
This is a reproduction of a library book that was digitized by Google as part of an ongoing effort to preserve the information in books and make it universally accessible.

Google™ books

<https://books.google.com>



WILS
GOVU
Y 4.IN 8/13:K 76/PT.1-2

Senate

Insular Affaris
Knowles-Paradise Dam Project

86:1-2

Dec. 1959-
Mar. 1960



THE LIBRARY
DOCUMENT COLLECTION

Y4. In 8¹³: K76

✓ [Pt. 1]

KNOWLES-PARADISE DAM PROJECT

HEARING
BEFORE THE
SUBCOMMITTEE ON
IRRIGATION AND RECLAMATION
OF THE
COMMITTEE ON
INTERIOR AND INSULAR AFFAIRS
UNITED STATES SENATE



EIGHTY-SIXTH CONGRESS

FIRST SESSION

ON

S. 1226

A BILL TO PROVIDE FOR THE CONSTRUCTION OF THE KNOWLES DAM PROJECT ON THE FLATHEAD RIVER IN THE STATE OF MONTANA FOR THE PROTECTION AND DEVELOPMENT OF THE FLATHEAD AND COLUMBIA RIVER BASINS; TO PROMOTE THE AGRICULTURAL AND INDUSTRIAL DEVELOPMENT PRIMARILY OF THE STATE OF MONTANA, BUT ALSO OF DOWNSTREAM AREAS; TO IMPROVE NAVIGABILITY AND TO ASSIST FLOOD CONTROL ON THE FLATHEAD AND COLUMBIA RIVERS; TO PROVIDE FOR THE NATIONAL DEFENSE AND WELFARE BY ADVANCING THE INTEGRATED COMPREHENSIVE DEVELOPMENT OF THE WATER RESOURCES OF THE PACIFIC NORTHWEST, AND FOR RELATED PURPOSES

DECEMBER 15, 1959

Printed for the use of the Committee on Interior and Insular Affairs



KNOWLES-PARADISE DAM PROJECT

HEARING
BEFORE THE
SUBCOMMITTEE ON
IRRIGATION AND RECLAMATION
OF THE
COMMITTEE ON
INTERIOR AND INSULAR AFFAIRS
UNITED STATES SENATE
EIGHTY-SIXTH CONGRESS

FIRST SESSION

ON

S. 1226

A BILL TO PROVIDE FOR THE CONSTRUCTION OF THE KNOWLES DAM PROJECT ON THE FLATHEAD RIVER IN THE STATE OF MONTANA FOR THE PROTECTION AND DEVELOPMENT OF THE FLATHEAD AND COLUMBIA RIVER BASINS; TO PROMOTE THE AGRICULTURAL AND INDUSTRIAL DEVELOPMENT PRIMARILY OF THE STATE OF MONTANA, BUT ALSO OF DOWNSTREAM AREAS; TO IMPROVE NAVIGABILITY AND TO ASSIST FLOOD CONTROL ON THE FLATHEAD AND COLUMBIA RIVERS; TO PROVIDE FOR THE NATIONAL DEFENSE AND WELFARE BY ADVANCING THE INTEGRATED COMPREHENSIVE DEVELOPMENT OF THE WATER RESOURCES OF THE PACIFIC NORTHWEST, AND FOR RELATED PURPOSES

DECEMBER 15, 1959

Printed for the use of the Committee on Interior and Insular Affairs



UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON : 1960

COMMITTEE ON INTERIOR AND INSULAR AFFAIRS

JAMES E. MURRAY, Montana, *Chairman*

CLINTON P. ANDERSON, New Mexico	HENRY DWORSHAK, Idaho
HENRY M. JACKSON, Washington	THOMAS H. KUCHEL, California
JOSEPH C. O'MAHOONEY, Wyoming	BARRY GOLDWATER, Arizona
ALAN BIBLE, Nevada	GORDON ALLOTT, Colorado
RICHARD L. NEUBERGER, Oregon	THOS. E. MARTIN, Iowa
JOHN A. CARROLL, Colorado	HIRAM L. FONG, Hawaii
FRANK CHURCH, Idaho	
ERNEST GRUENING, Alaska	
FRANK E. MOSS, Utah	
OREN E. LONG, Hawaii	

RICHARD CALLAGHAN, *Staff Director*

STEWART FRENCH, *Chief Counsel*

NELL D. MCSHERRY, *Clerk*

M. C. MAPES, Jr., *Special Counsel*

SUBCOMMITTEE ON IRRIGATION AND RECLAMATION

CLINTON P. ANDERSON, New Mexico, *Chairman*

HENRY M. JACKSON, Washington	THOMAS H. KUCHEL, California
JOSEPH C. O'MAHOONEY, Wyoming	GORDON ALLOTT, Colorado
ALAN BIBLE, Nevada	

II

CONTENTS

	Page
S. 1226.....	3
Report of the Comptroller General of the United States on S. 1226.....	8
STATEMENTS	
Aronson, Hon. Hugo, Governor of the State of Montana.....	11
Bennett, Mondell, St. Regis, Mont.....	20
Bessey, Roy F., engineering consultant for the Committee for Paradise Dam.....	34
Bonner, John W.....	109
Brandborg, Guy, Hamilton, Mont.....	29
Brower, David R., executive director, Sierra Club.....	234
Committee for Paradise Dam.....	273, 325
Corette, J. E., president, Montana Power Co.....	94
Crosswhite, Joe, business representative, International Union of Operating Engineers, Local 371.....	230
Deihl, George, representing the Montana Farm Bureau.....	105
Dellwo, Dennis A., Flathead Irrigation District.....	86
Doyle, Stanley M., representing the Elmo Electric Cooperative Association, Inc.....	119
Dragstedt, Carl E., representing the Missoula Chamber of Commerce.....	62
Erickson, Leif, Helena, Mont., representing the Committee for Paradise Dam.....	260
Gill, Henry L., State representative from Sanders County, Mont.....	29
Gill, Herb.....	147
Goodwin, Lester, State senator of Broadwater County, Mont.....	148
Graybill, Leo, Democratic national committeeman from Montana.....	18
Hagen, Harold, president, Montana Reclamation Association.....	121
Hahn, Paul.....	147
Harball, Charles, State representative, Lake County, Mont.....	32
Harlow, Paul K., president, Committee for Paradise Dam.....	253
Haw, John W., representing the Northern Pacific Railway Co.....	123
Hurt, Leon C., Missoula, Mont.....	270
Jensen, Arthur, Superior, Mont.....	56
Kenfield, Leonard, president of the Montana Farmers Union.....	24
Loman, Ray, president, Upper Columbia Development Council.....	61, 267
MacDonald, L. S., Northern Pacific Railway Co.....	71
Maclay, Sam.....	67
Mahoney, Eugene, Thompson Falls, Mont.....	271
Massa, Mike, member and chairman of the Board of Commissioners of Broadwater County, Mont.....	145
Maxwell, Ralph, representing the Board of Commissioners, Lake County, Mont.....	106
McDonald, Walter, president, Confederated Salish and Kootenai Tribal Council of Flathead Reservation.....	114
Metcalf, Hon. Lee, a Representative from the State of Montana, presented by Vic Reinemer.....	15
Morigeau, E. W., vice chairman, Tribal Council, Confederated Salish and Kootenai Tribes.....	118
Murphy, James E., representing the Kalispell Chamber of Commerce.....	128
Mushback, George E., Missoula, Mont.....	265
National Wildlife Federation.....	338
Neild, Mrs. Edwin D., Townsend, Mont.....	142
Nicholson, Dwight.....	141
Norwood, Gus, executive secretary, Northwest Public Power Association.....	153

	Page
Olsen, Arnold.....	59
Payne, Dr. Thomas, professor of political science, Montana State University.....	149
Pike, Eugene, manager, Missoula Electric Cooperative.....	57
Pitts, Eugene L., Dixon, Mont.....	324
Ragen, Walter, Townsend County, Mont.....	146
Ravalli County Fish & Wildlife Association.....	324
Rice, Hadley, mayor of Townsend, Broadwater, Mont.....	145
Romney, Miles, owner and editor, Western News, Hamilton, Mont.....	51
Stephens, Mrs. Helen, Paradise, Mont.....	69
Stephens, Wendell and Helen, Paradise, Mont.....	70
Stearns, Wesley, representing the Western Stockgrowers Association.....	92
Streeter, Bertha E., State senator from Lake County, Mont.....	138
Strnisha, Joe, a congressman in the Montana House of Representatives.....	320
Sykes, Robert C., president, District No. 1, Montana State Wildlife Federation.....	137
Tonner, L. P., president, Montana Electric Consumers Council, Inc.....	219
Townsend, Ted, director of public relations, Montana Farmers Union.....	23
Turnage, Gene, school district No. 28.....	140
Umber, James, Montana State president, AFL-CIO.....	21
Violette, James, Lake County, Mont.....	251
Washington Public Utility Districts Association.....	218
Welch, Kermit.....	269
Western Montana Fish & Game Association.....	341
Western Montana Stockgrowers Association.....	94
Wedemeyer, Winton, representing the Montana State Grange.....	91
Wheat, Herbert, president, Montana State Rural Electric Cooperative Association.....	28
Zahniser, Howard, executive secretary and editor, the Wilderness Society.....	30

COMMUNICATIONS

Billings, Harry L., Helena, Mont.: Letter, dated November 25, 1959, to Senator Murray, containing two editorials written by him.....	321
Bonner, John W., Helena, Mont.: Gruening, Senator Ernest: Letter to, dated January 28, 1960, with a proposed amendment to S. 1226.....	113
Murray, Senator James E.: Letter to, dated January 28, 1960, containing a copy of a letter sent to Senator Gruening.....	113
Campbell, Joseph, Comptroller General of the United States: Letter, dated May 29, 1959, to Senator Murray, containing his report on S. 1226.....	8
Cooper, A. L., superintendent, board of trustees, district No. 28, Ronan, Mont., public schools: Letter, dated December 14, 1959, to Senator Murray.....	140
Engstrom, Elmer W., Missoula, Mont.: Letter, dated December 15, 1959, to Senator Murray, containing a statement.....	252
Fisher, Maj. Gen. W. P., U.S. Air Force: Letter, dated August 3, 1959, to Senator Murray, explaining the reasons for the selection of Glasgow, Mont., for an Air Force base.....	65
French, Melville, president, Elmo Electric Cooperative Association, Inc.: Letter, dated December 15, 1959, to the subcommittee.....	120
Mansfield, Senator Mike: Letter, dated December 14, 1959, to Senator Gruening.....	10
Miles, Herbert M.: Letter, dated December 14, 1959, to Senator Murray, containing a statement.....	251
Murray, Senator James E.: Gruening, Senator Ernest: Letter to, dated November 23, 1959, designating him chairman of the hearing on S. 1226.....	1
Seaton, Fred A.: Letter to, dated January 19, 1960, referring to an address by Floyd E. Dominy before the chamber of commerce at Great Falls, Mont.....	316
Seaton, Fred A., Secretary of the Interior: Letter, dated February 8, 1960, to Senator Murray.....	319

ADDITIONAL INFORMATION

	Page
Address of Floyd E. Dominy, Commissioner of Reclamation, before the chamber of commerce at Great Falls, Mont., January 11, 1960.....	316
Flathead Irrigation District, Dennis Dellwo, secretary: Statement of, before the Corps of Engineers, October 21, 1957.....	88
Northern Pacific Railway Co.: Statement of, before the—	
U.S. Army district engineer, Seattle District, October 21, 1957.....	73
Board of Engineers for Rivers and Harbors, March 9, 1959.....	80
Northwest Public Power exhibits:	
1. Consumer power policy.....	163
2. Special report on multiple-purpose storage possibilities, Clark Fork River Basin.....	169
3. Power and Columbia River storage: Projects in the region's potential.....	179
4. Major benefits of Paradise Dam.....	189
5. President receives Northwest power program.....	190
6. Montana's Paradise Dam threatened.....	197
7. The search for upstream storage.....	199
8. For industry and for jobs, for recreation, for hydroelectric power, for flood control, for navigation—Let's build Paradise Dam.....	201
9. In the matter of Montana Power Co.: Before the Federal Power Commission.....	206
10. Montana's power future.....	208
11. Effect of storage on 1894 flood.....	210
12. The Mica Creek project—The hydroelectric power and the flood control potentials.....	210
13. Potential reservoirs and railroad possibilities.....	216
Resolutions:	
Camas Prairie Grange No. 103.....	141
Montana State AFL-CIO Resolution No. 5—The Paradise Dam project.....	23
Montana Stock Growers Association:	
Resolution No. 14—Multiple-purpose dam.....	93
Resolution No. 9—Water resources.....	93
Northwestern District Council of Carpenters Unions, United Brotherhood of Carpenters & Joiners of America.....	233
Plains Grange No. 101.....	70
Plains Valley Local No. 223, Montana Farmers Union.....	27
Scenic Resources for the Future, article by David R. Brower.....	243

KNOWLES-PARADISE DAM PROJECT

TUESDAY, DECEMBER 15, 1959

U.S. SENATE,
SUBCOMMITTEE ON IRRIGATION AND RECLAMATION OF THE
COMMITTEE ON INTERIOR AND INSULAR AFFAIRS,
Missoula, Mont.

The hearing convened at 9:15 a.m., Tuesday, December 15, 1959, at the University Theater, University of Montana, Missoula, Mont., Senator Ernest Gruening presiding.

Present: Senator Thomas Martin, of Iowa.

Also present: Mr. Vic Reinemer, executive secretary to Senator James Murray; Mr. M. C. Mapes, Jr., special counsel, Senate Committee on Interior and Insular Affairs.

SENATOR GRUENING. Will the meeting please come to order. I should like to open this hearing by reading a letter I have received from Senator James E. Murray, chairman of the Senate Committee on Interior and Insular Affairs; and also a telegram that I have received from the junior Senator from Montana, Senator Mansfield.

Senator Murray writes:

U.S. SENATE,
COMMITTEE ON INTERIOR AND INSULAR AFFAIRS,
November 23, 1959.

Senator ERNEST GRUENING,
Honolulu, Hawaii.

DEAR ERNEST: This is to confirm that I have designated you to act as chairman of the Interior Committee hearing in Missoula, Mont., December 15, on S. 1226, which would authorize construction of a dam in the Clark Fork-Flathead Basin.

I also want to express to you my appreciation for the fact that you are taking time out of your busy schedule to conduct this hearing. I realize that your coming to Missoula will decrease the amount of time you can spend in Alaska before our next busy session begins.

The other members of the committee are being notified of the hearing and the fact that I have designated you to act as chairman.

Your State and mine alike have the problem—and challenge—of vast, undeveloped, unharnessed water resources. During this next session of Congress the Interior Committee will consider several forward steps toward development of water resources in Montana, Alaska, and other States, and I am looking forward to working with you in this regard.

With warm personal regards, I remain

Sincerely yours,

JAMES E. MURRAY, *Chairman.*

I will somewhat later read the telegram from Senator Mansfield, but at this point I would like to introduce to you my colleague, Senator Thomas Martin, of Iowa, who is also a member of the Committee on Interior and Insular Affairs; Vic Reinemer, executive secretary to Senator James Murray; Mike Mapes, special counsel; and Fred Moody, our reporter.

As you all know, these hearings are for the purpose of determining the attitudes of the people of Montana with respect to Senate bill 1226 of the 86th Congress. There will be subsequent hearings in Washington, D.C., at which technical testimony of the interested Federal agencies will be taken, including the Corps of Engineers, and these agencies have, therefore, not been invited to testify today.

Because the great expense involved the trip back to Washington would be prohibitive to most ordinary citizens of any western State, it is necessary to hold hearings in the region which would be affected by proposed legislation if the people themselves are to be heard. This right to be heard is an important part of the representative system of Government under which we live and of the constitutional right to petition the Government for a redress of grievances, and this is why we are here today.

The committee has received numerous statements and materials for inclusion in the hearing record, and these will be included in the printed record at the close of today's testimony. In addition, I should like it understood that the record will be held open until December 31 for additional or supplementary statements or materials which persons or organizations may wish to include in the printed transcript, subject only to the judgment of the staff with respect to relevance and reasonable length.

It goes without saying that, for a hearing such as today's, we do not have unlimited time. In an effort to be as fair as possible, we have, therefore, decided to divide the time available equally between the proponents and opponents of the legislation which is the subject of this hearing, S. 1226.

The major proponents of this legislation are the members of the Committee for Paradise Dam, and its primary opponents are the members of the Upper Columbia Development Council. I have, therefore, asked these two organizations to arrange the specific order of the witnesses testifying on the two sides of this question. Mr. Eugene Mahoney will act as floor leader for the proponents, and Mr. Ray Loman for the opponents, and these two gentlemen have agreed to assure an opportunity to testify to the persons who wrote to the committee chairman requesting the right to appear. Additional persons wishing to be heard should contact either Mr. Loman or Mr. Mahoney; and I wish to thank both of these men for their assistance to the committee in this detail.

It has been agreed between the proponents and opponents and the staff members that the time available in the morning and afternoon shall be equally divided between the two sides. This morning the proponents will testify first, after these opening statements, with the opponents taking the last half of the morning for their presentation. This afternoon the time will again be equally divided, but the order will be reversed, with the opponents taking the first half and the proponents the last.

As I think you all know, S. 1226 was introduced on March 2, 1959, by Senator James E. Murray, the senior Senator from Montana and chairman of this committee, and was cosponsored by Senator Mike Mansfield, the junior Senator from this State. This bill would authorize the Secretary of the Interior to construct, operate, and

maintain either the Knowles Dam project on the Flathead River or the Paradise Dam project on the Clark Fork River.

The basic difference between these two projects is that the Knowles Dam, being on the Flathead River above where it flows into the Clark Fork, would store and utilize only the waters of the Flathead; the Paradise Dam, being below where the two rivers join, would block both streams and use the water from both. Because of these differences, the Paradise Dam would make it possible to produce approximately 80 percent more hydroelectric energy each year than Knowles Dam could, and would provide about 33 percent more flood control storage. However, it is also true that because of the higher relocation costs of Paradise Dam, that project would cost about 109 percent more than the Knowles project.

Because our time is so limited today, I want to ask all witnesses to keep their presentations as short as possible. For this purpose it is perfectly acceptable to summarize the main points of a statement orally and submit the entire statement for printing in full in the record, and I urge that this course of action be followed. However, each side will be allowed to use the time allocated to it with complete freedom and the Chair will consider the wishes of the floor leaders in this matter.

At this point in the record I should like to include the text of the bill, S. 1226, to be followed by any departmental reports that have been sent in by Federal agencies.

(S. 1226 follows:)

[S. 1226, 86th Cong., 1st sess.]

A BILL To provide for the construction of the Knowles Dam project on the Flathead River in the State of Montana for the protection and development of the Flathead and Columbia River Basins; to promote the agricultural and industrial development primarily of the State of Montana, but also of downstream areas; to improve navigability and to assist flood control on the Flathead and Columbia Rivers; to provide for the national defense and welfare by advancing the integrated comprehensive development of the water resources of the Pacific Northwest, and for related purposes

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Knowles Dam Project Act".

Sec. 2. (a) For the purposes of promoting the irrigation and reclamation of arid lands, controlling floods, improving navigation, conserving wildlife, providing recreation, generating electric energy, and encouraging economic development, primarily in the State of Montana, but also in the rest of the Pacific Northwest, the Secretary of the Interior is authorized and directed to proceed as soon as practicable with the construction, operation, and maintenance of the Knowles Dam project (including facilities for generating electric energy) in the Clark Fork-Flathead River Basin, substantially in accordance with the physical plans set out in the Columbia River Review Report of the Corps of Engineers completed during the Eighty-sixth Congress: *Provided*, That should subsequent investigation prior to the commencement of such construction indicate the desirability of removing the project location to any site between two miles upstream and eight miles downstream from the site recommended in such review report, the alteration of such plans to conform to such removal, upon the recommendation of the Secretary of the Interior, is further authorized.

(b) As used in this Act—

(1) The term "project" means the Knowles Dam, the appurtenant reservoir, power facilities and administrative offices, and the land area adjacent to the reservoir which may be necessary to carrying out the purposes of this Act;

(2) The term "project area" means the area of the State of Montana in the vicinity of and directly affected by the project;

(3) The term "Board" means the Knowles Project Area Planning Board created by section 4(a) of this Act;

(4) The term "Administrator" means the Knowles Project Administrator appointed in accordance with section 4(b) of this Act;

(5) The term "fund" means the Knowles project area planning and development fund created by section 5 of this Act;

(6) The term "Secretary" means the Secretary of the Interior; and

(7) The term "local government" includes all tax-supported bodies, including school districts, irrigation districts and improvement districts.

Sec. 3. (a) In order to promote the economic growth and development of the State of Montana and of downstream areas, and to facilitate the most efficient use of the hydroelectric energy from the project, the project power facilities shall be integrated into the Federal Columbia River power system, and the full amount of at-site firm power production attributable to the project, or such portion thereof as is required from time to time to meet loads under contracts made within this reservation, shall be made available for use within the State of Montana.

(b) Electric energy available from the project not required for the operation thereof or for associated irrigation projects shall be marketed by the Secretary in accordance with the laws relating to the disposition of power from Bonneville Dam, except that all revenues allocable to irrigation projects authorized herein, or hereafter in accordance with this Act, shall be disposed of in the manner provided by the Federal reclamation laws, and the radius from the project power plant within which the "at-site" power rate is available shall be thirty-five miles.

(c) The Secretary is authorized and directed to supply and transmit from the Columbia River power system the necessary construction power for the project.

Sec. 4. (a) There is hereby created the Knowles Project Area Planning Board to come into existence at the time the first planning funds are appropriated for planning of the project under this Act and to continue until completion of the project or so long after such completion as its duties may require, but not in excess of two years. The Board shall consist of the following officials or their designated representatives: The Governor, the president of the Senate and the speaker of the House of Representatives of the State of Montana, a representative of the Montana State Planning Board, the Regional Director of the Bureau of Reclamation (region 1), the Regional Director of the Bureau of Sport Fisheries and Wildlife (region 1), the Regional Director of the National Park Service (region 2), the Regional Forester of the Forest Service (region 1), the Area Director of the Bureau of Indian Affairs (Billings Area Office), the Division Engineer of the Corps of Engineers (North Pacific Division), a qualified representative of each of the three counties in which land will be inundated by the project, to be selected by the county commissioners of each such county, and one outstanding conservationist from the State of Montana, to be chosen by the above members of the Board at its first official meeting. The members of the Board shall receive no compensation for their services except a subsistence allowance of \$15 per diem for time actually spent in traveling and performing their duties as members of the Board, and reimbursement of actual transportation expenses including an allowance for use of privately owned automobiles at a rate not to exceed 9 cents per mile. The Board shall be responsible for planning and assisting the readjustment and development of the project area for the maximum benefit of the people of the State of Montana and especially the people of the project area, including but not limited to the relocation of communities and community facilities, the resettlement of residents, the development of recreation facilities, and the preservation and development of fish and wildlife resources within the project area. To the fullest extent possible the Board shall coordinate its functions with the engineering and construction planning of the Bureau of Reclamation and the activities of the Secretary under section 8(c) of this Act. It shall meet upon call of the Administrator or at such times and places as may be determined by the Board at any meeting thereof.

(b) There is hereby created the position of Knowles Project Administrator, to commence with and continue during the existence of the Planning Board. The Administrator shall be the administrative officer of the Board and shall be appointed by the President with the advice and consent of the Senate for a term of four years. He shall receive a salary at the rate of \$15,000 a year and shall be reimbursed for expenses (including travel and subsistence when away from his office) incurred in the performance of his duties under this Act. The Administrator shall not, during his continuance in office, be engaged in any other business, but shall devote himself to the performance of the duties

of his office and shall maintain his office in the vicinity of the project. He shall work closely with the Governor and public officials of the State of Montana and any subdivisions thereof which may be affected by the project, and with the interested agencies of the United States, and shall make an annual report of operations of the Board to the Secretary at the end of each fiscal year. He shall be responsible to the Board for expenditures from the fund in carrying out the purposes for which it is created and shall make expenditures from the fund only after their approval by the Board. He shall cause to be kept at all times complete and accurate books of accounts for the fund, which the Comptroller General of the United States shall audit with personnel of his selection at such times as he shall determine, but not less frequently than once each fiscal year.

SEC. 5. The Secretary is hereby authorized and directed to allocate from funds appropriated for the project sums not to exceed a total of \$5,000,000 for a fund to be known as the Knowles project area planning and development fund. The fund shall be made available during the existence of the Board. The Secretary shall allocate to the fund the sum of \$100,000 from the first year's planning appropriation and such amounts from subsequent appropriations as shall be necessary and shall be requested by the Administrator, up to the full amount authorized for it. The general purpose of the fund shall be to facilitate and promote the readjustment and development of the project area for the maximum benefit and enjoyment of the people of the State of Montana and the Nation, and particularly for the benefit of the people of the project area. It is specifically intended and shall be used to defray the expenses of the Board and the expenses and salaries of the Administrator and such staff members as he may appoint with the approval of the Board, in an amount not to exceed \$150,000 in any one fiscal year, and to provide for the establishment of recreation and park facilities, fish hatcheries, wildlife refuges, and any similar developments which the Administrator, with the advice of the State of Montana and the Board may find necessary and desirable to implement the enjoyment, utility and beautification of the project area. No part of the fund shall be used to satisfy any claim or claims against the Government (except claims submitted under title 28, United States Code, section 2672, arising from acts or omissions of employees of the Administrator or the Board) or to defray any direct expense arising out of or resulting from the construction of the project, except the functions of the Administrator and the Board and except as provided herein. But it is the intention of the Congress that the Board and the Administrator shall have wide discretion as to the proper means and most beneficial manner of carrying out the general purposes of the fund stated above.

SEC. 6. With the approval of the Board and the Secretary, the Administrator is authorized and directed to purchase or condemn and to improve suitable land in the immediate area of the Knowles Dam for a new townsite to replace the portions of those towns which will be flooded by the project, and to plat and provide for the appraisal of lots in such new townsite and to exchange and convey such lots at their appraised value in full or part payment for property to be flooded or acquired for the construction and operation of the project as requested by the displaced owners of such property, and to sell for not less than their appraised valuation any lots not used for such exchanges, except that no substantial number of such lots shall be conveyed to any single individual, corporation, or association other than to local governmental agencies as herein provided until the requirements of all individuals desiring such exchanges have been met. The Administrator shall assist the development of the new town and any communities relocated as a result of construction at the project in any reasonable manner, and in furtherance of this function is authorized to convey to the local governmental agencies involved in such development, without compensation, such land within the townsite as may be required for the establishment and operation of municipal offices and facilities, including schools, parks, and such utilities as may be authorized by its articles or bylaws. Title to land acquired by the Administrator under this section shall be taken in the name of the United States of America and payment therefore shall be made by the Secretary after his approval of such purchases, from funds appropriated for the project. Expenditures under this section shall not be charged to the fund.

SEC. 7. (a) The Secretary is authorized and directed to negotiate a contract with the Confederated Salish and Kootenai Tribes of the Flathead Indian Reservation in Montana providing for (1) the conveyance to the United States

of all right, title, and interest of such Indians in and to all tribal, allotted, assigned, and inherited lands required for carrying out the purposes of this Act, (2) the payment of just compensation for lands and improvements and interests therein so conveyed, and (3) final settlement of all claims of whatever nature arising out of the construction of the project.

(b) No contract negotiated under subsection (a) shall take effect unless or until it has been (1) ratified by Act of Congress, and (2) ratified in writing by a majority of the adult members of the Confederated Salish and Kootenai Tribes within nine months after the date of enactment of the Act ratifying such contract.

(c) In the event that the contract negotiated in accordance with subsection (a) fails to obtain ratification within the period provided in subsection (b), just compensation shall be judicially determined by proceedings instituted by the United States in the United States district court for the district within which the lands in question are situated.

Sec. 8. (a) The Secretary is authorized to proceed in accordance with the provisions of this Act and applicable Federal reclamation laws to make a study and report to Congress on irrigable arid lands in the Clark Fork-Flathead Basin in the State of Montana which can be benefited by financial and other assistance from the project, including existing projects which may be benefited by the provision of supplementary water thereto, including in such report the construction costs of the proposed irrigation works allocable to various functions, the operation and maintenance costs of such works, the amount of construction costs allocable to irrigation which the irrigators may reasonably be expected to repay, the amount of such costs in excess of that which the irrigators can repay which the Secretary proposes shall be recovered from power revenues, and a complete financial analysis of the repayment program, together with all other data reasonably required to enable the Congress to pass upon the economic feasibility of the proposed works. Except as provided in subsection (c) of this section, any such reclamation works proposed under this study may be undertaken only after the Secretary has submitted a report and findings thereon under this subsection and section 9 (a) of the Reclamation Project Act of 1939 (53 Stat. 1187) and only if the works so reported on are thereafter specifically authorized by Act of Congress.

(b) All construction costs of any reclamation works subsequently authorized and undertaken by the Secretary in accordance with subsection (a) of this section which are determined to be beyond the ability of the irrigators to repay as provided in said subsection (a) shall be charged to and paid from net revenues derived from the sale of power from the project which are over and beyond those required to amortize the power investment in the project and to return interest on the unamortized balance thereof. Power and energy required for irrigation pumping for the irrigation developments referred to in this section shall be made available by the Secretary from the project powerplant and other Federal plants interconnected therewith at rates not to exceed the cost of such power and energy from the project, taking into account all costs of the project which are determined by the Secretary under the provisions of the Federal reclamation laws to be properly allocable to such irrigation pumping power and energy.

(c) The Secretary is authorized and directed to make a study of the potential irrigation developments within the Clark Fork-Flathead Basin to determine which of such developments may be best adapted to the replacement of the farmland to be acquired by the Government in connection with the construction of the project, such study to commence at the time of the commencement of the detailed planning of the project and to be financed from the funds appropriated for such planning. To the extent determined by him to be necessary to provide farms for all farm families displaced by the project at least equivalent to those from which they have been displaced, the Secretary is further authorized and directed to acquire and provide irrigation facilities for lands best adapted to the purpose. Such construction shall be commenced at the time of the commencement of the construction of the project or as soon thereafter as necessary to permit timely relocation on such newly irrigated lands of the families displaced at the time of their displacement. The portion of the cost of such construction which is allocated to irrigation but is beyond the ability of the water users to repay shall be charged to and paid from net revenues derived by the Secretary from his sale of power from the project, which are over and beyond the amounts

required to amortize the power investment therein and to return interest on the unamortized balance of said investment.

(d) Notwithstanding any other provision of law, exclusive preference to purchase the lands brought under irrigation in accordance with subsection (c) of this section shall be given for such term as the Secretary shall determine to be reasonable to persons whose lands are required in connection with the construction, operation and maintenance of the project, and any such persons, whether tenants or owners, whose lands are so acquired shall be given such notice and opportunity to exercise such preferential right as the Secretary shall determine to be reasonable, with first priority to displaced farm families and owners. The Secretary is authorized and directed to reimburse the owners and tenants of lands acquired for the construction, operation and maintenance of the project for the reasonable expenses incurred by them in the process and as a direct result of moving themselves, their families, and their personal property from said lands, which reimbursement shall be in addition to, but not in duplication of, any payments otherwise authorized by law: *Provided*, That the total of such reimbursement to the owner and tenants of any parcel of land shall not exceed 25 per centum of its fair value as determined by the Secretary. Reimbursement under this subsection shall be made only upon application therefor, supported by an itemized statement of expenses incurred, submitted to the Secretary within one year from the date upon which the premises involved are vacated.

Sec. 9. In allocating the cost of the project to its various functions under section 9(b) of the Reclamation Project Act of 1939, the Secretary shall allocate to flood control such part of the total cost of the project as is justified by an average annual value of flood control storage in the Columbia River Basin of \$1 per acre-foot. Operation of the reservoir for flood control purposes shall be in accordance with the regulations prescribed by the Secretary of the Army pursuant to section 7 of the Flood Control Act of 1944 (58 Stat. 890).

Sec. 10. In order to render financial assistance to the local governments which may lose tax revenues due to the acquisition by the Secretary or Administrator for the purposes of this Act, of land and properties in the project area which were previously subject to local taxation, the Secretary is authorized and directed to pay to such local governments, from funds appropriated for the construction of the project during such construction and from power revenues after the commencement of generation at the project, sums equal to the average of the taxes received from such lands and properties during the five years preceding their actual removal from the tax rolls as a result of acquisition by the Secretary, such payments to any such local government to continue until the value of the taxable property within its jurisdiction shall equal 125 per centum of such taxable value at the time of such acquisition: *Provided*, That such payments are intended to hold said local governments harmless for net tax revenues lost as a result of the construction of the project and shall therefore be reduced by the amount of taxes paid upon any such properties which have been relocated or replaced at the expense of the Federal Government, and by the amount of any reduction in the cost of local governmental services resulting from the construction of the project.

Sec. 11. The Secretary is authorized and directed to pay from funds appropriated for the project the fair costs of relocation of, or to purchase for their fair value, improvements whose removal is necessitated by the construction of the project, including railroad facilities, highways, oil and gas pipelines, telephone, telegraph and electric power facilities, and other public or private improvements, whether located on lands of the United States or the State of Montana or on private lands in the project area. Payments may be made pursuant to this Act to persons, firms or corporations who shall establish to the satisfaction of the Secretary that they are entitled to receive the same, and who shall sign vouchers and contracts for such payments upon forms approved by the Secretary: *Provided*, That the amounts so paid shall not exceed the reasonable value of the improvements purchased or relocated, as the case may be.

Sec. 12. In acquiring land required for the construction or operation of the project the Secretary is authorized and directed to purchase or condemn such areas around the Knowles Dam Reservoir in excess of land actually to be inundated by the reservoir as may in his judgment and the judgment of the Board be necessary and desirable to provide initial public ownership of sufficient lakeshore frontage and adequate adjacent areas for recreation, fish

and wildlife preservation, parks and other public facilities and facilities for the development of waterborne commerce, and to assure adequate public access to the reservoir and optimum public beneficial use and enjoyment of the project area. The Secretary is further authorized to deed to the State of Montana or local governments, in consideration of their maintenance for public purposes, such areas around the reservoir as may be agreed between the Board, the governmental unit involved, and the Secretary to be desirable in the furtherance of such public purposes. At any time after completion of the project when in the opinion of the Secretary adequate land has been reserved or conveyed for such public purposes, the Secretary may, by competitive bids publicly announced, sell or lease any additional lands acquired under this Act which in his judgment are no longer necessary in carrying out the purposes of this Act.

SEC. 13. Title to all lands acquired by the Secretary or the Administrator for the purposes of this Act shall be taken in the name of the United States of America. In purchasing such lands the Secretary and the Administrator are directed to pay the fair value thereof. In determining what constitutes fair value the standard shall be that the owner of any such property shall be at least as well off economically after such transaction as before it. Any liens held by the United States against land acquired for the purposes of this Act are hereby forgiven as the effective date of such acquisition.

SEC. 14. In constructing, operating and maintaining the project and the associated reclamation works herein authorized, the Secretary shall be governed by the Federal reclamation laws (Act of June 17, 1902, 32 Stat. 388, and Acts amendatory thereof or supplementary thereto), except as otherwise herein provided. The Secretary and the Administrator shall have such powers as may be necessary or appropriate for the exercise of the powers herein specifically conferred upon them and for carrying out the purposes of this Act.

SEC. 15. There are authorized to be appropriated such sums as may be necessary to carry out the purposes of this Act.

COMPTROLLER GENERAL OF THE UNITED STATES,
Washington, May 29, 1959.

B-139499

HON. JAMES E. MURRAY,
*Chairman, Committee on Interior and Insular Affairs,
U.S. Senate.*

DEAR MR. CHAIRMAN: Further reference is made to your letter of April 29, 1959, requesting our report on S. 1226 to provide for the construction of the Knowles Dam project on the Flathead River in the State of Montana and for related purposes.

The proposed legislation would authorize the Secretary of the Interior to construct, operate, and maintain the Knowles Dam project, including facilities for generating electric energy, in the Clark Fork-Flathead River basin, Mont., in accordance with the physical plans contained in the Columbia River Review Report of the Corps of Engineers, prepared by its North Pacific Division, June 1958, pursuant to a resolution of the Senate Committee on Public Works dated July 28, 1955.

Section 3(c) authorizes and directs the Secretary to supply and transmit from the Columbia River power system the necessary construction power needed for the project. In this connection it is suggested that clarifying language be added to require the Knowles project fund to pay the Columbia River power system currently for power received upon billing by the power marketing agent; such payments to be considered a construction cost of the project.

Section 4(a) establishes the Knowles Project Area Planning Board to be comprised of 14 members. Eight of these are to be officials or residents of the State, who, it should be noted, when voting as a bloc, have sufficient numerical strength to control the activities of the board. We note, further, that no method is prescribed for selection of the representative of the Montana State Planning Board who is to be a member of the Knowles Project Area Planning Board. We recommend that consideration be given to amending the bill to specify the method of selection.

Section 4(b) specifically requires the Comptroller General to audit the books of account of the Knowles project area planning and development fund established by section 5 of the bill "not less frequently than once each fiscal year."

Since the Budget and Accounting Act of 1921 (31 U.S.C. 53) as implemented by the Accounting and Auditing Act of 1950 (31 U.S.C. 67) already imposes upon the General Accounting Office the duty of auditing Federal fund accounts such as here involved, it is suggested that the last sentence of section 4(b) be eliminated from the bill.

Section 5 authorizes the establishment of the Knowles project area planning and development fund in an amount not to exceed \$5 million to defray administrative expenses, to "facilitate and promote the readjustment and development of the project area," and to provide, without limitation, such recreation and park facilities, fish hatcheries, wildlife refuges, and similar developments which the administrator, at his discretion, may find necessary and desirable. We believe it advisable that some type of limitation or restraint be placed upon this wide authority and recommend a revision of the third sentence of the section along the following lines:

"The Secretary shall allocate to the fund the sum of \$100,000 from the first year's planning appropriation and such amounts from subsequent appropriations as he shall deem necessary and as shall be requested by the administrator with the approval of the board, up to the full amount authorized for it."

Section 6 authorizes the administrator to replace towns flooded out of existence by the Knowles project at Government expense and to sell any lands acquired therefor in excess of specified uses. No provision is made for disposition or use of the receipts from such sales. It appears desirable that the section clearly stipulate a disposition for such funds, which otherwise appear to be for covering into the Treasury as miscellaneous receipts.

Section 8 authorizes the Secretary to make a study and report to the Congress on irrigable lands within the basin which can be benefited by assistance from the project and provides certain cost criteria to be included in said report to enable the Congress to pass upon the economic feasibility of any proposed works. No provision is made for allocation of the costs incurred by the board in conducting this study. We believe that investigation expenses of this type should be included in cost allocations and repayment requirements.

Section 9 of the bill provides that the Secretary shall allocate to flood control such part of the total cost of the project as is justified by an annual value of flood-control storage in the Columbia River Basin of \$1 per acre-foot. We have no information which would enable us to make a determination of the reasonableness of this formula. We believe that allocations of multiple-purpose project costs to purposes including flood control, should be made on the basis of the estimated benefit to each purpose involved.

Section 10 covers payments in lieu of taxes on acquired property with a provision that such payments shall continue until the value of the taxable property within the jurisdiction of any local government affected shall equal 125 per centum of the taxable value within such jurisdiction at the time of acquisition. Value has been defined in many ways. To avoid possible misinterpretation, we suggest that the word "assessed" be inserted before the word "value" on line 20, page 15, and the word "taxable" be eliminated from the subsequent line.

Section 13 provides for Federal acquisition of lands needed for project purposes at a fair value which shall leave the owner of the property at least as well off economically after the transaction as before it. The apparent intent of the section is to save the owner from economic loss as the result of a Federal taking of his land for the purposes of the project. We believe, therefore, that the words "at least" should be eliminated from the text since they would apparently give the administrator authority to allow such owner's perhaps unwarranted profits in land transactions with respect to the project. This section would also forgive any liens held by the United States against land acquired for the purposes of the bill. We have no information as to the reason such liens should not be setoff against the purchase price of the lands concerned.

Sincerely yours,

JOSEPH CAMPBELL,
Comptroller General of the United States.

Senator GRUENING. And now, before introducing the Honorable Hugo Aronson, Governor of the State of Montana, as our first witness, I should like to ask my colleague, Senator Martin, if he would care to make any opening remarks.

Senator MARTIN. Thank you, Mr. Chairman. I have no very long statement to make at this time. I am here to listen to the testimony and to weigh it out as best I can. I will need to know a lot about the purpose of the dam and if it is a multiple-purpose dam, I will need to know how much emphasis is placed upon the various different purposes. I will be watching that part of the testimony, particularly, because I will need to take back to the full committee as complete a picture as is possible to gain in this hearing here today.

I want to thank you, Mr. Chairman, for giving me an opportunity to state my special interest in the matter; as a very junior member of the Committee on Interior of the Senate, I have a little responsibility to take back the best possible information to the complete committee, along with the chairman of this hearing, Senator Gruening. Thank you.

Senator GRUENING. Thank you, Senator Martin. Now, I would like to read the telegram which I received from Senator Mansfield, which says:

WASHINGTON, D.C., December 14, 1959.

HON. ERNEST GRUENING,
U.S. Senator, Missoula, Mont.:

Let me take this means to welcome you and our senate colleague, Thomas E. Martin, to one of the most attractive and wonderful small cities in the Nation, Missoula, Mont., home of my alma mater, Montana State University. My one regret is that my Senate duties of vital interest to the prosperity and welfare of my State and the country prevent me from participating in this hearing being conducted by your subcommittee of the Senate Committee on Interior and Insular Affairs, chaired by my able and distinguished senior colleague Senator James E. Murray.

The future prosperity of Montana is dependent upon economic expansion and the development of the State's abundant natural resources and this cannot be fully realized in western Montana until such time as the hydroelectric power potential in the Clark Fork Basin is no longer just a potential but a real source of electric power so necessary to industrial development. It is my sincere hope that this hearing will be a major step forward in resolving the question as to the most beneficial development in the area. The final selection can best be made by the engineers and technicians, but I shall continue to insist that any project shall meet the criteria set down for other major developments in Montana.

First, the plan must be feasible.

Second, the project must be favored by the majority of the people directly affected.

Third, there must be an absolute guarantee to Montana that she will receive the maximum amount of power possible for use within the State for its own development, a precedent established by the Hungry Horse Act. I shall support the multi-purpose development of the Treasure State's natural resources only as long as they are designed to benefit Montana.

Regards.

SENATOR MIKE MANSFIELD.

Because of the special official position which he occupies, Governor Aronson's testimony will not be charged to either side, and the same rule will apply to Mr. Walter McDonald, chairman of the tribal council of the Confederated Salish and Kootenai Tribes, who will be the first witness after lunch this afternoon.

Governor Aronson, we are honored to have you with us today and we will be very happy to hear testimony.

STATEMENT OF HON. HUGO ARONSON, GOVERNOR OF THE STATE OF MONTANA

Governor ARONSON. Mr. Chairman, the Honorable Senator Gruening, and Senator Martin, my presentation here today is made in response to a notice of hearing on S. 1226 sent to me by the Senate Committee on Interior and Insular Affairs.

First, let me thank you for giving me this opportunity to express my views as Governor in behalf of the State of Montana on construction of the proposed Knowles Dam, as provided under S. 1226. I am also grateful to you for granting me the privilege of appearing early in the hearing so that I will be able to take care of other commitments later today.

S. 1226 proposes the construction of a dam to be located at the most advantageous point between the old proposed Paradise site located below the confluence of the Flathead and Clark Fork Rivers, and the newly proposed Knowles site on Flathead River above the confluence of the two rivers. Either site proposed will have a pool elevation of 2,700 feet above sea level.

If Knowles Dam, as proposed in S. 1226, is built at the old Paradise site, water would be backed up the Clark Fork Canyon to a point about 5 miles above Superior, and up the Flathead River Valley to the town of Ravalli on the Jocko River and the foot of Kerr Dam on the Flathead River. If the dam is to be built above the confluence of the two rivers, water would be backed up the Jocko and Flathead Rivers as described above, but would not create a reservoir on the Clark Fork River. In either case the lands to be flooded above the new Knowles site would be the same.

There have been several hearings held by the Corps of Engineers on a proposed dam in this area. The first hearing to my knowledge was held by the corps at Hot Springs, Mont., on May 26, 1948. At that time, the Honorable Sam C. Ford, who was then Governor of Montana, presented a very definite protest. At this hearing the many protests were so overwhelming against the project that the Corps of Engineers dropped the idea of considering the proposal until recently. The next public hearing was held in Missoula on October 21, 1957, and the third hearing was held in Missoula on March 9, 1959. These last two hearings were held by the Corps of Engineers, at which times I protested the construction of dams at either the Paradise or Knowles site. I have not changed my convictions since these hearings, and I appear here again today, this time before your honorable Senate committee, to reaffirm my opposition.

My objections are not so much against the wording of S. 1226 as they are to the construction of any dam in western Montana that will affect our economy when the benefits accrue to downstream areas. The reasons for my opposition are set forth as follows:

1. Taxes: It has been stated in previous hearings that the loss of taxes to the three counties involved, Sanders, Lake, and Mineral, will amount to roughly \$700,000 per year. S. 1226 provides for payment to local governments a sum to replace lost taxes. However, this is a vague and indefinite provision which not only could result in prolonged litigation before counties and school districts

could receive their money, but also any increase in classification of property within those areas could easily wipe out entirely the proposed payment. Considerable stress was made by proponents at other hearings on the point that, after Hungry Horse Dam was built, the tax base of Flathead County increased 2½ times. This was due to two factors. In the first place, very little, if any, land was flooded by the reservoir which was assessed on the taxrolls. In the second place, the impact of the aluminum plant which accelerated the economy of Columbia Falls increased the tax base.

In contrast to this, if the proposed Knowles Dam is built, a very substantial amount of land will be taken off the taxrolls, and there is no assurance that industry will come into the area very quickly to replace the economy as happened at Columbia Falls.

While the proponents are quite vigorous in bringing out this point, you will note that they never apply the same argument to either Canyon Ferry or Fort Peck Dams. In both of those cases large tracts of land were taken off the taxrolls, but the economy has never been replaced by either industry or any other type of development directly traceable to the construction of either dam.

The taxes referred to above apply to property taxes, livestock, machinery, et cetera. There is another item of taxes, to be considered which is income taxes, both State and Federal. Both of these would be reduced until the lost economy could be replaced, if the proposed project is built.

I could also go into the cost of replacing railroads, highways, pipelines, telephone, telegraph and power lines. However, I understand this will be dealt with in other testimony.

2. Rights-of-way: I have heard that a considerable number of people owning property to be flooded by the proposed reservoir are quite enthusiastic about having the dam built with the idea that they will obtain abnormal prices for their holdings. This has probably been brought about by the high prices paid for land flooded by Cabinet Gorge and Noxon Rapids Dams, both of which were built by private industry. If the project is built as a public power project, it is not likely that correspondingly high prices will be paid for the rights-of-way. As an example, the prices paid for submerged lands both on the Canyon Ferry Reservoir, built by the Bureau of Reclamation, and the Pend Oreille Reservoir, built by the Corps of Engineers, were not satisfactory to the majority of landowners who were compelled to give up their holdings. Since this proposed project is to be built by the Federal Government, it is only reasonable to assume that the experiences of Canyon Ferry and Pend Oreille will prevail at the proposed Knowles site.

3. Economy: The loss taxes after the 5-year period of dubious replacement proposed by S. 1226 will raise the tax base on the remaining lands. This will be true until such a time as industry or some other type of development can come into the area and take up the slack. However, the loss of taxes is not the only item to be considered. The livestock and agricultural production from the lands affected will be wiped out entirely. This, in my estimation, is far more serious than losing just the taxes. Considerable livestock is raised in the Flathead Valley. They graze on the surrounding hills during the summer months and winter at the home ranches

along the river where hay is harvested for winter feed. S. 1226 would eliminate this type of operation entirely and render the adjacent grazing areas less valuable.

4. Power: If the proposed dam was built at the Paradise site, the ultimate installed capacity would be 864,000 kilowatts, and the Knowles site would have an ultimate installed capacity of 512,000 kilowatts. The release of storage from either of these sites would increase development of prime power at other plants on down the river. Yet no provision is made in S. 1226 for Montana to receive benefits from downstream generation due to storage in Montana.

Reservation is made in S. 1226 for the at site power only to be available for use in Montana. It is very doubtful if the State will be able to absorb that amount of power by the time the dam is completed. In this case, the power would need to be sold by the Bonneville Power Administration to other users on a temporary basis until such a time that Montana could call for the same.

In considering the Columbia interstate compact, a similar proposal was suggested as an item to be incorporated in the compact, but it was argued by the opponents that power of this nature could not be signed up on firm contracts. Instead, it would need to be sold as secondary power at a reduced rate until such a time as the State, wherein the power is generated, is ready to call for its allotment. Under this kind of an arrangement, the expected revenue from the development of the proposed Knowles Dam may not materialize for some years after the project is built.

5. Substitute power: According to the Corps of Engineers, it will take 10 years to build the proposed dam at the Knowles site, or 12 years to build the dam at the Paradise site, after the money has been appropriated and made available.

Rapid progress is being made in the development of atomic energy, and engineers are gradually simplifying the type of plant and reducing the cost of electrical energy output. In this rapidly changing world and with the progress being made in science, it may be reasonable to predict that the cost of atomic energy will compete with the cost of hydroplants by the time the proposed dam at either site can be built.

There are explorations being made in other types of power which may finally result in something more economical than or equal to the cost of hydropower. For example, I might mention the fuel cell, thermoelectric devices, thermionic emission, solar cells and magnetohydrodynamics. All of these are in the development stage.

6. Navigation: One of the supposed justifications of building the Knowles Dam is the assistance to navigation. This is stretching the point considerably. When all of the proposed dams have been built on the Columbia and Snake Rivers, navigation will be carried on through slack water which requires only enough water to pass the boats and barges through the locks. The quantity of water used for this purpose is very nominal compared with the total normal flows of the rivers. There is a grave doubt as to the value or need for such navigation in Montana and as to its comparative real cost.

7. Flood control: Knowles Dam would not serve much purpose in preventing flood damage in Montana, as there is very little property or lands susceptible to flooding within the State below this dam.

The top volume of the storage capacity would be reserved for flood control. This means that the water surface of the reservoir will continually be fluctuating between high water and low water periods. In low periods the shoreline will be unattractive mud flats such as has been experienced at the Fort Peck Reservoir. This detracts rather than enhances the value of the lake for recreational purposes.

8. Irrigation: There is very little land in Montana below the proposed reservoir that could be irrigated by stored water. The irrigation potential above the proposed dam is quite remote. Some land might be irrigated in the Little Bitterroot Valley and Camas Prairie, but the water would have to be pumped against excessive heads and many miles of canals built. To offset this possibility there are about 9,000 acres of irrigated land that would be flooded and taken out of production. In addition to this, there are 3,700 acres of tillable land and 38,600 acres of grazing lands that would be taken out of production based on construction at the Knowles site. If the Paradise site is selected, the acreages of tillable and grazing lands will be considerably increased.

Under S. 1226 it is proposed that the excess revenues from Knowles Dam be used to subsidize irrigation development in Montana, over and above what the land can repay. Let me call your attention to the fact that there is now a bill before Congress to create a Columbia River Basin account, in which account will be impounded the power revenues from all of the dams on the Columbia River system, with the excess to be used in subsidizing irrigation anywhere within the basin.

9. Fish: There will be 100 or more miles of trout fishing streams destroyed depending upon which dam is built. In its place will be a lake which will soon be populated with squaw fish, suckers, and other rough fish which will replace the trout. It is suggested in the 308 report that this situation can be controlled by the use of chemicals. At first glance, this may seem feasible, but from a practical standpoint it is not at all realistic. In order to poison a reservoir of rough fish, it is necessary to poison the tributary streams as well as the reservoir itself. If the Paradise site should be built, it would mean poisoning the St. Regis, Bitterroot, and Blackfoot Rivers, as well as many smaller tributaries. The task would be less if the Knowles site is selected, but it still would be a major undertaking. Poisoning just the reservoir alone will not solve the problem.

In conclusion, let me make it clear that as Governor of Montana, as a State senator and State representative from my home county of Glacier for many years, and as a private citizen, I have always worked for conservation and development of our natural resources such as our water. S. 1226 is not in the best interests of our Treasure State.

In view of the above objections, I trust your honorable committee will not find it feasible to permit construction of the proposed Knowles Dam as set forth in S. 1226. I prefer to share Montana's water through the medium of the Columbia Interstate Compact Commission and the Columbia Basin Interagency Committee, rather than giving it away through such proposals as this. Thank you.

Honorable Senator, it has been an honor and pleasure for you to give me the opportunity to appear before your honorable committee this morning, and I appreciate very much your giving me a chance to

speak first, because the Governors have sometimes a problem, pretty near as much to do as the Senators, and they keep us pretty busy. I thank you very kindly.

Senator GRUENING. Thank you very much, Governor Aronson.

There is a statement from Representative Lee Metcalf, who is unable to be present, but will be represented by Vic Reinemer.

Mr. REINEMER. Before I left Washington, Congressman Metcalf asked me to greet the committee, to welcome its members to this First Montana Congressional District, and to express his gratification at this hearing on legislation so important also to the development of this State and the Pacific Northwest.

Congressman Metcalf is in Washington attending hearings of the Committee on Ways and Means on tax revision. But he has a statement supporting the legislation under consideration today, legislation which he has cosponsored with Senator Murray and Senator Mansfield. He asked me to read it.

STATEMENT OF HON. LEE METCALF, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MONTANA, PRESENTED BY VIC REINEMER

Mr. Chairman, I take this opportunity to welcome you and the members of the Senate Committee on Interior and Insular Affairs and its staff to the First Congressional District of Montana. I regret that attendance and participation in tax hearings in Washington have made it impossible for me to be present at these hearings.

However, I do express my appreciation to the members of this committee for taking time from their busy schedules to conduct these hearings on a subject of such vital interest to this State and to the Pacific Northwest—and on a Senate bill whose companion legislation I have introduced in the House of Representatives.

My position in this matter is easy to state in general terms. I have always firmly supported the maximum development and conservation of the great natural resources on which our entire well-being depends. As Theodore Roosevelt—whom Senator Murray has called the godfather of the conservation movement—stated it:

The conservation of our natural resources and their proper use constitute the fundamental problem which underlies almost every other problem of our national life. We must maintain for our civilization the adequate material basis without which that civilization cannot exist. We must show foresight; we must look ahead.

I would like to add to T. R.'s fine statement that we must always keep in mind that true conservation is an ever-continuing mixture of resource development and resource preservation. To maintain and improve the standard of living of our growing population we must develop and utilize in the interests of the economy a large proportion of the great resources with which we have been so richly blessed. But to quote Teddy Roosevelt again—

There are certain mighty natural features of our land which should be preserved in perpetuity for our children and our children's children.

How do we choose? How do we make these hard decisions between which resources to develop and which to preserve in their natural state? I think no general rule is possible, for each case must be de-

cided on its own merits. But there are certain guiding principles. First, we must estimate—and within the limitations of our own narrow vision evaluate—the benefits of each course of action, the relative merits of the values each would serve, and the number of people who would benefit from the alternative courses of preservation and development. And secondly, we must plan—on a truly comprehensive basis—the future development of all the resources of any region to serve all these values to the maximum.

Often the full development of one specific resource will make the development of another resource unnecessary and its preservation possible, and this is a lesson we must learn well. Underdevelopment of any resource will inevitably put additional pressure on other resources sooner or later—and sooner than would be necessary with comprehensive planning and full development.

I have discussed the Ninemile Prairie project with many people in this area, conservationists, sportsmen, and those who have learned to prize the natural beauty of this little mountain valley. I have reached the conclusion that I must oppose the inundation of this area to provide upstream storage if any alternative source of such storage is attainable. Yet I know that some upstream storage is necessary in the Clark Fork Basin above its confluence with the Flathead, especially for flood control and for power development. There are two places such storage can be obtained. The need can be partially met by construction of the Ninemile Prairie project at the sacrifice of the conservation, recreation, and scenic values which that development would mean; or the need can be completely met by the reservoir below Superior behind Paradise Dam.

In this area the reservoir would create a magnificent mountain lake between the steep forested canyon walls of that stretch of the river, making available a great recreation resource to much of the population of western Montana which is now comparatively distant from any lake of substantial size.

Under this analysis, I felt that Paradise Dam would be the more logical, sensible development and the one which would best serve the basic principles of conservation to which this Nation has been devoted since the times of T. R. Not only would Paradise make the development of Ninemile Prairie unnecessary and create its own great recreation resource, but it would also make possible the development of the great power potential of the Middle Clark Fork Basin, a development which otherwise be completely infeasible and uneconomic.

I am told that the cost of relocations in the Paradise Reservoir would be exorbitant. On their face it seems so. Yet even with such great relocation costs, Paradise Dam is a good feasible project, and either Knowles or Paradise would be paid for within 50 years under the normal Federal repayment schedule. The cost of power would be slightly higher from Paradise than from Knowles, yet for the 50 years of that repayment period—and for hundreds of years thereafter—Paradise Dam would be producing 2 billion kilowatt-hours per year more power than Knowles would make possible. After the first 50 years the cost of that power would be almost nothing—a few tenths of 1 mill. As Theodore Roosevelt said, "We must look ahead"—and he did not say only 50 years ahead. Our waterpower is our most truly inexhaustible energy resource and we waste or destroy parts of

it only at the cost of our future energy-based civilization, and in disregard of our obligations of stewardship to generations yet unborn.

As I say, these are my initial predispositions toward this question. But I believe in this, as in all problems before their solution, it is necessary to keep an open mind. I, therefore, welcome these hearings, which will permit the people of western Montana to express their views on this important issue, whose decision will affect, and to some degree control, the economic and cultural development of this part of the State for decades. On the basis of these and subsequent hearings to be held in Washington, it will be possible for the Congress to make a rational decision both as to how the sometimes conflicting values of conservation can best be served and how those values can be coordinated with the best development of the region's economy.

While my discussions of this problem have convinced me that the majority of the people of western Montana are in favor of a Federal dam at one of the two alternative sites to be discussed here today, there are still some who have doubts or are undecided. I think it is necessary to look no further than Hungry Horse Dam to reach a decision on this question, for the economic benefits which Hungry Horse has brought to western Montana are undeniable and are available for all to see except those who will not. Only by the construction of a Federal project is it possible to assure legislatively that the electric power developed at a project will be reserved for use within the State. In the case of Hungry Horse, this was done almost entirely by building the legislative history of the authorizing bill during hearings. S. 1226, and my companion House bill, H.R. 5144, contain specific reservations. This is just one of the many factors which make the Federal development of this stretch of the river an essential part of the growth of western Montana in the future. That is the lesson of Hungry Horse Dam and it is a lesson which the people of western Montana have learned well.

I thank you for this opportunity to welcome you here today and again for your courtesy in taking such a great interest in the problems of Montana and the conservation, orderly development, wise management, and highest use of our natural resources.

Mr. Chairman, that concludes Congressman Metcalf's statement. I might add that Senator Murray concurs with Congressman Metcalf in the opinions expressed in this statement.

Senator GRUENING. Gentlemen, it is now a quarter to 10 and I suggest that we proceed for 3 hours, until a quarter to 1, which will give each side an hour and a half before the luncheon hour; and we would now like to hear from the proponents of the measure, who will have an hour and a half.

Mr. EUGENE MAHONEY. Senator Gruening, Senator Martin, my name is Eugene Mahoney, and as the floor leader for the proponents and an officer of the committee for Paradise Dam, I certainly wish to thank the members of this committee for the opportunity of having a hearing here out in the field so that the people of Montana and the area affected may be able to express their views.

In keeping with the desires of the committee, and we know our time is limited, we have endeavored in lining up our witnesses for this hearing to eliminate as much repetition as possible, to keep our

oral statements as short as possible, and in this light, of course, we will ask the committee for permission to introduce statements from people who are here and are willing to testify but because of the limitation of time will not be able to do so. Also, we would like the opportunity to submit any supplemental testimony that may be necessary at the conclusion of this hearing.

In the light of the limitation of time, I don't want to take any more time from the witnesses that we have here, and I would like to now introduce to the committee Mr. Leo Graybill, of Great Falls, the Democratic national committeeman from Montana. Mr. Graybill.

**STATEMENT OF LEO GRAYBILL, DEMOCRATIC NATIONAL
COMMITTEEMAN FROM MONTANA**

Mr. GRAYBILL. Senator Gruening and Senator Martin, by way of introduction, may I say that I have been a practicing attorney in Cascade County, Mont., for the past 39½ years; that I reside at Great Falls, Mont.; that I have served seven terms in the House of Representatives of the State of Montana, twice as speaker; that since 1951 I have been the Democratic national committeeman from Montana, serving on the advisory council of the national committee since the council was formed in 1956; and that during all of my adult life I have been interested in the economic development of Montana and the Nation.

I am enthusiastic in my support of maximum multiple-purpose water resource development at all sites where such development is economically feasible. We know from the Army Engineers that there are at least two economically feasible sites in the Clark Fork-Flathead River Basin. Naturally, I favor the Paradise site, for it alone offers maximum development of our water potential.

S. 1226 in its title states, among other things, that the proposed project is—

to provide for the national defense and welfare by advancing the integrated comprehensive development of the water resources of the Pacific Northwest, and for related purposes.

Since you Senators here today represent not only your own States, but the Nation also, I would like to point out that we need maximum water resource development, as exemplified in this project in Montana, because we need to increase our national rate of economic growth. We need to increase our Montana economic growth, of course, and in that connection, I attach myself to the statement of Senator Mansfield as contained in his telegram read this morning. But may I be permitted to dwell on the national need. Others will discuss the State need.

Our present annual national economic growth rate is now lower than at any time in the present century. During the several years following World War II we achieved an annual rate of economic growth averaging right at 4.7 percent. But in succeeding years the rate of growth is on the average less than 2.5 percent, despite great improvements in technology which should of themselves make for an accelerated rate of growth. The present average of growth is really no growth at all because our population growth is almost 2 percent per year.

In other words, 80 percent of our present growth rate is needed because of our increasing population. No less an authority than Allen Dulles, Director of Central Intelligence, estimates that the Russians' average annual rate of growth during the past 10 years has been 7 percent, almost three times our present growth rate. We must have a rate of growth in excess of our present rate just to maintain our standard of living and keep pace with expanding population. We must greatly accelerate our economic growth rate, for one thing, to catch up with the Soviet Union in important phases of defense; that is, in our intercontinental ballistic missiles, where it is admitted that on present expectations the next 3 years will give the Russians a 3 to 1 superiority. Accelerated growth will not only aid in our defense effort, but will also increase our tax income and our employment, and, in fact, our whole national prosperity. Paradise alone can make a major and material contribution to our Nation's defense and welfare.

Here, it seems to me, is a pertinent inquiry: While we follow a policy of no new starts in hydropower development by the Government, and precious few by private enterprise, what is Russia doing? Russia is exceeding us many fold in the rate of power expansion, especially for industry use. Russia already is constructing the 4.5-million-kilowatt Bratsk plant in Siberia, which will produce about the same as our three largest plants in the United States. The Kuibyshev project on the Volga is the largest dam in the world and, completed 2 years ago, has 2.3 million kilowatts capacity. The Stalingrad project is nearing completion with an even larger capacity, 2.5 million kilowatts. Incredible as it sounds, it is estimated that unless we move fast in this field that in 5 years Russia will have more power available for heavy industry than will the United States. The Soviets make no secret of their progress in this field. This I know, for I saw their bragging exhibits at the Russian exposition in New York City last July.

There is no argument but that plentiful and cheap power is the best accelerator for economic growth. Witness the Pacific Northwest and Hungry Horse. People are here today to kick about Paradise Dam because of claimed loss of tax income. And Governor Aronson twice in his statement referred to loss of tax income, and the fact that there would be no advantage to our economy. This sounds entirely out of place when we just read in the papers a few days ago the Anaconda Aluminum alone at its Columbia Falls operation in Flathead County, Mont., is paying about \$700,000 this year in State and county taxes where nothing was paid a short few years ago.

We need and need badly the maximum economic and defense lift that Paradise will give the Nation and Montana. That statement I read earlier from the title of S. 1226, "to provide for the national defense and welfare," can become reality if Congress will but authorize and provide the funds for maximum development of this, one of our fine remaining undeveloped sites in the Western United States, Paradise on the Clark Fork.

Senator GRUENING. Thank you, Mr. Graybill. Let me ask you a question. You are an attorney; is your statement representing anyone besides yourself? Are you here representing any group?

Mr. GRAYBILL. No. I am here for myself because of my interest in the subject matter, Senator.

Senator GRUENING. Thank you very much, Mr. Graybill.

Mr. MAHONEY. Mr. Mondell Bennett.

Senator GRUENING. I would like to suggest that in the interest of conserving time we omit applause and that we can save our applause for the very end for all concerned, and that any additional statements be given to Mr. Reinemer, who can then pass them out to the members of the committee.

Mr. Bennett, will you proceed please?

STATEMENT OF MONDELL BENNETT, ST. REGIS, MONT.

Mr. BENNETT. Senator Gruening, Senator Martin, members of the committee, my name is Mondell Bennett. I live in St. Regis in Mineral County. For the past 5 years it has been my privilege to serve as one of the county commissioners; however, the testimony I am offering comes as an individual impression. My convictions in this matter have been prompted by more than 12 years of living very closely with the people of Mineral County, and more specifically with the people of my own commissioner district, the west end of Mineral County. I sincerely testify that these good people as a whole are entitled to more opportunity, more security, a higher standard of living for themselves and for their children.

I can testify that our county taxable valuation is simply not keeping pace with the fast-rising costs of equipment, supplies, utility rates, insurance rates, welfare, medical and the many other basic expenditures. I can testify that far too many of our people live under conditions of mild to serious perpetual economic depression. Our seasonal and limited tourist business, the limited number of jobs offered by the single leading industry, lumbering, are not sufficient to induce the industrial expansion we must have if we are to establish a tax base which will insure our very survival as a governmental unit.

You will witness here today a parade of front men and businessmen who plaintively oppose multipurpose river development. I recognize many of these as merely front men for private monopoly organizations. For the greater part, some of these businessmen have already either feathered their nests financially, if you will permit me to use an old colloquialism, or they are well on the way by means of the patronage of the very people whom they would deny the right to greater opportunity and security. It is my sincere observation that these businessmen have dedicated themselves to a diehard "dog in the manger" political philosophy. This philosophy dictates no river development unless or until private monopoly can ring their cash registers from such development. These witnesses plead, "Let's save Montana water for Montana people." What they really mean is, "We demand the right to continue to do absolutely nothing with Montana's rivers."

May I respectfully submit an inevitable conclusion? Let us refuse to continue to turn our backs on the flagrant waste of our most valuable and available gift of all our many resources, water. Western Montana has wasted this precious resource daily, by the river load, for far too many years. Let us put our rivers to work for the benefit of the people of Montana. Let the people build a multipurpose dam here in western Montana. Let us not build a dam at slightly lower cost which will put the work harness on only one of our great rivers; let

us build one dam which will team up both our rivers here in western Montana. Let us build Paradise Dam.

Paradise Dam will fill the immediate need for more cheap power, water conservation and flood control. Paradise Dam, like Hungry Horse Dam in Flathead County, will be the means of creating new industrial growth for a very retarded western Montana. Paradise Dam will greatly add to the recreational attractions, both for tourists as well as for the use of our own people.

Mr. Chairman, my testimony is offered on behalf of the rank and file citizen of my home county. These people in the town of St. Regis, by a house to house canvass, by signature, have expressed their demand by a majority of more than 2½ to 1 in favor of the immediate construction of Paradise Dam. The town of St. Regis would have to be moved and rebuilt. Yet the people voted by more than 2½ to 1 in favor of Paradise Dam. I submit, sir, that the St. Regis story can be duplicated in most of our western Montana towns. It is dangerous to base any decision on the shallow arguments of a selfish minority. Let us rather listen to the wishes of all the people. Let us include those good people who have not the means of appearing at these hearings, people who wisely and quietly express their opinions at the polls. Let us make decisions which will be for the best good of all the people. Thank you.

Senator GRUENING. Thank you very much, Mr. Bennett.

Mr. MAHONEY. Mr. James UMBER.

STATEMENT OF JAMES UMBER, MONTANA STATE PRESIDENT, AFL-CIO

Mr. UMBER. Senator Gruening, Senator Martin, and members of the Senate Interior Committee, my name is James S. UMBER, of Helena, Montana. I am Executive President of the Montana State AFL-CIO.

The Montana State AFL-CIO is made up of approximately 200 union organizations representing nearly every craft and trade in Montana. These affiliates have a membership exceeding 20,000.

We have been on record in favor of Paradise Dam and full development of our water resources for a number of years. In June this year, in convention assembled in Helena, Mont., the delegates unanimously adopted a resolution in support of the construction of Paradise Dam and multipurpose river resource development. A copy of this resolution accompanies my testimony. The position we take in support of this program is the result of careful study and consideration.

There are a great many reasons why we favor the development of the many power sites and full river development, but I shall, in order to conserve time, enumerate the more important ones.

While we are not opposed to private power, it is apparent that private power companies, because of their very nature, cannot, nor will they, go beyond the building of dams for any other purpose than the generation and transmission of electrical energy.

Much has been said in opposition to development and distribution of electric power by agencies of the Government, but private enterprise doesn't complain because the Government delivers the mail, or cities own and operate water systems. There is no possible reason

in pure logic, then, why people, through their Government, should not provide themselves with other necessities for social and economic betterment.

Private utilities, thinking only in terms of profit, will neither integrate their projects into broad river basin development plans, nor, if they can get away with it, will they charge reasonable rates for the power they produce. Their excessive rates restrict markets and slow the growth of power use for both residential and industrial purposes, thus stunting progress in living standards and production.

Our feeling, then, is that the development of our water resources including the building of multipurpose dams and transmission of electricity, is the responsibility of the Government.

Montana, since before the days of Lewis and Clark, was, and still is, a vast reservoir of raw materials. We must have industry if we are to keep pace with the Nation and provide our people and future generations with the opportunity to live in health and abundance.

There are presently some 16,000 unemployed workers in Montana, which represents an economic loss of \$1,111,694 per week, over and above their unemployment compensation benefits.

Also, while the average national annual income has been steadily climbing, the average annual income for us in Montana has been declining.

We desperately need job opportunities. We need more tax revenue. We need more classrooms and more teachers. We have been educating thousands of our young people, only to see them, because of economic reasons, leave our State to seek employment in other States and add to the economic and social welfare of those States.

Montana needs more and better highways and bridges. Hundreds of heavy and highway construction workers, now idle, need jobs. We need cheap electricity to attract industry and to heat our homes. Limited available power and excessive cost now prohibits this. Home heating alone would provide hundreds of jobs to electrical workers and others.

We must find ways and means to broaden our tax base. The cost of State government and the increasing demands for more services of State government have caused our taxes to rise to the point that stifles our economy. Montana workers pour millions into the Treasury of the United States and we will pour millions more if our great natural resources can be developed.

The development of our great power potential will not only benefit Montana, but the entire Pacific Northwest. We ask only that we be given an opportunity to grow and prosper with the rest of the Nation. In conclusion, I wish to point out that there will be many opponents to the development of public power facilities in Montana. Many will be guided by blind subservience to the vested interests, others will be hoodwinked by false propaganda, and some by plain ignorance of understanding.

Our Indian people are disturbed, and rightly so, because they fear for their future welfare. The same people who are now putting the fear in these people are the same ones who have exploited them down through the years. Organized labor stands ready and willing to fight for the rights and the welfare of our Indian people and those others who may be displaced because of the construction of Paradise Dam.

We will, as we always have, continue the fight for human rights over property rights, as opposed to the policy of special interest groups, whose sense of public justice is obscured by their inordinate desire for wealth.

In behalf of the people I represent, I heartily endorse and recommend passage of Senate bill 1226. Thank you, gentlemen.

Senator GRUENING. Thank you very much, Mr. Umber.

(A resolution filed by the witness follows:)

MONTANA STATE AFL-CIO RESOLUTION No. 5—THE PARADISE DAM PROJECT

Whereas the U.S. Corps of Army Engineers has recently recommended that a multiple-purpose dam be erected across the Flathead River 6 miles upstream from the proposed Paradise Dam site or across the Clarks Fork near the town of Paradise;

Whereas the Corps of Engineers, using railroad-supplied relocation estimates computed by Northern Pacific Railway—long an opponent of multiple-purpose river resource development—instead of making their own investigation, and using highway relocation figures which properly should not be charged to the project, have given the nod to the proposed Knowles Dam in preference to Paradise because of construction cost;

Whereas that even with the subject-to-question cost estimates provided the corps by Northern Pacific Railway and the improperly placed highway cost figures, kilowatt-hour production cost at Paradise would be only one-fourth of a cent higher than kilowatt-hour cost at Knowles, and Paradise would provide almost double the amount of kilowatt-hours of power per year as would the smaller project upstream;

Whereas it is altogether probable that the cost per kilowatt-hour of power produced at Paradise can be substantially cut below that of Knowles if approximately \$100 million in questionable cost figures are deleted from the estimate on the much larger Paradise project;

Whereas the fullest development of our abundant low-cost power resource potential is the greatest possible attraction Montana has to offer to industry to locate within our State, thus broadening the job, business, and tax bases of our State;

Whereas with the Nation's population increasing at an unprecedented rate, we as Americans cannot afford to leave a heritage to our children of anything less than the fullest possible development of our water resources; that, in the words of House of Representatives Document 531, "a project which would only partially utilize the capabilities of a site would constitute waste of a valuable national resource": Therefore, be it

Resolved, That Montana State AFL-CIO in convention assembled this day of June 1959 do reaffirm our long-held position in support of the construction of the proposed Paradise Dam.

Mr. MAHONEY. Mr. Ted Townsend.

**STATEMENT OF TED TOWNSEND, DIRECTOR OF PUBLIC RELATIONS,
MONTANA FARMERS UNION**

Mr. TOWNSEND. Senator Gruening, Senator Martin, ladies and gentlemen, my name is Ted Townsend; I am director of public relations for the Montana Farmers Union with headquarters at Great Falls. I have filed a statement by our president, Leonard Kenfield, who is unable to be here, and also a resolution of Plains Valley local adopted at a regular meeting in Plains, Mont., December 6. Both President Kenfield's statement and the Plains local resolution favor passage of S. 1226 and construction of a dam at the Paradise site. In the interest of time, saving time, I shall not read either the statement or the resolution.

Senator GRUENING. They will be printed following your testimony.

Mr. TOWNSEND. I wish merely to explain that Farmers Union is the largest farm organization in Montana, with a membership of nearly 16,000 farm families. While we don't compile this membership on the basis of individuals, I think a figure of 4 per family is quite conservative in this case, which would mean about 64,000 farm people throughout the State.

Our policy and program is adopted annually by convention delegates and the Farmers Union has officially supported Paradise Dam for several years. Our current policy statement on the dam is as follows:

We support the Murray-Metcalf bill for authorization of a dam in the Knowles-Paradise region of the river, urging study so that the dam will be located at the site producing maximum benefits.

And the best site is, of course, Paradise. Thank you very much.

Senator GRUENING. Thank you very much, Mr. Townsend.

(The statement and resolution referred to by the witness are as follows:)

STATEMENT OF LEONARD KENFIELD, PRESIDENT OF THE MONTANA FARMERS UNION

Mr. Chairman, there is a growing insistence among our many thousands of members in Montana on the urgency of constructing Federal Paradise Dam. For several years the Farmers Union has urged construction of a multipurpose Federal dam at the Paradise site.

It is fundamentally important that the full potential of the Clark Fork and Flathead Rivers at that point be fully utilized in terms of public power production, water conservation, flood control, irrigation, and recreation. And in that connection, of course, human conservation is most important.

Of tremendous significance in Federal Paradise Dam is the more than 1 million kilowatts of electricity it will produce and make available. It is conservatively estimated that in the years ahead this Nation will need at least a 300-percent increase in electrical energy by 1975 in order to meet the demands of modern living. Meeting those demands and keeping our Nation in the forefront as a partner for those who love liberty and a refuge for the oppressed requires that every feasible power site be developed to its utmost capacity.

In terms of water storage and power capacity the Paradise project is much superior to any other on the Clark Fork and Flathead Rivers within Montana. That was the inescapable conclusion from the historic 308 report of the Army Engineers, and the new report, I am told, makes no substantial change in that regard. The best alternate proposal between the lower end of Flathead Lake and Plains would provide only three-quarters of the usable storage capacity of Paradise, only about half of the ultimate installed power capacity and while eliminating a part, but not all, of the railroad relocation requirements would still retain most of the relocation requirements as to people, homes, businesses, and farms.

We need Paradise with its 1 million kilowatt-hours of power capacity, its 4 million acre-feet of usable water storage, and its many other benefits. Paradise Dam is needed for the jobs it will create, the new businesses and industries it will bring into being, the broader tax base it will develop, and the expanded recreational activities it will provide.

Electric energy requirements for rural electric associations here in Montana are growing tremendously during these days of increasing use of electricity on the farms and ranches. We can also see the stifling of fuller industrial expansion in this State because of power shortages. Enlightened farm people are interested in industrial expansion that means better times for agriculture as well. Industrial expansion means increased demand for farm commodities. Industrial and agricultural expansion means a broader tax base for the support of the many services our people demand.

Taking figures for the month of December each year, the average kilowatt-hours used per farm consumer in Montana has been as follows, according to Rural Electrification Administration: 1941, 76; 1946, 142; 1950, 114; 1952, 375;

and 1955, 469 kilowatt-hours. In 15 years, use of electricity on Montana's farms and ranches increased more than six times.

One rural electric leader, Mr. V. T. Hanlon, manager of the East River Electric Power Cooperative in South Dakota, stated in a public address in Montana in 1957 that the average farm could feasibly use 30,000 kilowatts of electricity a year in the not too distant future.

Not only do we need more power; we need low-cost power. Federal Fort Peck and Hungry Horse, the Bonneville Power Administration, and the TVA demonstrate that Federal power can be low-cost power. The taxpayers are getting their money's worth, and repayments to the Treasury are often ahead of schedule. Many farm and ranch people are looking forward to the day when they can have electrical energy at 1 cent per kilowatt-hour, delivered at their farmsteads. This they know is possible only through proper Federal development of the remaining river sites like Paradise.

Of course it is only good sense that in developing our river resources we get out of them satisfaction of other purposes besides power, such as regulation of the flow of the water to minimize costly floods, retention of water in Montana for whatever irrigation that might be possible, and expansion of recreational facilities.

A 1948 map of the U.S. Engineers office shows that Paradise could ultimately make available tens of thousands of irrigable acres of land in the area. Not only could the 8,700 acres of irrigable land that will be inundated be replaced but at least twice as many more acres could be put under ditch utilizing gravity flow and pumping with low-cost power if farmers and ranchers so desire. Possibilities for expanded irrigation lie in Camas Prairie, Little Bitterroot, Pablo, Arlee, Nine Pipe, and St. Ignatius areas.

There are people in the valley who are concerned about their homes. That is a sentiment with which we can all sympathize. The Farmers Union supports this proposal, understanding that adequate reimbursement based on fair appraisals of value of property will be negotiated with farm, town, industrial, and transportation property owners and with our Indian citizens. It is important that the tribal Indian treaty rights and equities of these people be fully recompensed before any construction is begun.

Furthermore, we strongly recommend the establishment of a Paradise Project Area Planning Commission with sufficient funds and authority to help reestablish dislocated people, institutions, businesses, and industries in whatever new homes, communities, and farms are required for satisfactory readjustment.

Of course there are the scare stories about flooding land in the Paradise Valley.

Why do the private power interests inspire scare stories about flooding out farmland at Paradise when there was not a whisper from them when private utility projects flooded out many thousands of acres of productive land at Cabinet Gorge and Noxon Rapids?

Many farmers in western Montana are already losing equities in their property and will do so as long as the depressing farm condition continues. Selling out to Uncle Sam to make way for a resource development project, I am told by many of our people, will be better than being bankrupted out. The misfortunes of agriculture today are adversely affecting many small businesses throughout our State. Solving the farm problems, we realize, will take more than a Paradise Dam.

The multipurpose Paradise Dam under Federal construction would stimulate the lagging economy in western Montana. Members of our organization are small farmers, many of whom have found it necessary in recent years under adverse farm prices and harsh credit policies to look to local industry for part-time jobs to help keep their families in groceries and pay the taxes. More recently some of them have lost their jobs because local industries have closed down from stagnation in the economy. The construction of Paradise Dam will afford many small farmers a chance to find work near at home in order to keep their families together.

Our farmers and ranchers would benefit also on a broader basis. There is evident a growing demand for Montana livestock and grain products on the west coast due to increasing industrialization and rapid population growth in the region. Paradise Dam would improve the water and power facilities of the west coast and strengthen further the basic economy of the area and thus further improve the market for Montana agricultural products.

Bulletin No. 293 of the agricultural experiment station and extension service, Montana State College, issued at Bozeman in 1956, says, "Not long ago, livestock producers in Montana looked to the heavily populated East for a market. Now they must change their sights and concentrate on satisfying consumers to the west."

The same Montana State College bulletin suggests that since there is no corn belt on the west coast, Montana producers could well be encouraged to enlarge livestock-feeding operations for the west coast market.

There is no doubt that low-cost power from such installations as Paradise would firm up the energy resources of the Pacific West and help stimulate an economy that would demand more raw food products from Montana farms and ranches.

This idea also suggests a similar development here in western Montana. Industry attracted to this area by the low-cost power of Paradise Dam would mean more jobs and an enlarged local market for farm produce.

Farm people, of course, look to industrial growth as a factor in agricultural growth. Thus, low-cost public power that stimulates industry makes jobs available for workers who buy beef, mutton, pork, cereals, milk, and many other agricultural commodities. There is a direct relationship between farmer income and industrial worker income.

We must not forget that our Nation's population is increasing at a rapid pace, nearly 3 million new people a year with forecasts of a U.S. population of 210 million or more in 1975, or a gain of 45 million, which would be a new group of Americans more than 60 times larger than the present population of Montana.

Land is limited, yet these people must be fed and clothed and sheltered. It seems imperative that we develop our resources to get the most out of them for the greatest number of people for the longest time.

If American farm people are to clothe and feed our population which is growing so rapidly, they will need much more electric power. To meet the big feeding job ahead farmers will require much more low-cost electric power that is possible only from Federal dams and generating plants. They will need low-cost power for making fertilizer and for irrigation. They will need low-cost power to make the land area available for more productive cultivation.

Some people of this Nation seem to feel smug and secure behind a lot of loose talk about agricultural surpluses. Actually, much of the surplus we hear about is mythical, and some of the extra supplies of farm produce must be considered as only reasonable safeguards against disaster.

Here is what the Honorable George Dewey Clyde, Governor of Utah, said a few months ago in a speech before the American Society of Engineers.

"Let us begin by taking a brief look at the agricultural surpluses which we now have on hand. While the accumulated piles of commodities may appear mountainous—and in a few special areas they are—the excess agricultural products we have on hand amount, I have been told, to about 7 percent of our annual food consumption. Now, it has been widely urged, by leaders of civil defense and others, that each U.S. family lay in a 1-month supply of food against a possible emergency. If this were done, if each family set by a single month's supply of food, our surplus would be entirely wiped out and we should be faced with critical shortages. As a matter of practical fact, I am not suggesting that each family will set aside a month's supply of food—but this simple illustration shows how quickly our food surpluses could disappear."

In another part of his speech Governor Clyde, who was showing the need for more reclamation development in the Nation, underscored the food problem with this revealing statement:

"Not so long ago, Dr. Byron Shaw, who is Administrator of the Agricultural Research Administration of the Department of Agriculture told a congressional committee that if our demand for red meat continued on the 1933 per capita consumption—and it is increasing—that by 1962 we should need 35 million acres more land devoted to the raising of feed than were in production in 1953. This is land for pasture and grazing and for the growing of feed grains."

He raised the question: Where are we going to find 35 million acres of suitable land?

Another voice of authority stresses the shortage of productive land:

"The Nation must find by 1975 the equivalent of an additional 70 million acres either through expediting the reclamation program or through material increase in productivity of existing lands," we are told by the report of the President's Water Resources Policy Commission in a publication dated 1950.

The whole point is that land is limited and that we are being pressed to make better use of the land we have. In the technology of change and improvement in agriculture, low-cost electricity is a key factor. We have seen that factor clearly demonstrated in the Tennessee Valley under the TVA, in the Columbia Valley under the Bonneville Power Administration and elsewhere in the Nation.

It is quite clear in the whole discussion of this proposal that Montana Power Co. wants the Paradise Dam site, and for some time that company has been before the Federal Power Commission with an application for a permit to build at least one small, low-head, single-purpose, run-of-the-river dam in the vicinity of that point. The power company's proposal would ruin much of the full potential of a Federal Paradise Dam with the latter's many benefits.

Anyone who gives careful thought to adequate development of powersites on our rivers knows that no private power company has the resources nor the inclination to build a project that will give the people full value in terms of power; water, irrigation, navigation, and recreation.

We are told the estimated cost of Federal Paradise Dam is about \$490 million. That would appear to be a very good investment since, in addition to its many benefits, it would be a self-liquidating project.

Paradise Dam would have another attraction in terms of expenditures of public money. The Military Establishment of our Government is very wasteful. We are constantly being reminded of the scrapping of costly defense projects of various kinds. Not long ago the newspapers informed us that the Navy had thrown away \$500 million when it scrapped its guided missile Triton, and the Air Force had tossed out of the window a cool \$680 million in dropping its Navajo project. That is more than \$1 billion for unsuccessful experimenting. Meanwhile, millions of dollars worth of U.S. lunar efforts are dropping wastefully into the ocean with appalling regularity. Paradise Dam would be a half billion dollars worth of solid assets serving the people for more than a hundred years.

In this connection we urge our lawmakers to provide for capital budgeting in resource expenditures. Certainly a Federal Paradise Dam ought to be carried in the Federal bookkeeping system as a capital item. This procedure would shed a cleaner light on Federal financing. It is hard to understand why we should not now consider Hungry Horse Dam, for example, as an asset rather than as a liability in our Federal budget. If a private power company owned Hungry Horse Dam, that facility would be listed among its assets, I am sure. Uncle Sam should do likewise.

Finally, increasing mechanization in the modern era points to shorter working hours. If they are going to work less, our people must have opportunities for wholesome leisure time activities. Already, many of our Federal manmade lakes are opening new opportunities in recreation. In fact, it is difficult for the ordinary citizen and his family to find a fishing or camping spot any more at our older natural lakes because the shorelines are already taken up by others. New lakes will broaden recreational opportunities.

For strengthening agricultural opportunities, for building large blocks of new power for the rural electric program, for creating more jobs and stimulating more business, and for water conservation and recreation, we urge congressional authorization of Federal Paradise Dam and an early start on its construction.

Thank you.

RESOLUTION OF PLAINS VALLEY LOCAL NO. 223, MONTANA FARMERS UNION

Whereas Senate bill 1226, providing for construction of the Knowles Dam project in the State of Montana and containing an alternative provision permitting its location within an area between 2 miles upstream and 8 miles downstream from the Knowles site, was introduced in the Senate on March 2, 1959, has been twice read and referred to your honorable committee; and

Whereas practically every aspect of the project has been developed by hearings conducted by the U.S. Army Corps of Engineers except the exaggerated estimated cost of railroad relocations, estimates which are admitted as solely that of the railroad corporations affected and subject to suspicion as of self-interest; and

Whereas legislation such as that embodied in S. 1226 is long overdue for the purpose of providing adequate flood control, generation of electric power, irri-

gation, and the general upbuilding of the western Montana community to a position comparable to other similarly situated areas; and

Whereas all surveys of public sentiment are known to be overwhelmingly in favor of early commencement of the Paradise project: Now, therefore, be it

Resolved, That Montana Farmers Union, Plains Valley Local No. 223, respectfully requests and urges prompt action by your honorable committee in recommending passage of S. 1226 with such recommendation containing approval of the dam being built at the Paradise instead of the Knowles site on a basis that the Paradise site will avoid a waste of opportunity to build for the future, a future in which forecasters estimate a far greater need of hydroelectric power than would be produced by the lesser Knowles location.

Mr. MAHONEY. Mr. Herbert Wheat.

STATEMENT OF HERBERT WHEAT, PRESIDENT, MONTANA STATE RURAL ELECTRIC COOPERATIVE ASSOCIATION

Mr. WHEAT. Mr. Chairman and members of your committee, my name is Herbert Wheat, residing in Dillon, Mont. I am president of the Montana State Rural Electrification Cooperative Association, a statewide organization representing 25 cooperative organizations who serve central station electric energy to over 40,000 members.

I desire to express appreciation to you for holding this hearing, as I believe a better understanding can be had by all concerned.

Association members and many individuals whom I meet daily are deeply concerned about the economical development of industry and agriculture in our great State of Montana. To further the progress of industry and agriculture, there is no question that the solution rests with full development of the State's water resources.

Electricity is a necessity of the American way of life. Our special interest is in an abundant supply of low-cost electrical energy to serve our people and industry to their maximum desire. On this, and of special interest of our members, at the Montana State Rural Electric Cooperative Association's annual meeting held in Miles City, Mont., a resolution was adopted specifically urging the Paradise Dam development. A similar resolution urging this development has been passed a number of times in prior years.

The use of electrical energy is growing at the rate of about 10 percent per year. We feel electric energy produced by multiple-purpose projects should be developed to maximum feasibility.

I note, too, that most of the rural electric cooperatives in Montana are also affiliated with the Northwest Public Power Association which represents 104 consumer electric distribution systems in the Northwest, with a membership of about 2 million users, and has, at its many annual meetings in the past years, recommended the development of the Paradise project. Recommendations for this development have been based on facts taken from the reports of the U.S. Corps of Engineers.

When you have studied all the pros and cons of this bill, for the good of this generation and future generations, I know you will urge the passage of Senate bill 1226.

Thank you.

Senator GRUENING. Mr. Wheat, do you know how many of those consumer distribution systems are in the State of Montana and about

what their membership would be? Have you any approximate estimate?

Mr. WHEAT. Well, it's 25 cooperative memberships.

Senator GRUENING. How large would that membership be?

Mr. WHEAT. 40,000 members.

Senator GRUENING. Would those be the same as in REA subscribers? Are those the same?

Mr. WHEAT. Yes.

Senator GRUENING. Thank you very much.

Mr. MAHONEY. Henry L. Gill.

STATEMENT OF HENRY L. GILL, STATE REPRESENTATIVE FROM SANDERS COUNTY, MONT.

Mr. GILL. Mr. Chairman and members of the committee, my name is Henry L. Gill; I am State representative from Sanders County and a businessman of the town of Thompson Falls.

A majority of the people in Sanders County favor the construction of a multipurpose public power dam at the proposed Paradise Dam site. I make this statement without hesitation or reservation.

My campaign for election in the fall of 1958 was based on my promise to actively support the building of the Paradise Dam. The results of that election indicate that a majority of our people want a major multipurpose public power dam constructed in Sanders County. Support for this type of construction has greatly increased since 1958.

There is a great need for industrial development in this area to stabilize and increase local employment. Industrial growth will come when the basic requirements are made available. We now have most of these basic requirements. With the addition of an abundance of low cost power, reserved for local consumption, industrial growth is assured. Establishment of additional industries in our area will mean additional industrial workers. For every job in basic industry, another job in trades and services is created. This means business to a businessman.

I am confident that enactment of Senate bill 1226 will provide this area with the construction, the industrial development and increased employment that we need to stabilize our economy.

I urge speedy passage of this bill. I thank you.

Senator GRUENING. Thank you very much, Mr. Gill.

Mr. MAHONEY. Mr. Guy Brandborg.

STATEMENT OF GUY BRANDBORG, HAMILTON, MONT.

Mr. BRANDBORG. Mr. Chairman and members of the committee, I am G. M. Brandborg, of Hamilton, Mont. I have been active in conservation affairs in Montana for over 40 years, in government and private organizations.

I am deeply concerned with the problem of how Government and private agencies, civic groups and individual citizens can best work together to bring about cooperative planning and development of our land and water resources. I appear here today as a private citizen, interested only in helping to bring about such comprehensive planning and development that will do the most good in providing power

and flood control, with the least damage to wildlife and other recreational assets. I refer specifically to the need for developing Libby and Paradise Dams. I urge support and development of these specific projects, since they will meet requirements for flood control and other water uses without inflicting great losses upon outdoor recreational resources.

Conservationists throughout the country, after careful study of the problems involved, have endorsed these projects as the two outstanding alternatives to inferior projects which would provide less flood control and power, but would also inflict irreparable damage to some of the finest wild country and unsurpassed fish and game assets in the United States.

As supporting evidence, I am submitting with my statement for the record two policy statements by the National Wildlife Federation and the Wilderness Society concerning water developments in the Columbia River Basin.

I wish to go on record supporting the position that these two national conservation organizations have taken opposing the Spruce Park and Nine-Mile Prairie projects in Montana. Objections have also been raised to each of these two projects by competent State and Federal fish and wildlife conservation agencies.

If our objectives are to bring about the greatest good to the greatest number in the long run in the development of power and flood control in the Columbia River Basin, there are no alternatives to Paradise and Libby Dams.

Thank you for the privilege of appearing here today; and, Mr. Chairman, on behalf of the Wilderness Society, Dr. Howard Zahniser, who is executive secretary of that organization, has asked me for permission to submit a statement of his at this time, and with your permission, I would like to submit that statement and the telegram requesting me to do so.

Senator GRUENING. It will be received and placed in the record at this point. Thank you very much, Mr. Brandborg.

(The documents referred to follow:)

WASHINGTON, D.C.

G. M. BRANDBORG,
Hamilton, Mont.

DEAR BRANDY: A copy of statement I have prepared entitled "Dam-site choices with wilderness needs in mind" is on its way to you. Will you please present this in my behalf as the statement of the Wilderness Society at the hearing to be held in Missoula, Mont., by Senate Committee on Interior and Insular Affairs on December 15, 1959? Your representation of the Wilderness Society thus will be much appreciated.

Sincerely yours,

HOWARD ZAHNISER,
Executive Secretary and Editor.

STATEMENT OF HOWARD ZAHNISER, EXECUTIVE SECRETARY AND EDITOR, THE
WILDERNESS SOCIETY

DAMSITE CHOICES WITH WILDERNESS NEEDS IN MIND

Mr. Chairman, I have welcomed the notice of this hearing from Senator Murray, chairman of the Committee on Interior and Insular Affairs, because it provides an excellent opportunity to emphasize that in order to preserve adequate areas of wilderness in this country we shall have to meet other needs also and meet them with our wilderness purposes in mind.

My name is Zahniser, my first name Howard. I am executive secretary and editor of the Wilderness Society, a national nonprofit conservation organization, with headquarters at 2144 P Street NW., in Washington, D.C. The Wilderness Society publishes the quarterly magazine, the *Living Wilderness*, and seeks in behalf of its members in all States of the Union to represent the public interest in wilderness preservation and in both public and individual understanding of our wilderness resource and its values.

The purpose of the Wilderness Society is to secure the preservation of wilderness and to encourage the appreciation and use that will bring the benefits of wilderness to our people. It is the society's purpose accordingly to carry on an educational program concerning the value of wilderness and how it may best be used and preserved in the public interest, to make and encourage scientific studies concerning wilderness, and to mobilize cooperation in resisting the invasion of wilderness. Our long-time broad purpose is to increase the knowledge and appreciation of wilderness, wherever found.

In connection with all these purposes we also join with other organizations in cooperation for the conservation of all natural resources. We do this not simply because of our cooperative disposition and our appreciation of the excellent support received by the Wilderness Society from the other conservation organizations of the Nation. We do it because we are convinced that wilderness can be preserved in an enduring way only through an overall public program that accommodates all interests and adequately meets all needs.

Thus we become concerned with the needs for watershed protection, the conservation of water resources, and the wise handling that both conserves and controls. These needs can provoke conflicts with those for wilderness, but it is our conviction that they need not do so—that rather we can meet these needs in such a way as to provide also for wilderness.

This basic conviction and policy of the Wilderness Society brings us a deep concern with the proposals for development of water resources within the Columbia River watershed—a region that includes much of great wilderness value.

Within the Columbia Basin dams, in fact, have been proposed at sites that would destroy important wilderness values in Glacier National Park; on the Middle Fork of the Flathead; and on the Salmon, the Clearwater, and other tributaries of the Middle Snake. Where such dams that threaten wilderness may be proposed in the future we cannot predict.

In these circumstances we do see clearly the importance of meeting the problems that dams are designed to solve, but meeting them by choosing sites that do not threaten the values of our precious wildlands. These values include wildlife and scenic assets and related recreational opportunities that will be sacrificed needlessly if we dam areas that destroy wilderness when we could just as well put our impoundments somewhere else.

These are the considerations, Mr. Chairman, that lead us of the Wilderness Society to commend the consideration you are giving to those aspects of the bill S. 1226 that can provide for a program that meets the needs for dams while at the same time obviating other proposed programs that would destroy wilderness.

Our basic policy in this aspect of the public interest in conservation in this region was expressed in a statement adopted on February 13, 1958, entitled "Water Storage Needs and Wilderness in the Columbia River Basin." With the submission of this statement of policy I shall conclude this testimony, but with thanks for your interest and consideration. The statement of policy is as follows:

"WATER STORAGE NEEDS AND WILDERNESS IN THE COLUMBIA RIVER BASIN

"The executive committee of the Wilderness Society, having reviewed water storage needs and various proposals for dams in the Columbia River system, adopted the following policy on February 13, 1958:

"Projects for construction have been considered in relationship to their impact upon areas of wilderness and other undeveloped country on several of the Columbia River tributaries. It is recognized that in striving for the preservation of these wild areas, it will be necessary to meet the needs of water storage at other sites which do not encroach upon lands that have been dedicated to wilderness uses or upon other areas of high scenic or recreational value. A sound overall program for developing the water resources of this region should be consistent with and include the preservation of these outdoor resources.

"Following a thorough consideration of all the values involved, a sound appraisal from an overall point of view should be made of any project proposed

for construction within the Columbia River system. The society will contribute, within the limitations of its resources to the study and appraisal of each of the proposed dams to determine its effects upon the fish, wildlife, and other wilderness resources of the Northwest. Such appraisals should be designed to facilitate the selection of alternatives to harmful upriver impoundments without jeopardizing the irreplaceable recreational resources of this region. Surveys and studies should be made by all the appropriate government agencies involved and made available for public consideration.

"The society will actively oppose not only any dams in dedicated areas of wilderness but also any proposals for authorization of dams at sites where complete studies of the impact of these projects upon wilderness, wildlife, and other recreational resources have not been completed by all appropriate agencies or where recommendations resulting from these studies have not been made available for full consideration by the public.

"Evidence now available indicates that several of the dams currently proposed for construction within the Columbia drainage would seriously encroach upon areas having unique scenic, wilderness, and wildlife assets.

"Such dams include Glacier View, which would flood western portions of Glacier National Park; the Penny Cliffs project, which would back water for 6 miles into the Selway-Bitterroot primitive area; the Crevice impoundment, which would inundate wild sections of the Salmon River Gorge within both the Selway-Bitterroot and Idaho primitive areas; and the following proposed dams at valuable wildland sites not included in specially designated areas of wilderness: Spruce Park on the Middle Fork of the Flathead River in Montana; Long Meadows on the Yaak River in Montana; Ninemile Prairie on the Blackfoot River in Montana; Bruces Eddy on the North Fork of the Clearwater River in Idaho; Nez Perce on the Snake River in Idaho and Oregon; Lower Canyon and Freedom on the Salmon River in Idaho; Wenaha on the Grande Ronde River in Oregon; and Narrows on the Upper Snake River in Wyoming.

"In order to satisfy current requirements for water storage there are other projects, which do not necessitate sacrifices of irreplaceable outdoor values, such as those in wild and other undeveloped areas. From information available at this time some of the dams currently proposed for construction appear to involve only minor losses to outdoor recreational resources. Because of their locations at downstream sites, Paradise on the Clark Fork River in Montana, Libby on the Kootenai River in Montana, and High Hells Canyon on the Snake River in Idaho and Oregon afford maximum flood control and hydroelectric power potentials without serious encroachment upon areas of outstanding recreational value. Other proposed dams that might be considered include Pleasant Valley, or a combination of Pleasant Valley and Mountain Sheep on the Snake River in Idaho and Oregon.

"The staff of the Wilderness Society is instructed to cooperate with other conservation groups in studying the various projects which have been and may be proposed for construction in the Columbia Basin, and in counsel with the executive committee of the Wilderness Society, to formulate statements on the position to be taken by the society on each of these dams as they may relate, either directly or indirectly, to the protection of recreational values. The society will also endeavor to work in fullest cooperation with other conservation groups to obtain general agreement on the positions that may be taken on these various proposals in the light of recreational, hydroelectric power water storage, and general long range economic needs of the region."

STATEMENT OF CHARLES HARBALL, STATE REPRESENTATIVE, LAKE COUNTY, MONT.

Mr. HARBALL. Senator Gruening, Senator Martin, and gentlemen of the committee, my name is Charles Harball; I am a rancher and reside 20 miles west of Polson. I am also one of the State representatives of Lake County. I am here to testify on behalf of S. 1226.

I believe there is room for both private and public power in this Nation of ours; that in order to develop fully the potential natural resources, we need both. I believe that commonsense plus efficient power engineering would dictate that private power concentrate upon

the development of community and State water projects, plus the retail distribution of power, while Federal power development be directed toward the great interstate flood control, irrigation, and power development projects. Montana has only begun to utilize its hydroelectric resources. The potential hydroelectric energy in Montana was estimated in 1954 by the Federal Power Commission to be 6,227,000 kilowatts, and the installed capacity of hydroelectric plants in Montana in 1957 was 943,752 kilowatts.

Montana is unique in the fact that it is the 4th largest State in the Union, and yet ranks only 43d in population.

The residents of our State demand, and justly so, all of the services that the residents of the other States demand. Consequently, that throws upon the property holders a heavy burden in the form of taxes. Our only relief lies in industrialization, which brings about a broadening of the tax base, thus lightening the burden upon the property holder. Montana has two of the prime requirements needed to attract industry, the potential of an abundance of cheap electrical power and a great abundance of fresh water.

Are we keeping abreast with our sister States in industrial growth? With the development of the Columbia River Basin, let us look at the assessed valuation of Montana, and two of her sister States. Washington, in 1939, had an assessed valuation of \$1,077,476,000. In 1958, the assessed valuation was \$4,451,369,000, or over 400 percent growth. Oregon, in 1939, had an assessed valuation of \$899,092,000. In 1958, her assessed valuation was \$3,894,994,000, or over a 400-percent increase. Montana, on the other hand, had in 1939, an assessed valuation of \$1,013,905,000. In 1958, her assessed valuation was \$2,244,197,000, for an index of just over 200 percent. This is just half of what our sister States had.

What can we expect in the way of a broader tax base if Paradise or Knowles is built? I think I have just shown what it has meant to our sister States to have an abundance of cheap electrical power. Now let us take a closer look at home. It is interesting to compare the tax situation in Flathead County, where Hungry Horse pays no taxes, with those of other counties where private owned utilities are located.

Flathead County: The Anaconda Aluminum plant, due to Hungry Horse, pays \$702,380 in taxes.

Sanders County: Thompson Falls—Montana Power pays \$128,654, and this is all property including transmission lines from Kerr Dam to Idaho. Noxon Rapids—Washington Water Power pays \$235,919. Cabinet Gorge (reservoir area)—Washington Water Power pays \$5,471, or a total for Sanders County of \$370,044.

Lake County: Kerr Dam—Montana Power pays \$373,474, with no industry in Lake County attributable to Kerr Dam. Polson Plywood and Plumbcreek Lumber Co. use Flathead irrigation project power.

Hungry Horse, which, incidentally, would be only half as productive as Paradise, has been a boon to broadening the assessed valuation of Flathead County. In 1946, the assessed valuation of Flathead County was \$35,072,935. In 1959, it had soared to \$90,047,923, or over 250 percent in growth. In addition to the increase in assessed valuation, one cannot overlook the 600 steady jobs at the aluminum plant, which means \$3,500,000 in yearly payroll.

Lake County, with its \$173,434 in all-time delinquent taxes, as of June 30, 1958, is in dire need of not only a broader tax base, but a need for a steady payroll.

Thank you, gentlemen, for the privilege of appearing before you. Senator GRUENING. Thank you very much.

Mr. MAHONEY. Mr. Roy F. Bessey.

STATEMENT OF ROY F. BESSEY, ENGINEERING CONSULTANT FOR COMMITTEE FOR PARADISE DAM

Mr. BESSEY. My name is Roy F. Bessey. I am a planning consultant of Portland, Oreg., sometimes employed by the Committee for Paradise Dam.

My statement is a rather long one, and with your indulgence I would like to go into it only to a very limited extent, stressing certain points, in support of the proposed bill. The general scope of my paper goes into these matters: The basic and well-established principles that should govern in this kind of development; the place of the Paradise reach, a strategic place in the larger river basin plan; the vital importance of upstream storage and river regulation in general; the community of interest of upstream and downstream areas; the desirability of high goals for flood control; the need for electric power in volume and at low cost; and the growing significance of general water supplies for industrial, agricultural, and domestic uses, adequate in quantity and quality, in river basin plans.

It also brings out some of the pertinent needs and relationships in the various multiple uses of the water from this or a similar project.

Stressing a few points, I would like to bring out with as much force as I can the superiority of the Paradise location from the standpoint of use of resources, and these are very strategic resources in the Columbia Basin system. These are resources that may be lost for all time, practically speaking. It is crucial that we use these resources to meet needs

You have heard and will hear testimony about our needs in national growth. In capsule form, we are facing a population growth of over 1½ percent per annum for a considerable period. Our gross national product, the product of all of our goods and services, should be about three times that population growth to provide any room for increased living standards, increased security, increased wealth. In other words, at about 4½ percent.

The requirement for energy increase should be at least twice the percentage, twice the rate compounding of the gross national product, or about six times, or so, of the population growth. We have attained that and we should attain it. These rates of growth should be more, at a larger rate, in the Pacific Northwest than they are in the Nation as a whole because of our lower stage of development.

I would like to come back to power for a minute, and point out that there are no surpluses of power in any real sense. Under such great rates of growth as we have outlined, we only have margins from year to year and we need those margins as reserve for development. We have to have something to sell, something upon which to build our industrial and other development.

Also, as the committee well knows from its investigations and from a recent trip of some of the members, we have to meet competition in resource development abroad. That is not, as I see it, a primary need. Our primary need is to meet our own needs for materials and for better living for their own sake and for the sake of what we call the free world.

I will not go into the U.S.S.R. development, but I think they have certain advantages that we can and should meet as far as we possibly can. They do approach their river development from a full development standpoint. They do support their planning, research, and development work at a greater rate; and without going into particulars, I think that the committee will pay considerable attention to those problems and developments.

I would like to stress the area planning provisions of the proposed legislation. I think that this is among the most enlightened legislation in resource development that we have had. It is a departure from the usual authority of bare authorization of a project to be built. I think this fits the project into the area economy, and it is certain to enhance the benefits. It is more than certain to do away with the dislocations in a project area that come from a large development of this kind. I think that this is a pioneer piece of legislation.

I would also stress the need that this project, the Paradise project, be carefully fitted into the Columbia power system. We need that for an integrated operation in the Pacific Northwest and for all the advantages that can go with that and the system as it grows. That means a million or more kilowatts, increasing hundreds of thousands of kilowatts of capacity. It means the lowest cost energy, and here the benefits are mutual benefits for the upriver and downriver areas. We get the benefits of integration on both ends, and that applies with large force to the upriver areas.

The Hungry Horse development, of which you will hear and have heard a great deal, demonstrates that in actual practice, these advantages accrue to the upriver areas, including western Montana, in three or more ways. One, in price. The Paradise or any other project on the upper river, the unit cost of power will be higher than it is in the system at large and you will get the benefits of the lower cost development of the system as a whole, particularly in the lower river projects. You will also get the benefits of integration. Specifically you will get the benefits of return flow of power to this area while your reservoir projects are not producing. Your firm output, your energy output, the energy available will be greatly increased.

I might stress in this connection that the low cost of power is a first essential for industrial location and establishment. You have got to get the price of power down to the lowest possible level, and that means Federal development; it means multiple-purpose development.

Finally, I would like to stress the need of intensive study of the whole project, free study, as a matter of fact, in order to get the best possible project, the best use of resources, the lowest possible cost. In my statement I pay considerable attention to the need of estimate review. Obviously there is a great deal of fat in the estimates for the Paradise Dam. I only need to cite their relocation costs of well over \$300 million, including interest during construction. A great deal of this can be cut out by planning, by negotiation, by the use of

disinterested expert consulting services and by a much more careful exploration of all the alternatives involved in railroad and highway relocations. Thank you.

Senator GRUENING. Thank you very much, Mr. Bessey. Your full statement will be appended to your oral statements.

(The statement referred to follows:)

PREPARED STATEMENT OF ROY F. BESSEY

My name is Roy F. Bessey, address 606 Southwest Evans Street, Portland, Oreg. I am a consultant, in private practice, in the general field of resources and regional development, and have been thus engaged since 1953. Prior to 1953, I was employed by the Federal Government, for about 35 years between 1911 and 1953, in civil engineering, resources and regional development, and planning and programing fields—under the Panama Canal, the Navy, War, and Interior Departments, the Public Works Administration, and the Executive Office of the President.

For about 7 years, between 1926 and 1932, I was employed in private consulting engineering work, in the United States and abroad, with several firms, principally in port and terminal and waterways investigations and planning. An examination of waterway and port programs of the U.S.S.R. was included (1930).

My experience in regional and resources development work includes Federal service as Pacific Northwest regional officer for the National Resources Planning Board and its predecessors and executive officer of the Pacific Northwest Regional Planning Commission and of their regional water resources committee, 1934-43; special adviser to the Administrator, Bonneville Power Administration, on resources and regional development matters, 1943-46; executive director and chairman of the Pacific Northwest Field Committee, a regional program coordination agency of the Secretary of the Interior, 1946-53. At various times since 1952, I have been consultant for United Nations Technical Assistance Administration, on general and country program planning, and as representative at Technical Conference on Water Resources Development, Economic Commission for Asia and the Far East; Resources for the Future, Inc., on a regional-studies project; National Hells Canyon Association; Committee for Paradise Dam; Water Resources and Power Subcommittee, Government Operations Committee, U.S. House of Representatives; Committee on Interstate and Foreign Commerce, U.S. Senate; and others.

INTRODUCTION; PURPOSE AND SCOPE OF TESTIMONY

Substantially, my testimony, based upon a review of the current Corps of Engineers' basin plan, is a reiteration of statements submitted to the corps on the same subject, to the division engineer at hearing in Missoula, Mont., October 21, 1957, and to the Board of Engineers for Rivers and Harbors, March 14, 1959.

It is my purpose in this testimony to urge most careful scrutiny of the plans and estimates for the development of the strategic Paradise reach of the Clark Fork system—with the basic objective of achieving optimum development and use of, and maximum net benefit from, the resources involved. Such special review is extremely desirable because of the importance of full development to the Clark Fork Basin and to the control of the Columbia River system as a whole.

In this presentation I would support the view:

That a project for optimum development of the Paradise reach is an essential element in a main control plan for the Columbia River and major tributaries and in a broader comprehensive plan for the development of the resources of that river system and the Columbia Basin as a whole.

That development of such a project and main control plan are called for under basic principles and objectives of full development and use of resources.

That early priority in authorization and development of the project are called for by its key place in the major water plan, and its large multiple-use benefits, especially in its strategic and urgently needed water storage and river-regulating capability, its at-site and downstream power production, and its major contribution to effective flood control.

That early development of the project is essential from the standpoint of its contribution to fulfillment of fundamental national, regional and local economic and social needs.

That most expert and careful revision of existing project plans and estimates be carried out, with a view to improvement in use of resources, of benefit-cost relationships, of economy of power output, of breadth and distribution of benefits, and of area and community welfare.

In view of the findings of the pending report of the Corps of Engineers with reference to a Knowles project in this reach—a project providing for less than effective use of the reach's outstanding resources—I would strongly stress the view that the plans and estimates for the whole Paradise project should be objectively and intensively restudied. In this, particular attention should be given to the inordinately expensive railroad and highway relocations involved, which brought about the division engineer's rejection of the Paradise project in the last stages of his investigation. The intense review and fresh look are amply warranted by the much greater accomplishments of the Paradise project, as compared with those of its alternatives.

For these reasons, authorization for project development in the Paradise reach should call for such restudy and should provide for selection of a dam location, within limits several miles below or above the Knowles site, as dictated by the results of that restudy. Limits of 8 miles below and 2 miles above that site have been suggested.

My statement is intended to assist in throwing light upon the relative merits of alternatives for the development of the Paradise reach, including the markedly inferior Buffalo Rapids project formerly considered as an alternative by the division engineer.

As essential background and basis for such consideration, the statement touches upon such pertinent matters as: the basic and well-established principles that should govern in resources conservation and development; the important place of the Paradise reach in the larger basin plan; the vital importance of upstream storage and of regulation in general; the community of interest of upstream and downstream areas; the desirability of high goals for flood control; the need for electric power in volume and at low cost; and the growing significance of general water supplies for agricultural, industrial and domestic use, adequate in quantity and quality, in river basin plans. It also brings out some pertinent needs and relationships of development in other multiple uses—irrigation, watershed management and headwater storages, recreation, and fish and wildlife. Accomplishment of such projects is, it is submitted, highly dependent upon simultaneous solution of problems of various multiple purposes—as, very notably, in the concurrent replacement of project-displaced croplands, pastures, and farms.

The statement also stresses the beneficial effects upon the economy—the broad economic and social effects in the local area, western Montana, the Pacific Northwest, and even the country as a whole—of a comprehensive and full development of the Paradise reach.

Finally, the statement calls attention to a number of problems affecting successful planning and development, and realization and equitable distribution of project benefits. It suggests that appropriate intergovernmental area-planning machinery be set up for the purpose of providing joint and coordinated investigations, planning, programing and budgeting for optimum development and benefit and minimum dislocation in and around the project area.

ALTERNATIVE PLANS FOR DEVELOPMENT OF THE PARADISE REACH

I would preface my comments on the alternative plans for this reach with the more general thesis, later elaborated, that project-area and overall plans should provide, to the maximum feasible limit, for comprehensive, basinwide, multiple-purpose development, under highest level objectives, and with full use of resources, maximum net benefits, and wide and equitable distribution of those benefits. Comprehensiveness would involve inclusion in a basin plan of all plans for land and water development associated with a major water plan (as provided in recent river-basin planning legislation for certain southern basins). It connotes fullness in quality as well as in scope. Full development of water resources is a "must" in view of expansion of national material needs and of our competitive position in the world scene as well.

In this prefatory comment I would also like to refer to the obvious point that certain river reaches—including main stems and a number of upstream and

major tributary areas geographically, topographically, and hydrologically suited to major storage development—are naturally strategic. The Paradise reach is in one such area. Main-stem reaches of the Columbia itself are already farther advanced toward full development and use; the great and immediate need now is for securing the optimum development of the complementary upstream storage capacity and removing the marked lag on this side of main control plan development. There is, or should be, very great concern over this matter of balanced overall development and over the lowering of sights that is apparent in this connection during recent years and which stands out in some aspects of the current report of the division engineer.

It is also desirable to bring out, in the premises, that "alternatives" in river-basin and other resource development problems and programs should produce generally equivalent results. Ideally, a desirable and presumably feasible plan for the maximum development and use of resources is the proper basis for comparisons. Among alternative plans the test should be the most efficient use of resources rather than the most efficient use of capital, or highest rate of return.

The division engineer has investigated and reported upon three disparate projects in the Paradise reach: Paradise, Knowles, and Buffalo Rapids.

The contrasts are indicated, at a glance, by a summary of the major direct benefits of the key projects. The Paradise project would control both the Flat-head and the Clark Fork, while Knowles and Buffalo Rapids would control less than 60 percent of that flow in each instance. Paradise project's usable storage of 4,080,000 acre-feet is one-third more than that of Knowles and about 6 times that of Buffalo Rapids. Energy output for Knowles is only about 56 percent and for Buffalo Rapids only 28 percent that of Paradise, which totals $4\frac{1}{2}$ billion kilowatt-hours annually. In money terms the benefits stack up as shown in the tabulation below:

	Paradise	Knowles	Buffalo Rapids
Floodcontrol.....	\$4, 101, 000	\$2, 991, 000	\$678, 000
Power.....	27, 000, 000	19, 692, 000	7, 500, 000
Recreation.....	28, 000	58, 000	12, 000
Total.....	31, 129, 000	22, 741, 000	8, 190, 000
Justification ratios.....	1. 61	2. 31	1. 75

These figures from the division engineer's report show Knowles with only about three-quarters and Buffalo Rapids with only about one-quarter of the accomplishments of Paradise.

The recreation benefits mentioned—although they are relatively small in monetary terms and not determining—are distorted in the comparison as between Paradise, Knowles, and Buffalo Rapids. The greater benefit shown for Knowles than for Paradise is misleading, since recreation benefits would obviously be much greater for Paradise than for the other projects. Here, omission of recreation benefits from national forest development—although these are directly attributable to the project if not to a particular item of cost—hides Paradise recreational benefits. Commenting more generally, it seems likely that the recreation benefits of that project are greatly underrated in view of the extent and nature of the body of water to be provided and of the extraordinary growth of usage of such facilities. While benefits of recreation, fish and wildlife are not of great monetary importance in relation to those of power and flood control, they are of very considerable economic and cultural importance locally and regionally.

Buffalo Rapids is, of course, a very bad third in the running, with its inefficient use of resources and its fractional accomplishments. The division engineer dropped this project for such sufficient reasons.

The division engineer apparently abandoned the Paradise project, at the 11th hour, for different reasons—on the basis of high initial and annual costs of \$492 million and \$20.6 million, respectively. It is of recognized significance that, of the total initial cost in question, \$291 million or 59 percent is involved in relocation costs. Thus, a substantial saving in relocation costs would have a very crucial effect upon the relative economy and desirability of the Paradise project.

For convenient reference, the key items of cost of Paradise and Knowles are noted in the following abbreviated tabulation. These, and other very significant subitems for Paradise, presented in table 5 of volume V of the report, are discussed briefly below.

Key items of cost—Paradise and Knowles projects

	Paradise	Knowles
Relocations.....	\$201, 170, 000	\$107, 610, 000
Total construction.....	492, 262, 000	235, 021, 000
Interest during construction.....	61, 533, 000	23, 502, 000
Investment cost.....	533, 795, 000	258, 523, 000
Annual costs:		
Interest and amortization.....	19, 527, 000	9, 116, 000
Operation and maintenance.....	802, 000	535, 000
Replacements.....	242, 000	163, 000
Recreation:		
Operation and maintenance.....	8, 000	18, 000
Replacements.....	6, 000	9, 000
Additional on National Forest lands.....	19, 800
Total.....	20, 604, 800	9, 841, 000

Source: Division Engineer's report, pp. 179 and 189.

Still another tabulation, relating to indicated unit costs of output, is also of significance in evaluation of the alternatives. The basic figures, except for assumed downstream power costs, are derived from the report.

Approximate and comparative unit costs of energy

	Paradise	Knowles	Buffalo Rapids
Capital cost..... millions.....	\$553. 8	\$258. 5	\$114. 7
Annual cost, total..... do.....	\$20. 6	\$9. 8	\$4. 7
Ratio, power allocation.....	27:31. 1	19. 7:22. 7	7. 5:8. 2
Annual cost, power..... millions.....	\$17. 9	\$8. 5	\$4. 3
Output..... billions of kilowatt-hours.....	4. 51	2. 52	1. 27
Unit cost..... mills per kilowatt-hour.....	4. 0	3. 3	3. 4
Output..... prime kilowatts.....	1009	697	278
Unit cost..... per prime kilowatt.....	\$17. 7	\$12. 2	\$15. 5
Justification ratio.....	1. 51	2. 31	1. 75
Downstream output..... billions of kilowatt hours.....	2. 60	1. 20	. 32
Assumed downstream annual cost..... millions.....	\$2. 5	\$1. 2	\$0. 3
Assumed annual cost, at-site and downstream..... do.....	\$20. 4	\$9. 7	\$4. 6
Assumed unit cost..... mills/per kilowatt-hours.....	4. 5	3. 8	3. 6

NOTE.—Transmission cost not included.

It will be noted from the very approximate indications of this last tabulation that the unit cost of energy—on a Federal project basis—is about on a par for Knowles and Buffalo Rapids, but around three-quarters of a mill higher for Paradise.

The key to the high capital and annual costs of Paradise, and hence to energy unit cost, is, obviously, the exorbitant charges for relocations. If, say, \$100 million could be pared off from the \$327 million (\$291 million construction and \$36 million interest during construction) in relocations, the unit cost of energy from Paradise would be reduced by about 0.7 mills and brought into parity with the others (\$100 million investment cost saving; \$3.6 million total annual cost saving; \$3.1 million annual power cost saving divided by 4.5 billion kilowatt-hours).

Very large savings in relocation costs would appear to be possible with a more exhaustive and determined effort, and a number of areas are suggested for digging into by means of further investigation, planning, estimating, and negotiation:

Maximum feasible savings in the basic railroad relocation plan and lines, consistent with requirements of the area for service. Some possibilities

have been discussed in other evidence and correspondence; the report of the division engineer itself mentions one that has not been followed out.

Possible savings in the basic highway plan, similarly.

Possible savings in capital costs chargeable to railroad and highway systems, as betterments in their capital plant above existing values, rather than as results of the project.

Possible savings in extremely large allowances for contingencies in relocations estimates, now of the order of 25 percent, or \$55 million.

Possible savings in cost of an extra tunnel for railroad, involving something of the order of \$40 million.

Possible savings in interest-during-construction charges, primarily by shortening construction period within economic limits. A 7-year rather than 10-year construction period would reduce this charge, now about \$61.5 million over all, to about \$43 million.

Possible savings in details of location and design of lines, earthworks, and structures—perhaps including joint rights-of-way and bridges where feasible (as for two railroads and for railroad and highway).

Possible effects of railroad consolidations, in the long run.

Naturally, all of the possible savings in the several areas mentioned above would not be subject to addition, cumulatively, but it will be seen that very large figures are involved both in individual instances and overall.

It should be apparent, as already indicated, that the intensive review and replanning is both necessary and promising. In this restudy, it is essential that the responsible Federal agencies themselves attack the problem of relocations with the purpose of getting an effective and economical plan and equitable distribution of costs—making their own studies of location, design, etc., with expert and specialized engineering and economic consulting assistance of their own, and with less reliance upon the locations, designs, and estimates of the railroad and highway interests.

In summary—even if estimates for Paradise were not flagrantly excessive (which assumption is a dubious one, as indicated above)—the Paradise project is greatly superior. The higher cost of power—by about three-fourths of a mill per kilowatt-hour—under assumed costs would not warrant the waste of resources involved in the alternative projects, although it is highly desirable that such unit costs be held to a minimum. However, these first estimates do not represent the whole story. Power output is generally underestimated in the report and unit costs would be reduced under a less conservative estimate. Allowance of a longer period of useful life and amortization than the very conservative 50 years, for “permanent” works, would reduce annual and unit costs. Or, if the project were to be amortized in 50 years there would then be a large drop in power unit cost to benefit the economy over another long period of years. Annual costs after amortization in 50 years might be of the order of \$1½ million with unit costs only about one-third of a mill per kilowatt-hour at site and perhaps a little over 1 mill at the wholesale market. Alternatively, if the power rate were kept up at some determined-upon level above cost, several million dollars could be made available annually to cover investment in reclamation or other resource development.

It is difficult to overstate the inferiority of the Buffalo Rapids project in any major water plan or main control plan. The great waste in natural resources and loss of output has been noted above. As a Federal project, as also indicated, Buffalo Rapids would not be at a disadvantage from the energy unit-cost standpoint. But as a private project it would be at a very decided disadvantage on this score. Western Montana and the Pacific Northwest would lose the very vital and pyramiding direct and indirect advantages and benefits of a considerable block of moderately low priced power, with its stimulative “multiplier” effects in economic development.

The following tabulation gives an indication of the relative unit cost of energy from the Buffalo Rapids project under private financing and operation. This rough approximation gives the advantages to the private project of allocation of cost for nonpower benefits and of credit for downstream power benefits that may not actually accrue to a private power project.

Approximate and comparative cost of energy, for Buffalo Rapids under private finance and operation

	Million
Capital cost.....	\$114.7
Power capital cost (assumed).....	100.0
<hr/>	
Annual power cost (at site).....	11.0
Interest, 5 percent.....	5.0
Depreciation, ½ percent.....	.5
O. and M.....	.5
Taxes, 5 percent.....	5.0
Annual cost, downstream power.....	.3
<hr/>	
Annual cost, power, total.....	11.3
<hr/>	
Output, at site and downstream, billion kilowatt-hours.....	1.27
Unit costs, mills/kilowatt-hours.....	8.9

NOTE.—Transmission costs not included.

The superior advantages of the Paradist project have been outlined above, in positive terms. In brief, that project would provide for full development and use of, and optimum returns from, the resources of the river reaches involved.

However, the salient facts in comparison of the three projects might be summarized:

Buffalo Rapids and Knowles are at a serious locational, topographic and hydrologic disadvantage as compared with Paradise. They would dam one arm, while Paradise will dam the two main streams to form a reservoir of unusual capacity in relation to dam structure required.

Either Buffalo Rapids or Knowles, and especially the former, would represent a greatly less, and wasteful use of resources. It would bar the development of the larger and much more effective Paradise project.

The Buffalo Rapids project would develop only about one-sixth of the storage capacity of Paradise (670,000 to over 4 million acre-feet) and dependent benefits would be lost in rough proportion. Accordingly, it would make relatively minor contributions to the strength and capabilities of the main control plan for the river system. Knowles would develop about three-quarters of the Paradise capacity (3 million versus 4 million acre-feet).

The flood control contributions would vary roughly as the storage capacity; the benefit of this kind for Buffalo Rapids is represented at about one-sixth, and for Knowles less than three-quarters that of Paradise (as shown by figures tabulated above).

In power, neither Buffalo Rapids nor Knowles would use all of the head on the Flathead and Clark Fork, and would take advantage of only part of the flow. If the full head of both branches were to be developed in a series of dams—which has not yet been shown as feasible—many of the flowage disadvantages and costs of Paradise would be involved there also. In terms of kilowatts, the installation at Buffalo Rapids would be only a little more than half that at Paradise (448,000 kw. versus 864,000 kw). Prime power from Buffalo Rapids would be between one-quarter and one-third that from Paradise (287,000 kw, versus 1,009,000 kw.) and that from Knowles about two-thirds (697,000 kw, versus 1,009,000 kw.). The beneficiaries of the larger downstream power output would include private and public power agencies operating all the way from western Montana to seaboard.

Water supply advantages of Buffalo Rapids, Knowles, and Paradise to locality and region would also be in the relative order of storage capacities.

The navigation advantages would be much less for the Buffalo Rapids and Knowles projects than for Paradise. As a general measure, the reservoir length would be only about one-third as great as Paradise for the former and about two-thirds as great for the latter.

In irrigation, benefits of Buffalo Rapids would be very materially less and those of Knowles a little less than those of Paradise. Presumably, an irrigation project would not be included in a private project at the former site.

The recreational advantages of Buffalo Rapids would be only a fraction of those of Paradise. The lake, again, would have only about one-third the length and about one-quarter the area, and it would have greatly less attracting power, visitation, and recreation-affording and income-producing quality. Drawdown,

at the maximum, would be 67 feet for Buffalo Rapids and 84 feet for Paradise, but, due to the lesser capacity of the former, full drawdown there is likely to be more frequent. The recreational advantages of Knowles, while much more than for Buffalo Rapids, will be somewhat less than those of Paradise.

Fish and wildlife advantages, with good management, should similarly favor Paradise.

The general economic advantages of the Buffalo Rapids project, again, would be only a fraction of those of Paradise. Much lesser effects would be felt in power, flood control, water supply, irrigation, recreation, and other uses. The favorable impacts on local, regional, and national economies might be considered as broadly proportionate to the power output—with the general Buffalo Rapids contribution perhaps less than one-third that of Paradise. In the event of private development, the differences in economic benefits would be accentuated by reason of the higher annual costs and higher unit costs of output in this case. The general economic advantages of Knowles might be assumed as about three-quarters those of Paradise.

Buffalo Rapids and Knowles have higher benefit-cost ratios than Paradise, as shown above, although all are in favorable ranges (over 1.5 to 1). Obviously, the lower ratio for Paradise is due to high costs of flowage, including relocations of railroads, highways, and pipeline. It is probable, too, that the ratio estimate is low, or conservative, due to conservative assumptions as to useful life of principal project elements and the higher estimated annual cost that that entails. In any case, however, the test of superiority of feasible projects does not lie in relative benefit-cost ratios but in the relative use of resources and relative net benefits. The latter must be controlling in public resource development projects. In this regard, Paradise is far and away the superior project.

The foregoing discussion of relative benefits and costs is based primarily upon direct comparisons between the three alternative projects in the Paradise reach. It is believed that such comparisons are broadly accurate on the basis of the report's figures. It is also considered that they are valid and useful in view of the mutually exclusive nature of these three projects.

The division engineer has sought to justify his decision to drop Paradise on the basis of comparison of three multiple-unit plans of quite different extent. The report points out that the accomplishments of the select plan would be 95 percent of those of the larger plan and are obtainable at 65 percent of the cost and with much less disruption of developments in the area.

However, in this plan comparison, the combination including Knowles is bolstered in its benefits by the addition of the Ninemile and Quartz Creek projects. Here, it should be pointed out and stressed that these additional projects could be added also to the combination including Paradise (although with smaller credit for benefits than in the Knowles combination). The much more complete and larger benefits from Paradise and from a full plan including Paradise are very obvious but they should again be emphasized at this point.

The larger other benefits under plans 2 and 3 also distort the comparison, although the figures are not large in relation to power and flood control benefits. Obviously, Paradise itself (as already noted above) and any full plan including Paradise would have larger recreation and fish and wildlife benefits than the others. For instance, those benefits of Ninemile could also be included in a plan with Paradise.

In both the direct and three-plan comparisons the Buffalo Rapids project is manifestly beyond the pale even though in the latter Spruce Park and Smoky Range are added as well as Ninemile and Quartz Creek; a failure to use the great resources of the reaches affected, such as this project would represent, could not be countenanced under any proper view of public water resources and power policy. The Buffalo Rapids project would be at even greater disadvantage as a privately financed and operated project, as indicated above.

Thus, the accomplishments in beneficial use of resources and net benefits strongly favor the Paradise location, and warrant every earnest effort to develop the best project for the reach.

The background and basis upon which such a conclusion is reached are outlined below, and are also urged upon the consideration of the Congress and the development agencies.

BASIC PURPOSES AND PRINCIPLES OF WATER RESOURCES CONSERVATION AND DEVELOPMENT

A comprehensive plan for the conservation and development of the resources of a river system can be properly and effectively evolved and designed only in the light of certain basic and well-recognized objectives, principles, and criteria. Well known to the congressional and developmental agencies concerned, these need be only briefly referred to here.

The objectives of resources development lie, most fundamentally, in human benefit and betterment—of the individual, community, society, and Nation. The purpose is summed up in the old phrase: "the use of the earth for the good of man." Such aims are inherent in our Constitution, our system of government, and way of life. The wise and full use of our resources is essential in constantly expanding our economic base to meet vast and strongly growing needs for land, water, energy, and materials, and to raise productivity, wealth, and income, and general well-being.

The fundamental principles of resources conservation and development, management and utilization have been stated and restated over the past half-century, and are by now axiomatic and well established in our law and in our best usage. A brief mention of some of the more relevant of such basic principles is important to the current consideration of the Paradise reach and the main control plan to which its development is adapted:

The development of resources is necessary to meet the basic economic and social objectives outlined.

Resources are closely related one to another in nature and in their development and use; a comprehensive, multiple-purpose approach to development and use is essential; and a combined use will have greater effect in net benefits than the sum of individual and separate uses. In view of these relationships, integrated development and use of resources in river basins, regions, and economic areas is essential.

The basics of conservation of resources—involving the matching of expansion of production with expansion of material and energy resources, the sustained yield of renewable resources, and prudent use of nonrenewables; the substitution of renewable and plentiful nonrenewable resources for the scarce; and the elimination or minimizing of waste—all apply with great force to river basin development.

The maximization of net benefits and the wide and equitable distribution of benefits of development must prevail under basic objectives and the principle of the greatest good for the greatest number for the longest time. Related is the principle of superiority of national and general public interests, and the preference and priority to those interests in the public development of public resources.

Such principles have been brought out in whole or in part in numerous congressional hearings, investigations, resolutions, and acts dealing with rivers and harbors, flood control, reclamation, public works, regional development, and river-system investigations and planning. They have been delineated in a number of policy statements and proposals, including very notably those of the inland waterways and conservation commissions of the Theodore Roosevelt and Taft administrations, of the National Resources Planning Board and its predecessors, of presidential committees or commissions on administrative management, water resources policy, materials policy, and river-basin development.¹ They have been applied in varying ways and degrees in the natural resources fields by the Federal investigating and administering agencies, especially in their individual and joint investigations for river-basin development. They have been discussed and expounded widely in various nongovernmental professional and academic journals and texts dealing with resources, geography, economics, and government.² Extrnational recognition is also very wide as evidenced by foreign and United Nations practices and publications.³

¹ Note especially the 1950 report of the President's Water Resources Policy Commission, vol. 1, "A Water Policy for the American People," and vol. 3, "Water Resources Law."

² See e.g., Williamson and Buttrick, "Economic Development, Principles, and Patterns," including Joseph L. Fisher, "The Role of Natural Resources."

³ See, e.g., United Nations, "Multiple-Purpose River Basin Development," part I, "Manual of River Basin Planning," New York, 1956, and United Nations, "Integrated River Basin Development," 1958.

Realization of the fruits and advantages of these purposes and principles should not be prevented or foreclosed by the wasteful use of key sites or river reaches.

THE PLACE OF THE PARADISE PROJECT IN THE LARGER PLAN

The Paradise project is patently a key project in the larger main control plan and in the comprehensive river basin plan. Situated on the Clark Fork below the Flathead confluence, it is strategically located to provide a very substantial degree of control of one of the major tributaries of the Columbia, and to contribute most effectively, with other such projects, in Columbia main-stem regulation.

In a 30-million acre-foot level 3 alternative for development considered by the division engineer and set out in his 1957 prospectus, Paradise would provide over one-eighth of the total usable storage. In the 40-million acre-foot level 4 alternative, it would provide for one-tenth of the total. With its large capacity and strategic location on a large contributor to main-stem floods, it would do its full share in flood control. With its large regulated discharge and high elevation, 2,700 feet above sea level, it will be a large producer of power both locally and in a long chain of powerplants all the way downstream to Bonneville Dam. It would contribute materially to the feasibility of all downstream projects and to the main control plan as a whole, with its multiple benefits in flood control, power, navigation, irrigation, recreation, and general water supplies.

The place of this project in the general scheme was recognized in the 1948 review report, where it was proposed for development after the then immediate C phase. The importance of its place is clearly indicated in the current study where it would form a part of the higher levels of development that are consistent with a reasonably full use of resources.

The 308 report of the corps holds ample evidence of the superiority of Paradise in main control and comprehensive plans, from locational, resource use, and physical-capacity standpoints.

THE IMPORTANCE OF STORAGE AND REGULATION IN GENERAL

Retention of excess flows and release at more favorable times is, of course, a fundamental purpose and procedure of river system development and utilization. The uses of storage in flood control itself, in power, and in general water supplies for agricultural, industrial, domestic, and municipal purposes are readily apparent. On the Columbia, where floods are primarily of the more predictable snow-melt type, the conflicts among storage uses are relatively minor; the uses for flood control and for power, for instance, are fully complementary and mutually supporting. The main burden of establishing feasibility of storage does not rest either on flood control or power but on both. Adequate storage capacity, in short, is a key to comprehensiveness and effectiveness in a main control plan, with a balanced upstream and downstream development in which feasibility of each of those sides of development is enhanced by the other.

The values of storage should be considered as enduring, in spite of changes in basic conditions and operations over the years. Generally, firm-power benefits of storage will gradually diminish to a new level in the coming thermal hydro-power system, while those of peaking capability will increase. Also, flood control benefits will tend to increase with the intensity of economic development in the region and the increased values of valley lands, facilities, and activities protected.

Under the circumstances it is desirable to set the sights for the development of storage at the highest level that may be feasible. Large capacity storage projects are hard to come by, and the difficulty of bringing them into being will increase with the passage of years and the intensification of land uses and of general development. Of a number of projects listed in the major water plan of the report, only one (Libby) has a capacity of over 4 million acre-feet and only 8 of 13 have 1 million acre-feet or more. There are serious obstacles to be overcome in the development of a number of the larger projects of immediate and long-range plans.

It will be realized that the totals of storage development proposed or attainable on the Columbia system are not large in relation to the annual discharge of the river or to the amount of capacity that could be used, from an engineering standpoint, for a substantially full regulation of flow. The highest level, of about 40 million acre-feet (level 4), referred to as considered by the division engineer, would provide for only about one-quarter of total river flow, or maybe

about a half or a third of a conceivable storage ceiling. Such a level—40 million acre-feet—is low in relation to the capacities in being or planned, under different circumstances, for other large river systems, such as the Colorado and Missouri. A conclusion to be drawn here is that all diligence should be exercised toward the attainment of the highest feasible level of storage development.

It will be borne in mind also that, because of a diminishing rate of return in benefits of increments of storage added to the system as the total capacity increases, the earlier storage projects will have higher assigned acre-foot values than the later ones. A conclusion to be derived from this fact is that the most desirable projects from an engineering point of view should be developed with the least possible delay. Another conclusion is that all of the effective and feasible storages in the United States should be authorized and developed both to meet inherent needs and to avoid any unduly high or inequitable valuation on the desirable storages in Canada.

A general conclusion may be outlined in terms of desirable levels of development. The maximum feasible level should be set as an ultimate goal, under the fundamental needs—national, regional, and local—for materials and energy for our advancement and security, for protection from flood disaster, and for assured water supplies for multiple uses, and under the fundamental principles of conservation and development.

Levels 1, 2, and 3 would set the storage and regulation sights far too low. A commitment to level 1 or 2 would exclude either of the higher levels 3 or 4, because the former include minor projects that would bar the development of the full capacities of reaches of larger storage projects, such as Hells Canyon, Nez Perce, and Paradise. Level 3 is deficient as to the noninclusion of the vital Canadian storage. Even level 4 may be considered deficient in some respects. For these reasons the lower levels cannot be used as steppingstones; in effect they would prevent the taking of full steps in certain strategic areas. Thus, the highest feasible level should be maintained as the next goal and, presumably, that would be something like level 4, as enhanced by fullest practicable development in Hells Canyon and Nez Perce reaches of the Snake River. Such a phase should be followed by another including additional storage projects that may be developed and found feasible as a result of current and extended studies. The goal for the next couple of decades or so certainly should not be less than the 40 to 45 million acre-feet mentioned as under consideration by the corps in its prospectus.

With reference to the Paradise project in particular, and to the possible loss of critical storage capacity in that reach, it will be noted that 1 to 3 million acre-feet would be permanently lost to the main control plan through substitution.

The Hungry Horse project, also in Montana, might be cited as a good working example of effective and profitable use of strategic upriver storage, and also one in very serious danger of underplanning in its early stages.

COMMUNITY OF INTEREST OF UPSTREAM AND DOWNSTREAM AREAS

Upstream and downstream areas have a strong community of interest in the upstream storage projects. Obviously, the contribution of such projects is a vital one toward full development of resources and maximum net benefits. The total benefit will be larger and both upstream and downstream shares will be potentially greater under full and integrated development. The stage will be set for a well-distributed use—as well as full use—of resources. The problem is one of equitable distribution.

The upstream storage proposed adds very materially to the capabilities and benefits of downstream projects, while the capacities, benefits, and feasibility of upstream projects are greatly enhanced by the low-cost increments of power added to downstream plants (as well as by flood control benefits). The Federal power system completes the stage setting for full hydraulic and electric integration—permitting the release of water for maximum power production all along the line and the return of energy to upstream areas from downstream plants during the storage refilling season when upstream power production is low. The greater, and distributed, upstream and downstream benefits to be obtained from Paradise, with its large and strategic storage capacity, have been well illustrated by the actual operations of the Hungry Horse Dam and the Federal transmission system.

Stressing the urgency of Paradise and similar upstream storages in a balanced development of upstream and downstream features in a unified basinwide scheme is the fact that the downstream, essentially run-of-river projects are

proceeding in advance of the upstream regulating projects that would make them fully effective and economical. Upstream development should be stepped up to keep the pace, for the general benefit.

FLOOD CONTROL

As with the storage capacity upon which effective flood control is dependent, maximum feasible goals should be set for the reduction of flood discharges. An 800,000 cubic feet per second limit for an 1894 flood is an arbitrary, if useful, limit for an arbitrary flood, and not a sharp breaking point at which additional storage ceases to be justifiable. The current objective should be at least as low as the 600,000 cubic feet per second possible with the level 4 development. As the preliminary findings of the corps' prospectus say, of lesser aims, "a greater degree of control by storage is desirable and is obtainable within the limits of economic and needed development of the water resources for the generation of hydroelectric power."

It is obvious, from the analyses of the corps, that the pursuit of such rational and progressive objectives and principles calls for the full development of the Paradise reach. The Clark Fork is, as shown, one of the large contributors to floodflows and the Paradise interception of those waters is strategic. Without it, flood control capabilities in that tributary will not be adequately used, and the attainment of a reasonable flood control goal will be seriously jeopardized.

In view of the facts that the good storage projects are hard to get and that some of the storage projects listed by the corps are by no means assured, a large, strategic, and feasible project like Paradise cannot logically be passed up.

As already brought out in the discussion of storage, the values of Paradise will be greater if the project is brought in in an early phase of development, as it should be on the basis of need and merit. These greater values should be realized by according a high priority to full development in the river reach.

In the consideration of flood control benefits, full weight must be given to the direct and indirect, measurable and unmeasurable human values of flood control—the savings in human life, in individual, family, industrial, service, and community dislocations, and in losses of productivity and income. The more measurable values in property and other tangibles do not tell the whole story; the larger human values must be given consideration.

POWER

The vital and rapidly expanding power needs of the national economy and the region exert great pressure for the most complete and economical development of the unparalleled waterpower resources of the Pacific Northwest. The importance of abundant energy at lowest cost in our progress and our security can hardly be overstated, nor can that of use of the Columbia's full potentials. Obviously, that full potential in maximum output and low unit cost cannot be attained if the at-site and downstream values of Paradise and other such strategic upstream reaches go unused.

So, realistic power development and power use planning is very much in order both in the region and the project area.

The effective use of 40 to 45 million acre-feet of storage over a long period, referred to, is not likely to be attained without the development of Paradise and other such projects that effectively use head, flow, and storage capabilities of important river reaches. The Paradise reach is, of course, a very significant one from both regional and local standpoints—in the latter instance accounting for a very considerable fraction of the total hydropower potential of Montana.

Under the anticipated load growth of the next two decades or so, power requirements will pass beyond the combined power capacity of all feasible hydroelectric projects. Since the unit cost of such hydropower will be less than that of thermal power from any source, all feasible hydro should be developed; not to do so would be stark waste of a continuing, self-replenishing resource.

The lower unit cost of power from the large Federal projects—due to economies of multiple-purpose development, or large-scale and of public financing—should also be considered for its spiraling and cumulative effects: the lower cost will induce higher usage and economic activity, raising rate of load growth, and increasing power benefits. It is crucial in many industrial locations.

For such reasons it is suggested that the load estimates of the corps study may well be too conservative—tending to inhibit full and timely development. The point is that one way to keep load growth down and to avoid shortages is to fail to meet the trend.

Although power benefits do not stand alone and must be considered in conjunction with other multiple benefits of a coordinated main control project and plan, they are largest among individual benefits in economic and monetary terms. The economic returns from high-volume low-cost power—in added industrial development and diversity, in raised production, income, and living levels, and in increased strength, balance, and security in local, regional, and national economies—are very great and proportionate with the volume and economy of the power made available.

The power benefits will have greatest local values as developed in mutually supporting resource and industrial location combinations—as of energy, raw materials, water supply, labor, and transportation.

GENERAL WATER SUPPLIES

Recognition of the growing national uses of water for general—agricultural, industrial, domestic, and municipal—purposes and of the great importance of securing and assuring future supplies is mounting and widening. Various studies of requirements indicate a doubling of demand in only 20 years or so. In 1955, to illustrate one direction of concern, hearings of a congressional subcommittee on water resources and power evoked testimony from representatives of the Corps of Engineers, covering most of the divisions of the country, to the effect that such uses should be planned for in connection with multiple-purpose river development schemes generally.⁴

A leading factor in expanding water use is the large and growing requirements of heavy industry, particularly in the chemical and metallurgical fields. Expansion in such industrial fields is placing heavy demands upon water supplies in the East and Middle West, and it seems inevitable that industry look to other potentials, wherever they may lie. It should be realized, in this connection, that the Columbia holds the largest and best water supply potentials of any of the country's streams outside of the Ohio and Mississippi.

The Paradise reach will be a very important element in a development that will assure very significant water supplies, in quantity and quality, for future growth in the Pacific Northwest and the West generally. The advantages should be felt both locally in the Clark Fork reaches and downstream to tidewater. The fruits in industrial development will be gained, especially, where the advantages of good water supplies can be combined with those of available materials, low-cost power, and good transportation facilities.

NAVIGATION

Only local navigation is involved directly and substantially in connection with the Paradise project, but this navigation facility should have material and significant values from the standpoints of both commercial and pleasure craft traffic, and of the attendant development of resources and of economic and recreational activity in the area.

On the larger, systemwide scheme, the Paradise project will contribute very materially to the benefits of the main control plan as a whole, including its substantial navigation component. In this connection, the long navigable reaches of the middle and lower Columbia and the lower Snake, with their great potentials for economic benefit of the whole tidewater and interior Pacific Northwest, will be of largest economic importance.

IRRIGATION

The irrigation that can be provided through the Paradise project is of broad importance. It is essential, for dual reasons, that the maximum feasible acreage be developed: agricultural lands that will be overflowed by the project should be replaced, with the best possible margin, in order to keep whole—intact and in balance—and to strengthen the local economy. The full feasible expansion of agricultural—crop and livestock—capability will be of high value both in

⁴Hearings, Special Subcommittee of the Committee on Government Operations, House of Representatives, 1955, "Water Resources and Power."

the area economy and in meeting the expanding needs of a growing West and Nation.

The inherent and strategic importance to the local area of some 60,000 acres of land apparently feasible of irrigation development through the Paradise project will be readily recognized. Such a land area may be almost insignificant in relation to the region's 20 million acres or the Nation's 400 million acres of cropland. But they will be a keystone of the local agricultural economy and will be of some considerable importance in the economic structure of western Montana. Their importance will greatly transcend that of the limited agricultural areas, with only scattered irrigation, of generally extensive rather than intensive use, and often part time and marginal in operation, in the areas to be overflowed. However, the area significance of existing agricultural lands is in no sense discounted.

It is vital under the circumstances that the integrity of the project—in all of its combined purposes, including irrigation—be maintained. The success in development of the project, and full public support, will depend in large measure upon the mitigation of dislocations and damages in land use, the ample and timely replacement of drowned-out resources, and the expansion of economic opportunity upon new or improved lands outside of the flowage area. These problems must be taken care of in project planning and programing, authorization, construction, and operation stages.

WATERSHED MANAGEMENT AND HEADWATER STORAGES

The watershed management aspects of the project area and their relationships to the main Paradise project should not be overlooked. Headwater storages in particular will have significant auxiliary relationships.

It will be borne in mind that such headwater storages, however desirable and effective for their valuable purposes, cannot take the place of the large storage projects strategically located at control points on main stems of the river and major tributaries. They are too limited in capacity and too remote to be effectively manipulated for major flood control purposes, for power production, or for other large water uses beyond their local areas. This is not to discount the headwater storages for their watershed management, water retardation, and local flood control use; it is to stress that both kinds of storage—headwater and main stem—are desirable, and that they are distinctly complements and not substitutes one for the other.

RECREATION

The modern trends with respect to outdoor recreation are very widely known. Population, individual disposable income, leisure time, and mobility of the American people are steadily increasing and heightening demands for recreational facilities and services. The use of outdoor recreational areas and facilities, such as those afforded by the national parks and forests, is growing by leaps and bounds. Mass production of boats is emerging. And water areas afford a particular and widening attraction in these connections.

A scenic and recreational feature such as Paradise Reservoir would be of very high attracting power and of outstanding regional and national significance. With its 70-mile primary length, its several long arms and broad reaches, and with suitable facilities for usage, it would be of national recreational area stature. As such it would bring several hundreds of thousands of visitors annually with substantial economic benefits to the area through activities in equipment and supply, transportation, travel, shelter, and related expenditures.

Reservoir drawdown should not detract materially from the attractiveness and usefulness of the lake. Maximum drawdown is given by the corps as 84 feet, which is a relatively small one for a reservoir of this large capacity in the Columbia Basin. Canyon and valley topography is such that there will not be very extensive mudflat areas upon drawdown. Moreover, drawdown will not occur in the summer months but during the winter, reaching the annual maximum in the spring before the refilling with spring runoff. It is presumed also that operating plans will not require the full 84-foot drawdown each year.

FISH AND WILDLIFE

It is assumed that the project will include provisions for the maintenance of the fish and wildlife values of the reach affected. It is assumed, further, that with well-coordinated planning and management on the part of the responsible Federal, State, and local agencies there will be opportunity for enhancement of those values.

Since the Clark Fork reaches involved are above the compass of the Columbia's anadromous fish runs, the fishery potentials of the Paradise project lie in the building up of resident populations. It would appear certain that the large reservoir will afford considerably enlarged opportunities for fishing in the area, for commercial as well as sports purposes. The recreational attraction should be strong.

With the enlarged water area, there should be no diminution in the net attractiveness to aquatic birds, it is believed.

INDIAN INTERESTS AND AFFAIRS

Indian affairs are a special problem in the development, support, and economic and social use of the project and project area. Indian rights and interests are very deeply involved in about all aspects of the project and solution of problems is of highest importance—from the standpoint of both Indian and general welfare.

Suggested as highly desirable are intensive joint investigations looking to such results as determination of the facts with respect to basic Indian interests; correlated plans for Indian irrigation; similar plans for Indian power use; broader plans for Indian participation in other resource-use and area-development plans and programs; short- and long-range arrangements for Indian compensation and benefit sharing; suitable treaty, agreement, and organization arrangements to protect and foster Indian activities related to project and area development.

ECONOMIC AND SOCIAL BENEFITS: EFFECTS UPON THE ECONOMY

Consummation of the large Paradise project, with its multiple benefits, would be very important in the local, State, regional, and national economies.

Making waters now wasted to the sea available for multiple beneficial uses, such a project will have considerable effects in meeting our expanding needs for land, water, energy, and materials. It will provide important new opportunities for investment, industrial location and expansion, business, employment, and settlement. Its additions to power supply at low cost, in particular, will be a factor in the production of local minerals and other industrial materials, including western Montana phosphates and others, and will afford opportunities—as did the Hungry Horse project before it—for the location and establishment of important industrial plants.

Montana and the Pacific Northwest as a whole—whose economies are characterized by a high dependence on extractive industries and by relative deficiencies in manufacturing industry and employment—would have renewed and enhanced opportunities for achieving a better diversity and balance, and a greater maturity in those economies. Per capita incomes in the State and region, which have tended to lag in growth in relation to the national rate, can be moved upward through reduction of underemployment due to high seasonality and through addition of manufacturing payrolls with increased numbers of skilled workers. There should be a greater range of "home" opportunities and a lesser tendency to "export" trained youth.

In the local area and in western Montana generally, the beneficial effects will have the greatest relative impacts. These areas are, relatively, more underdeveloped and underdiversified than the region in general or the Nation at large. They are quite highly dependent upon the extractive pursuits in mining, agriculture, and forestry, and markedly deficient in manufacturing, as noted. Their material and energy resources, and their labor and technological resources, are relatively underutilized. The level of income is lower than in much of the country and is relatively slow growing. Larger and wider opportunities are needed for a growing population and a better balanced economy. The development of resources—particularly low-cost power but also other elements—through the project will bring new opportunities for development and use of latent resources, for expanding economic base and economic opportunity, and for lifting of income and living levels. With the expansion on the industrial side, the agricultural economy can be held up and expanded in parallel, in a generally advancing economy. The advance should be strong locally, and in tune with growing markets in the region and the West in general.

Tax bases and public revenues—local, State, and Federal—will naturally expand with the growth in plant, production, and income induced directly and indirectly by project development.

The general needs and the benefit to be felt in the regional economy are the same in kind as those in the smaller area economy. The differences will be largely those of scale—with a larger group of projects affecting a larger area. The additions to power supply, in particular, will have very material direct and indirect effects. The abatement of flood threats to life and property will be of no little importance. The development of projects in upstream and interior areas will add a desirable wider distribution of economic activity in the region.

The significance of project and main control plan benefits in the national economy is greatly reduced in scale but is nonetheless great. The Columbia is the Nation's greatest power stream. The Columbia ranks among the greatest in water supply potential. It has outstanding navigation potentials, particularly so far as the West is concerned. The resources of the Columbia and of the Paradise reach are thus truly of national significance, and their full development and contribution toward meeting the needs of the national economy and its defense and security is distinctly in the general interest. The national significance of the Paradise contribution is extended as it works through the larger main control plan and expands the benefits of comprehensive, river-system-wide development. These potentials must be set off against the economy's great and growing needs.

The issues themselves—the wise conservation and development of national resources—are of deep national and international significance; it is highly important that they be resolved at Paradise in accord with the general welfare. Paradise development would provide needed further precedent in the full development of and full return from water resources. From standpoints of policy as well as of material gains in resource base, productivity and security, the United States cannot afford further to lag in the application of best principles of river development. There are larger river resources in other countries and continents, and there are strong indications from Asia particularly of a larger and more intensive development in being or in prospect. Our country should achieve and hold a position of leadership or excellence in this field, as well as in a number of other spheres of resources development and use. The present time, perhaps especially, is not one for "little plans"—plans that fall short in imagination, objectively, boldness, and promise—while world neighbors—friends and rivals—from North America to Asia and the Far East are making bigger, and perhaps sometimes better, plans.

SOME GENERAL PROBLEMS OF PLANNING AND DEVELOPMENT

A number of problems—affecting successful planning and development of the project and equitable distribution of its benefits—should be on the way to solution by Federal, State, and local interests concerned. Some important illustrations will be briefly noted.

The project will be of greatest value and will have the greatest assurance of consummation if its integral nature is preserved—if all of the mutually supporting uses are developed to the full, included in plan and authorization, and carried out in coordination. For example, the land-replacement and irrigation part of the total project should be fully adequate and closely coordinated.

Coordinated Federal, State, and local land and community planning and programming should proceed, in the development stages of the project, with the view of minimizing inevitable dislocations and of fostering the adequate, timely, and orderly reestablishment of farms, industries, homes, communities, and other facilities affected.

Planning of highway and railroad relocations should proceed similarly, looking toward the most effective and economical redevelopment and toward an equitable division of costs, in proportion with benefits, between the water project and the transportation purposes served. For example, the water project should not bear an excessive share of highway costs based largely on future transportation needs rather than present facility replacement. Nor should the project bear railroad costs beyond those involved in replacement of equal facilities.

Power utilization planning should also proceed in coordination, with the view of equitable solution of the problems of full beneficial use and equitable distribution of the power output of the project.

The Federal development agencies, the State, and the local community will all be aware of these and other problems of research, planning, and development, the solution of which calls for a very high degree of foresight and cooperation. The range for coordinated effort is very great—extending from main project investigations and planning to that of land uses, communities, industrial dis-

tracts, recreational facilities, and other features. Organized thought and action are of the essence if maximum and best distributed benefits are to be obtained from such a project.

Under the circumstances it is suggested as most desirable that appropriate local planning and Federal interagency machinery be set up for the purpose of providing coordinated investigations, planning, programing, and budgeting for optimum development and benefit.

Objective, well-directed, and well-supported intergovernmental and interagency project investigations, together with an effective area research and planning setup will be vital in protecting and enhancing the economic and social opportunities connected with the basic river and power development project and program. They will have very material effects in protecting the important individual, group, and community interests involved. On the more positive and progressive side, they should provide very significant new opportunities for developing new strength and real wealth and in adding to amenity in the community and area economy. Such opportunities will have their strong reflections in State and regional economies.

Senator GRUENING. Senator Martin?

Senator MARTIN. Mr. Bessey, you have given some little time in your general discussion here—I have run through it while you have been speaking to the committee—and I appreciate your inclusion in there of the various purposes of such project.

Mr. BESSEY. Yes.

Senator MARTIN. Such as flood control, navigation, water conservation, recreation, power development, and irrigation, and all those I notice you have treated here in your general statement, which will be included.

Mr. BESSEY. Yes.

Senator MARTIN. And that is what I referred to in my opening remarks. I wanted some such study as that brought before us for our study and consideration.

Mr. BESSEY. I hope it will be very useful to you.

Senator GRUENING. Thank you very much, Mr. Bessey.

Mr. MAHONEY. Mr. Miles Romney.

STATEMENT OF MILES ROMNEY, OWNER AND EDITOR, WESTERN NEWS, HAMILTON, MONT.

Mr. ROMNEY. Senator Gruening, Senator Martin, my name is Miles Romney; I am owner and editor of the Western News, a newspaper published at Hamilton, Ravalli County, Mont., a newspaper as old as commercial business in Hamilton, founded in 1890.

My statement is rather prolonged, and in the interest of time, and because of the introduction of certain other matters, which I think are important, which transpired subsequent to the preparation of this statement, I will not use the entire statement, but introduce a few statements in addition thereto, with your permission.

In my judgment, the consideration of river development envisages the best development. If we judge the case upon immediate personal selfish considerations, the proper target is missed. None among those here today should consider ourselves the natural heirs to benefits from the development. If we build wisely we build for posterity as well as for the immediate future.

Prolonged studies carried out by the Army Engineers, and other authorities, have clearly demonstrated that there exists a need for an overall development of the Columbia River watershed to protect

downstream communities from floods, to halt the loss of soil, the value of which is beyond measurement in dollars, to provide cheaper freight through utilization of barge lines upon tamed rivers, to provide for recreation, and to serve the best interests of preservation of fish and wildlife.

The public interest in recreation is growing tremendously. The time is coming when a large proportion of families will own a boat. The roads of America in summertime are filled with people trailing their boats toward their favorite rivers and lakes. This means that our fisheries and wild game will be subjected to an ever-increasing attack.

It will take the utmost in planning and proper development of the Columbia River watershed if we are to salvage, protect, and increase our diminishing fisheries and our game herds.

Of course, development of any river of consequence, like the Columbia, is also concerned with the hydroelectric power that can be developed, for it is power which pays the bill for the development. It also provides means for improving the life and lot of mankind, eliminating drudgery, providing light and heat, furnishing the energy to turn the wheels of factories, and the heat to make aluminum and chemicals; in short, developing industry and providing jobs and taxes for better functioning of our economy.

Some people assert that hydroelectric developments are obsolete. They claim that atomic power will soon supersede hydroelectric power and that money Uncle Sam would invest in a development like Paradise Dam is wasted. This is a preposterous tenet. Montana Power and other private power companies don't believe it, for they are building small dams. Idaho Power does not believe it, for it is building the wasteful dams upon the Snake River. The Russians and Chinese don't believe it, for they are building numerous hydroelectric installations like mad, some of which dwarf the mighty installation the American people have at Grand Coulee.

When the day comes that atomic power can compete with hydroelectric power, we will certainly then require them both. It must also be remembered that under the terms of the pending bills to build Paradise Dam it will be paid for 50 years after it is built and starts operating out of revenues it earns from falling water, just like the dams of the Bonneville Power Administration and the TVA dams are paying out, happily ahead of schedule. Do any of you know when any private power dam ever paid out?

There are persons who are slaves to the fallacious notion that instead of building giant hydroelectric installations such as Hungry Horse, Paradise, Libby, or Grand Coulee, it would be better to build a myriad of small ponds near the headwaters of little creeks and rivers in an effort to impound the floodwaters in springtime. That would be like tethering a mastodon with a single strand of cotton yarn. Anyone who has seen Lake Como fill up with the waters of Rock Creek in the Bitterroot Valley or Painted Rocks Lake fill up with a gulp from the waters of the West Fork of the Bitterroot during the spring runoff realizes the futility of such a theory.

If followed, we would have hundreds of thousands of little lakes and ponds, costing probably as much as a Paradise Dam installation, cluttering up the back country, flooding many times more valuable

acres than the big installation, accomplishing almost nothing toward flood control, ruining grazing land for livestock and game animals, not contributing to commerce and not paying their way through development of power. Such zany spouting is beyond comprehension of anyone really seeking to solve the problem and is very possibly only a smokescreen raised by opponents of any river development.

In this connection, this shotgun map that has appeared several times in the Missoulian, showing little dots all over western Montana in the form of hypothetical lakes, with respect to the Ravalli County area, of which I am familiar, already half of those, or approximately half of those, little dots have lakes. The lakes were built years ago and they are still there. They are impractical as far as flood control; they produce no power; they do give irrigation values to the farmers whom they serve. So if the same thing is true elsewhere over the area which is involved in this controversy, the lakes on the shotgun map are already half built.

Development of Hungry Horse brought the giant Anaconda Aluminum Co. to Flathead County, where that company this year is paying more than \$700,000 in county taxes and providing hundreds of new jobs, and the Victor Chemical Co. to Silver Bow County, where it likewise is contributing taxes and employment and products for the national wealth.

But the greater value of Hungry Horse is that it holds back a vast amount of floodwater, which is released after the spring floods are gone to the sea, with the result that it provides power all the way down the Flathead River, through Kerr Dam, down the Clarks Fork through the Montana Power Co. dam at Noxon, and the Washington Water Power Co. dam at Cabinet Gorge, and through the Bonneville Power Administration dams and other dams all the way down the Columbia River to the Pacific Ocean. Thus, its great value is that it furnishes not only its own capacity of 212,000 kilowatts, but through water it preserves and sends to other dams downstream it furnishes 628,000 additional kilowatts in power which would otherwise not be available at all.

As a matter of fact, without Hungry Horse Dam, the run-of-the-river installations recently erected by Montana Power Co. at Noxon and by Washington Water Power at Cabinet Gorge would not have been feasible. Hungry Horse made them possible. Of course, Paradise Dam would likewise have made them possible and by its construction will greatly increase their values. This very fact demonstrates the stupidity of the private power companies which have attempted to hamstring the construction of Paradise Dam. They similarly obstructed and fought the building of Hungry Horse Dam. Later they were happy to buy power from Hungry Horse. All of which demonstrates these private power companies are unaware of what is good for them. They will be allowed to buy power at the switchboard from Paradise when it is built, buying it for a song and vending it to the public as though it were cortisone.

This matter summed up offers choice between no river development, partial river development, or full river development. The first choice is unthinkable to anybody, even to the upper Columbia development outfit and the Montana Power Co. This leaves a choice between partial or full development.

It seems King Rameses II of Egypt first built the Suez Canal; and when it was permitted to fill up with sand, it was reopened by Emperor Darius I of Persia. It was again permitted to fill up through disuse. These leaders of antiquity had not done their job well. They had done a halfway job. When Ferdinand DeLesseps and company finally dug the Suez Canal right, they did not stop halfway across the Isthmus of Suez; they did not dig it so that it would again fill up and become unusable. They went all the way across, wide enough and deep enough that it has endured, although from time to time has been increased in size as the size of oceangoing ships increased.

When Col. George Washington Goethals and Uncle Sam dug the Panama Canal, they did not get as far as Gatun Lake and sit back satisfied. They finished the job, and it has been serving mankind ever since.

When the Union Pacific, the Great Northern, and, if you please, the Northern Pacific built across the country from the Midwest toward the Pacific, they did not stop at Cheyenne, at Shelby, or at Garrison. They went all the way.

When you have a real job to do, there is only one way to do it and that way is to do it right.

Little festering obstacles like sandstorms, the Teddy Roosevelt revolution of Panama against Colombia, the buffalo herds of yesterday, financial problems growing out of deals to fleece the Federal Government, politics and selfish personal considerations were all finally swept aside as the jobs of digging canals, building locks, and making railroads were completed.

That is the way we should develop the remaining natural resources of America. They should be built as big today as they will need to be tomorrow. That is why Paradise is much more preferable than Knowles Dam. It does a bigger and a better job, possesses a justification ratio of 1.51 compared with 2.31 for Knowles Dam, will provide more floodwater so that Montana Power Co. at Noxon, Washington Water Power at Cabinet Gorge, and all the rest of the power installations, will develop much more power.

While it is true that construction of Paradise Dam would be more costly than Knowles, the fact remains that 50 years after either is finished and working, they will have been paid for, so why not get the most for our money.

Why should our progeny look backward tomorrow and wonder why we did not build the big dam and do the job best in the first place? Are we going to force our progeny to do the job over, as did DeLesseps?

Just because a terrible mistake was made upon the Snake River is no reason why it should be repeated on the Clarks Fork in Montana. On the contrary, the appalling lunacy of the error on the Snake, which will one day in the future have to be corrected in order to secure maximum benefits for the exploding population of America, constitutes good reason for avoiding any more mistakes in the development of the Columbia watershed. There are not enough giant power sites remaining to permit mistakes, even if the Power Trust begs for them on bended knee from the Congress.

Let us wipe away all petty selfish considerations, forget about any individuals or corporations existing today, consider the best way to

develop the Columbia watershed for posterity, for economic welfare of the areas concerned, for protection of our country. If we do this the single answer upon the Clarks Fork is that we build Paradise Dam.

Now, in conclusion, and in amplification of what I have said, I wish to make an additional observation. Years ago the ships that carried the commerce of the world were little galleys. They often used slaves to propel them when there was no wind to fill their sails, and these galleys were rowed by these slaves, and these crossed the Mediterranean and went around into India and were used in many places; it is even said that Leif Ericson came to America before Columbus in such a boat.

We now have before us a situation which calls to my mind a similarity. This morning I discovered it. The emancipation proclamation which was proclaimed so vigorously a few months ago, which everyone enjoyed, hoped would be filled with truth, has proved to be a matter of fluff. *Res ipsa loquitur*; it speaks for itself. The Daily Missoulian editorial this morning shows that it has reverted to type. It reminds me that the galley is in a bad situation. Some of the slaves are rowing on one side and some of the slaves are rowing on the other side and they are not going to get anywhere with Shorty Dye rowing one way and Guy Mooney rowing the other way.

Incidentally, in this editorial, I'd like to have all of you who read it note that they are afraid that we don't need any power until 1964. That's pinned on Administrator Pearl. Be that true, who thinks that Paradise Dam can possibly be built by 1964? Thank you.

Senator GRUENING. Mr. Romney, I would like to ask you a question. As a newspaper editor you are in touch with public opinion. What is your belief as to the prevailing public sentiment in western Montana on this legislation? Would a majority be in favor of it or against it?

Mr. ROMNEY. I think that as someone stated a little while ago, one of the witnesses testified that the rank and file of the people are for it. Certainly various businesses and big organizations are not for it. For example, I know I speak for the people of Missoula. I think the majority of the people of Missoula are for it, but they are grossly misrepresented by their chamber of commerce, which is—

Senator GRUENING. I would appreciate your refraining from these expressions of approval or disapproval. I can understand the reason for these expressions, but I think it would be helpful if you will be kind enough to refrain from them.

Mr. ROMNEY. I think that the majority of the people in Missoula were—we talk a lot about exploding population. We have that here in Missoula, I think, although there has been some controversy about it. With the exploding population here there is also a parallel explosion of taxation, and I think that the people of Missoula could stand having a little more industry in Missoula or in contiguous areas, because it would help them pay the taxes for their new schools and maybe they could get some streets here some day. And I think that an aluminum plant here like that at Columbia Falls, for example, or any other industry under no matter what name, would smell as sweet as some of the industries they have here.

Senator GREUNING. Well, will you answer my question if you think you have the information? Do you think a majority of the people, if a referendum vote were taken on this issue, would favor it or would oppose it?

Mr. ROMNEY. I think a majority would favor it, and I will tell you, I have a pretty good reason for that observation. I do not think that Senators Murray and Senator Mansfield and Congressman Metcalf, who, as politicians as well as statesmen are sensitive to the grassroots feeling, would be for it otherwise. Now, there might be some combat about that from Governor Aronson, but Governor Aronson has bowed out of politics so he doesn't count anymore.

Senator GREUNING. Thank you very much, Mr. Romney.

Mr. MAHONEY. Mr. Art Jensen.

STATEMENT OF ARTHUR JENSEN, SUPERIOR, MONT.

Mr. JENSEN. Mr. Chairman, members of the committee and fellow citizens, my name is Arthur N. Jensen; I am a resident of Superior, Mont., and have operated the Strand Theater in Mineral County for the past 25 years.

I have had the honor and privilege of serving as State representative from Mineral County for six terms.

I am happy to be here in support of Senate bill 1226 and regret that the bill does not specifically state that the dam must be built below the confluence of the Clark's Fork and the Flathead River.

One Paradise Dam would give us two storage areas for this valuable water resource. The Seattle Post, on October 20, 1957, had an article, "U.S. Waging Battle on Water Shortages, Needs Will Soon Double." Secretary Seaton, outlining various projects underway, declared:

We know and history will back us up, that a nation prospers only as it uses its resources wisely, and water is the most essential of all resources.

It is estimated that 453 billion gallons of water will be needed to meet the Nation's requirements each day by the year 1975, or twice our daily water consumption today. The Government is working on ways and means to convert salt water into fresh water for human consumption and need in the Nation. It therefore behooves us to develop storage reservoirs that would furnish flood control, irrigation, and power, and also help maintain underground water levels. The evaporation from these large water surfaces forming precipitation could easily be responsible for maintaining water levels elsewhere.

I came to western Montana from the eastern part of the State 37 years ago and located at Donlan, Mont. Donlan was located halfway between Paradise and St. Regis on the Clark's Fork River. Having lived there from 1922 to 1928, I am familiar with the entire area to be inundated, and to my knowledge, I know of no area that water storage would cause as little damage and displacement as the Clark's Fork River from Paradise to Superior, Mont. It is hard to find anyone in our locality that opposes the Paradise Dam. I refer especially to those who have really studied Senate bill 1226 and acquainted themselves with the methods employed by the Government in bringing about a project of this nature.

The lake formed would very likely attract many ducks and geese and give us a type of hunting we have very little of at the present time on the Clark's Fork River. Resorts and homes would be built on the shores of this lake as they are doing on any lake large enough for boating. It would be hard to estimate the number of boaters, fishermen, sightseers, hunters, and vacationists that would be attracted to this area each year.

Practically all the timber in the inundated areas has been harvested and it is possible that the rise in water level of the reservoirs may make timber available for harvest that has not been economical to harvest otherwise.

If we check other water projects in the Nation relative to their financial feasibility, we will find them paying off. Some of them are making advance payments, and I see no reason why a multipurpose dam at Paradise would not pay for itself as others are doing. In my personal evaluation of the many advantages and disadvantages claimed for Paradise Dam, I believe in the years to come the advantages will, by far, outweigh the disadvantages. I, therefore, am in favor of the Federal construction of the Paradise Dam, and when Senate bill 1226 is presented to your committee in Washington, D.C., I hope it will deal wisely with this great water resource for the benefit of the greatest number of people and will give it your consideration and support so our Congressmen may have an opportunity to make it a law.

Senator GRUENING. Thank you very much, Mr. Jensen.

Mr. MAHONEY. Mr. Eugene Pike.

STATEMENT OF EUGENE PIKE, MANAGER, MISSOULA ELECTRIC COOPERATIVE

Mr. PIKE. Senator Gruening and Senator Martin: My name is Eugene Pike. For the past 13 years I have served as the manager of the Missoula Electric Cooperative, which presently is serving approximately 1,650 consumers over 720 miles of electric lines in portions of 6 counties around the Missoula area.

A contributing factor to our growth and development has been the availability of Bonneville Power which came to us after the completion of Hungry Horse Dam and the Hot Springs-Anaconda transmission line. I might say the preference clause was responsible for us getting the Bonneville power. Also the Ravalli County Electric Cooperative, Corvallis, got this power, too, as a result. I am sorry to say that Missoula Electric Cooperative was the only voice heard before the Senate Subcommittee on Appropriations in 1949 when that transmission line was under consideration.

I think that a check of the records will show that some of the same parties who opposed that transmission line and Hungry Horse Dam are there today. I am happy to say that I am here in favor of this bill, No. 1226. I realize the bill provides for an alternative site, but I want the record to show that I think the Paradise site should get the nod.

It seems to me that the chief question we have to answer is, Do we or do we not believe in comprehensive development? Those of us who believe in comprehensive development look much farther ahead

than the near future; we look beyond State lines and national boundaries. We try to assess the future needs of those coming after us. It seems to me that Senate bill 1226 is proposing a form of comprehensive development that the majority of the people in the Columbia River watershed would like to see. It is full of safeguards and benefits for Montana. For instance, let's look at section 3 (a).

This section deals with the reservation of power for Montana which is "at site firm power production attributable to the project." To me this implies that Montana will be assured power from downstream generators whose capacity has been increased because of the upstream storage. I understand that has been calculated about 217,000 kilowatts for Montana. As both the Knowles and Paradise sites would provide large quantities of usable storage upstream from the major power-producing plants on the Columbia and would increase their capability, a tremendous amount of power would become a reality. Thus, upstream storage becomes very valuable.

Right now there is talk of high voltage transmission lines between the Columbia River power system and eastern Montana, to connect to the Missouri River system, to alleviate shortage of power in eastern Montana which exists today. Electric cooperatives of eastern Montana are hard pressed right today. It seems to me an abundance of power and its transmission to eastern Montana would surely be worth a lot to Montana.

Another important aspect to keep in mind is that we are bargaining with Canada in this all important matter of upstream storage. What kind of a position do we put our negotiators in when we ask Canada to let us store water on her lands if we do not utilize our own lands to the maximum? If we refuse to store water on our upstream lands and at the same time ask Canada to do it for us, then naturally the Canadian stored water will become worth more and in all probability we will be stuck with unnecessary costs due to our own greediness. If we really need the upstream storage that the Corps of Engineers' studies indicate is needed, I don't see how we can afford to let our neighbor to the north set the price on the upstream water. I think we should develop as much of our own as is feasible and thus make the Canadian storage of the future less valuable to us. We should show Canada that we are sincere when we say we need upstream storage by doing our best on our side of the line. Then we will be able to negotiate with her on more advantageous terms. The Paradise Dam project would go a long way toward achieving this objective.

I don't see how anybody can be worrying about water rights when there is so much water going to be stored. I don't think the people of Montana realize the scope of this project. It is a lot of water they propose to store down there, and I don't think Montana should ever worry about running out of water if the Paradise project is built. I don't believe that irrigation or use of consumptive water in western Montana could lower that lake very much.

I believe that Senate bill 1226 is very well written; that a comprehensive project is needed in the area; that Montana's interests are adequately represented in the bill; and that the people of Montana should support it with the attitude of "let's get on with the job of developing our resources to the utmost, both for ourselves and for those who come after us."

And in conclusion, gentlemen, if any amendments are proposed which would safeguard or provide more safeguards for Montana, I hope you will give them your good consideration.

Thank you very much.

Senator GRUENING. Thank you very much, Mr. Pike.

Mr. MAHONEY. Mr. Arnold Olsen.

STATEMENT OF ARNOLD OLSEN

Mr. OLSEN. Senator Gruening, Senator Martin, I am sorry that I do not have a prepared written statement. I am a practicing attorney in the city of Butte and Helena, maintaining offices in both cities, and I have been attorney general of the State of Montana for two terms, or 8 years.

I am one of the citizens who believe that Montana's water should have first priority for Montana people, and I can recollect when this particular slogan of Montana water for Montana people was first used in political campaigns in this State. During my term as attorney general, I noted how feeble was the slogan and how feeble was the policy of Montana water for Montana people, when prime power monopolies constructed our power dams on our rivers.

With particular reference to Cabinet Gorge Dam, I recollect when the authority was given by the State legislature and how there was an absolute refusal to reserve any power from that river for the people of Montana. That refusal was made because of the private, selfish profit interest of the power companies, and I think rightfully so; that is their interest, that they sell their power wherever they can for the greatest profit they can. And that is the fallacy of Montana water for Montana people being enforced by a pure slogan.

I note now that the power companies are collectivizing; the power companies are federalizing; they are organizing and saying they will build the big dams, the Government should not do this. But I know and I am sure that every honest thinking person knows, that there isn't any way for Montana water to be used for Montana people except that a government of and by the people construct this facility and make appropriate legislative reservation for the people of this area where the storage and inundation is going to occur.

And in answer to a question that Senator Gruening made of the editor from Hamilton, I think that it is a tribute to the foresight and the ambition, the vision of Senators Murray and Mansfield and Representative Metcalf that the people return them again and again to Congress, and that particular foresight and vision and ambition is in this one big policy of appropriating the rivers of Montana to the use and benefit of the people of Montana, and there isn't any other way that it can be done except through a government that is controlled by the people's vote in determining exactly what will happen to their resources.

Now, I think we have all heard, and we are going to hear more, of the Khrushchev threat to bury our economy and our country, and the method is to build a greater economy in Russia than we have in this country. But that, to me, is only another small reason for building and investing in this great country of ours, and particularly in such a site as Paradise Dam under S. 1226.

I think that it was and always has been fundamental that we can't let the rivers be quitclaimed by quitclaim deeds to the private power trusts by such federations as Governor Aronson spoke of when he talked of the interstate committee, or interstate commission, of this new State federation that he is proposing to have handle power in the Northwest. The time is now, when every household operation from heating and cooking to sweeping and sewing is being performed by the aid of electrical power, when every article on the average man's meal table, every item of his clothing, every piece of his furniture, every tool of his trade, has been manufactured or processed by electric power; when from morning to night, from the cradle to the grave, electric service enters at every moment and from every direction into the life of every man, woman, and child. The time is now, and only the Government of, by, and for the people can save us as little individuals out here in Montana, or individuals all across this great broad land.

It is only that kind of government that can save us from the thorough, unceasing, and intimate control of the private power monopoly. Only the Federal Government can or should build multiple-purpose dams. Only the Federal Government that is ours. It is us. It is not some foreign country: it is us, you and me and everybody here and all across the land, people having an interest in owning, controlling, developing, benefiting, appropriating these rivers to the use of all of us. Only our Government can serve that interest of multiple-purpose development.

We were rejected in our proposals for the Cabinet Gorge Dam that there be a reservation of power for Montana people. They even grudgingly gave in to an established law that prior appropriation of irrigation had priority on the waters of that river. Yes, grudgingly they gave in to the established law.

Not so with us in our own Government. We are not grudgingly giving in to each other; we are cooperating with each other and our Federal Government through our representatives to establish navigation for our brothers and sisters downstream. Maybe some on Paradise Dam Lake for ourselves; and maybe even some in the river somewhere in Montana for ourselves; perhaps not very much.

But now for the rest of the benefits, flood control; we can enjoy some of that and other benefits; all of the program as announced by Governor Aronson, all of his statements are refuted by the Corps of Engineers and by the Bureau of Reclamation.

The Corps of Engineers, in a very cursory survey, finds 60,000 acres that are irrigable by pumping water with cheap electric energy from Paradise Dam. The Corps of Engineers finds that not just in a year like 1948 but every year Paradise Dam can contribute greatly to relieving downstream people from floods and the ravages of floods. Sixteen percent of the flood in 1948 at Portland came from the Columbia River above the Kootenai and 16 percent came from the Clarks Fork and the Pend Oreille. That is how important Paradise is. It could contribute as much to control of a flood like the one in 1948, which was the worst in many years, it could contribute as much as Libby Dam on the Kootenai or a large dam on the Columbia.

Only the Federal Government can have that interest of flood control. Only the Federal Government can have that interest of naviga-

tion. Only the Federal Government can have the interest of recreation.

As a matter of fact, these are old figures, but in 1956, 55 million visited the national parks of the country; 50 million visited the national forests. However, 71 million visited the manmade lakes of the Nation and 29 million additional were at TVA and various Bureau of Reclamation projects.

I sit here somewhat amused that it is only the Governor of Montana who will step up and try to refute the established evidence as presented by the Corps of Engineers and the Bureau of Reclamation regarding the Federal Government's capability for this multipurpose objective that is the accomplishment of this multipurpose Paradise Dam or any other dam. On the other hand, the extremely popular Senators, Murray and Mansfield, and the popular Congressman, Metcalf, they assist and promote the affirmative; the affirmative that, of course, Montana will grow. Of course, we will use the river; of course, we can use it soon. No reason for selfish animosity about it, just cooperation, all of us together. No need to set it aside as private profit for just a few, but every reason, every reason that is right and honest and good and decent and kindly and neighborly, is to appropriate the river to the use of all of us by the use of our already federated system, our existing federation of ourselves. Little human action, you and me and everybody. Thank you very much.

Senator GRUENING. Thank you very much, Mr. Olsen.

The time of the proponents is now expired. They have consumed 2 extra minutes beyond the hour and a half, and those 2 extra minutes will be also given to the opposition, which will now have its opportunity in the morning hours to present its case.

STATEMENT OF RAY LOMAN, PRESIDENT, UPPER COLUMBIA DEVELOPMENT COUNCIL

Mr. LOMAN. Thank you, Senator Gruening. My name is Ray M. Loman. I am president of the Upper Columbia Development Council, an organization working for economic and recreational development in this area.

It is a privilege to have an opportunity to express our views to this U.S. Senate committee, to you, Senator Gruening, to you, Senator Martin, and to the members of the staff. We will most certainly take advantage of your gracious offer to keep the record open to December 31 and will file further documents.

This is the sixth time we have come to discuss before official representatives of the U.S. Government the wishes of our residents as to the development and greatest utilization of this area's resources. Our presentation will include expressions from persons in every walk of life in this area. Each will present his own reasons for his objection to S. 1226.

The Upper Columbia River Development Council wishes to go on record as opposing Senate bill 1226. We feel multipurpose projects of the type proposed in this bill are bad conservation. We feel they are uneconomic, and probably worse yet, we feel that they lead toward serious deterioration of the legislative powers of Congress and the reduction of individual rights. I am sure that during the course of this

testimony these points and others will be brought out very forcibly in both oral and written testimony.

Due to the limitation of time at this hearing, I respectfully suggest that previous hearings by Senate subcommittees, by the Corps of Engineers, on this and related subjects, also be considered by the committee in your deliberations.

With the hope that as many opponents as possible be heard, I would like to now call the first witness for the opponents, Carl Dragstedt, of the Missoula Chamber of Commerce.

STATEMENT OF CARL E. DRAGSTEDT, REPRESENTING THE MISSOULA CHAMBER OF COMMERCE

Mr. DRAGSTEDT. Mr. Chairman, members of the committee, I am Carl E. Dragstedt. I am joint owner and operator with my brother in a men's clothing store with the enviable background of 41 years of business here in Missoula. I am also the duly elected president of the Chamber of Commerce of Missoula, Mont., and have been empowered by the board of directors of that organization to appear before you here today.

Membership in our chamber of commerce, which totals over 400 firms, is voluntary and by firm rather than individuals, so it would be impossible for me to estimate exactly how many thousands of business people are represented by our organization. It is for these firms that I have been empowered to speak by the board of directors, as authorized in article 2, section 3, of the bylaws of our organization.

As a preface to my remarks, I wish to point out that it is indeed unfortunate that this hearing was called on such short notice, and secondly, at this the busiest season of the year. If more notice of this hearing had been given, and if it had been held at any other time than the Christmas season when businessmen of necessity must stay right on the job to get all possible business dollars so necessary to help pay the taxes which in turn make Government possible, I am sure you would see several hundred more interested people in the audience.

It is also regrettable that the other members of the Senate committee could not be here so that they might get firsthand information on the feeling of our people concerning this proposed half-billion-dollar spending project. We realize that they too are very busy men, but we certainly hope that they will find the time and have the opportunity to read all testimony before making any definite recommendations.

Two ballots of the general membership of our organization have been taken in past years concerning the locating of a Government-owned dam in the Paradise-Knowles neighborhood. The results of both of these ballots showed a majority opposing such Government projects.

After carefully weighing the advantages and disadvantages to be incurred through the proposed construction of either Paradise Dam or Knowles Dam, our board of directors have unanimously agreed that we are opposed to the construction of this dam as outlined in the plans and specifications presented by proposed Senate bill 1226. Our organization believes the proposal to be economically unsound. This

stand is historic in that the board of directors made the same decision in 1948, 1957, and again in March of 1959.

The reasons for this decision on the part of our elected spokesmen and policymakers are many, but at this time we wish to remind you of only a few. While our organization works constantly to better the economy of Missoula and western Montana, we feel that the construction of such dams would be detrimental to our economy.

First, we are unequivocally opposed to this project because it will cost you and me, the taxpayers, no less than a half billion dollars now when the interest alone on our Federal indebtedness totals the staggering amount of \$51 per year for every man, woman, and child in the United States, and our taxes are still every year going up. This trend must be stopped to assure a favorable economy.

Secondly, as business and professional people, we would not be opposed to going into debt if by so doing we would be bettering ourselves. The passing of this bill would result in the unnecessary flooding of large areas of presently taxable land and property and the relocation of some 3,300 people, not to mention the relocation of railroad lines, roads, and utilities. It would provide additional power for downstream States who already enjoy economic industrial advantages which we do not have and will be of no assistance to Missoula or western Montana. While the legislation proposed by the proponents of this dam calls for reservation of a large block of power for Montana, it is unrealistic to assume that Congressmen representing all States would approve such legislation when the many millions of dollars necessary to pay for such dams would be coming from taxpayers in every State in the Union.

Thirdly, we are opposed to this legislation because it presumes that we lack adequate electric power in western Montana, when as a matter of fact, we have a surplus of electric power. Take the case of the aluminum plant at Columbia Falls, which has been cited many times as being the direct result of the construction of Hungry Horse Dam. The electric energy necessary to operate this valuable plant comes from Hungry Horse Dam only 16 weeks of the year. The balance comes from the Northwest Power Pool for the remaining 36 weeks of the year. The reason: Hungry Horse was overestimated and only produces satisfactory amounts of power an average of 16 weeks a year. Is this efficiency?

The Montana Power Co. regularly supplies more than enough power to the Northwest Power Pool to operate the aluminum plant and upon at least two occasions supplied ample power direct to the aluminum plant for full operation when neither Hungry Horse or the Northwest Power Pool had the current available.

And in the light of all this, the Montana Power Co. is ready and has made application to construct two additional low dams in the same neighborhood. Construction of these dams would add greatly to the tax income of our area rather than take taxable property off the rolls as in the case of Paradise Dam or Knowles Dam.

Fourthly, we are opposed to Senate bill 1226 because it is based on the assumption that electric power is the No. 1 consideration for new industries in our area. With the exception of a few specialized industries such as the manufacture of aluminum, this is not true. The Waldorf Paper Products Co. started operation in a new \$7 million

plant outside Missoula about 3 years ago. The firm is now expanding into the Waldorf-Hoerner Co. and is presently doubling their investment. The original location of the plant and the subsequent doubling of their investment was made without the necessity of Government-subsidized power. The Van-Evan Co. is currently constructing a \$2½ million plywood plant; Cascades Plywood have purchased the Polson Plywood plant and are expanding the facilities there. In fact, the estimates of our industrial division reveal that 12 plants located in the Missoula-Flathead area have started within the past 10 years in the Clark Fork and Flathead Valleys with an investment of \$27½ million and an annual payroll of almost \$8 million. This is in the timber field alone, and the stockholders of these plants have not demanded Government-subsidized power.

Now, on the other hand, if any such investments have been made in the vicinity of the Government-constructed Canyon Ferry or Fort Peck Dams because of the availability of so-called cheap power, it has not been brought to our attention. We also understand that many of the people in the Townsend area who were supposed to benefit from Canyon Ferry are not too happy with the results of that project.

The Missoula Chamber of Commerce is quite cognizant of the unfortunate flood situations in the downstream areas and wish to be of any and all possible aid in alleviating this unfortunate situation. However, it is felt that this situation can be remedied in one or more of several ways that would not cause such an unnecessary burden on the presently overloaded taxpayer.

In conclusion, the Chamber of Commerce of Missoula greatly favors the location of new industries and expansion of existing industries in western Montana. We have a division of our organization composed of forward-thinking businessmen who constantly interest themselves in bringing new industries to our area and aid in expansion of present industries. Even as this hearing is being held, we are in contact with several firms who are considering locating in western Montana. To date none of these firms have made a request for Government-subsidized power. These new industries will locate in our area if raw material, transportation, labor supply, and markets are favorable and if we want them. They will move into western Montana without disrupting or displacing our present installations, industries, and agricultural interests.

Our neighbors to the northwest of Missoula have been good to us and we appreciate their many considerations through the years. We cannot approve a plan that is opposed by so many of these good neighbors. Thank you.

Senator GRUENING. Mr. Dragstedt, you say, speaking of the unfortunate flood situations in the downstream areas, that you wish to be of all possible aid in alleviating this unfortunate situation, that they can be remedied in one or more of the several ways which would not cause such an unnecessary burden on the presently overloaded taxpayer. Would you indicate what some of those ways are?

Mr. DRAGSTEDT. Yes, sir, I would be very happy to. We have men who are learned in this field, foresters, land conservationists, and so forth, who point out to us that the proper way for this to alleviate floods is at the source, or the watershed, by proper building of small dams at the floodwaters, watersheds, and also by what we are prac-

ting now, in the lumber industry, in the sawing of the timber and all that, by leaving an adequate stand of timber, and also by eliminating overgrazing of the timbered areas. Now, those are the means that are suggested by these men who are authorities on this subject.

Senator GRUENING. You feel that those would stop the floods?

Mr. DRAGSTEDT. Yes. It will go a great way to alleviate such a situation, yes. As I say, that is their studied opinion and I am willing to go along with it. And you will have access to a report of these people showing the suggestion of such dams located in, as I say, the watershed, which is the mountainous areas of the country.

Senator GRUENING. Mr. Reinemer, do you have a question?

Mr. REINEMER. Just one observation, Senator. Mr. Dragstedt, you and one of the other members had pointed out that no big industry has come into the area of Fort Peck Dam. That is over near my country there, and I think it will be of interest to the committee to know that a few months ago the Air Force happened to write a letter to Senator Murray about its program there at the huge Glasgow Air Force Base, and in that letter they mentioned that one of the reasons why the Air Force chose the site, chose to locate this huge base at Glasgow, was the fact that Fort Peck Dam with its power and also the recreational facilities was in the area. And with your permission, Senator, I would like to ask that that letter from the Air Force to Senator Murray be included in the record at this point.

Senator GRUENING. It will be included.

(The letter referred to follows:)

DEPARTMENT OF THE AIR FORCE,
Washington, D.C., August 3, 1959.

HON. JAMES E. MURRAY,
U.S. Senate.

DEAR SENATOR MURRAY: This is in response to your inquiry concerning the criteria for selection of the site for an Air Force base near Glasgow, Mont.

The selection of bases along the northern perimeter of the United States was based, primarily, upon the necessity for protection against enemy attack. At the time the site near Glasgow was selected, the operational requirement dictated that the base be located within a relatively small sector, predicated upon the location of the controlling radar station in that area and the coverage provided by other bases along the northern boundary. Within this sector, a site had to be selected which would permit speed and economy in the construction of a base. The site also had to be close enough to a community to provide those community facilities, social, cultural, and recreational, that could not be provided at the base. In addition, the attitude of the people in the area must be favorable to the establishment of an Air Force base.

All of the above conditions were met by the site near Glasgow. As you can see from some of the above criteria, the nearness of Fort Peck Dam with its recreational facilities and power supply contributed to the selection of this site for a base.

Sincerely yours,

W. P. FISHER,
Major General, USAF,
Director, Legislative Liaison.

Mr. DRAGSTEDT. May I inject also that from other sources I have heard also that the reason for the location of that particular air base at Glasgow was the strategic one, namely at the north part of the State, and as I say, from the military point of view that was the proper location, not designed there because of adequate power at Fort Peck.

Mr. REINEMER. As the Air Force said, that was one of the reasons.

Senator GRUENING. I would suggest that the public refrain from these interruptions.

Mr. DRAGSTEDT. May I ask—he has raised a question there. I would like to ask this: A military installation of that kind, why would they require such tremendous quantities of power that would necessitate the location at such a point?

Mr. REINEMER. They don't require a tremendous amount of power; they do require power.

Mr. DRAGSTEDT. But you did make the statement that they sought that location because they were close to a source of power.

Senator GRUENING. I will have to insist that there be no further demonstrations, which are constantly interrupting the proceedings, and if those wish to applaud the speaker, they are merely denying that side a certain amount of time. All these applauses are taking time from the side that you wish to support, and it is very unwise to do so.

Go ahead, Mr. Dragstedt.

Mr. DRAGSTEDT. I stand willing to answer any questions here, because I am an individual. I am concerned with the tax angle. If I could speak as an individual, that is the point that I would like to bring up, the fact that it would raise our taxes to build this \$500 million plant, and as I pointed out, when we are so heavily indebted at the present moment, and the opposition will say if you don't get it here in Montana you are going to get it down some other place. Well, I say that those people in those other States should stand by their guns as we are and say "No" when we don't need it. We don't need the power; we have already demonstrated to you that we have a surplus of power here. We don't need this dam. If we need it, it is still there. We can get it at a future date. We have adequate power right now, and as I say, so far as I am concerned, we don't need it at this time.

Senator GRUENING. Do you believe that this project would raise the taxes in the State of Montana?

Mr. DRAGSTEDT. I do, yes, because we are all in it, the same as it will be raised also in the State of New York and every other State, because like the TVA, we are paying for the TVA.

An interesting sideline on that on power, and this is interesting to know, that every dollar that is taken across the till of any power utility in the State of Montana, 31 cents of that represents taxes, so in other words, these utilities are nothing more than tax collecting agencies, if you wish to choose to call them that.

Senator GRUENING. You don't believe that these multi-purpose projects may be self-liquidating?

Mr. DRAGSTEDT. I do. I say but the cost is too great.

Senator GRUENING. Then why should they increase taxes if they are self-liquidating, they pay for themselves?

Mr. DRAGSTEDT. Will this be self-liquidating?

Senator GRUENING. Well, I asked you that and you said you thought so.

Mr. DRAGSTEDT. Many in the past, some of the smaller dams have, yes, but this one here I am taking issue with.

Senator GRUENING. You think this would not be self-liquidating?

Mr. DRAGSTEDT. It is economically unsound; put it to you that way. In other words, in our lifetime we will never see this thing liquidated.

Senator GRUENING. Well, if it were self-liquidating, would you approve of it?

Mr. DRAGSTEDT. If it were done so within my lifetime, yes.

Senator GRUENING. Why should it be limited to your lifetime?

Mr. DRAGSTEDT. Well, I mean it is good business, within 20 years to be able to liquidate these things.

Senator GRUENING. I have no further questions. Thank you very much, Mr. Dragstedt.

Mr. LOMAN. I would like now to introduce Sam Maclay from Lolo.

STATEMENT OF SAM MACLAY

Mr. MACLAY. Senator Gruening, Senator Martin, gentlemen of the committee, and ladies and gentlemen, I am not an orator; I am a farmer from western Montana, at Lolo. I have lived practically all of my life and farmed the place established by my father about 80 years ago. My brother, David Maclay and I have owned the place and operated it for about 30 years. I appear before the committee in my own behalf and not at the request of anyone or any agency. However, I am a member of and a director for the Upper Columbia Development Council, which is presenting a statement, and I am in full accord with their presentation.

I am not going to waste the committee's time, or my own, by reciting statistics or engineering data. There will be expert testimony by qualified persons to inform you of the views to which I subscribe in those areas.

I object to the construction of Paradise or Knowles Dams for three specific reasons. One, the construction of either of the dams suggested in the bill puts the Government into direct competition with private, taxpaying power producers and adds another increment to the growing need of the Government for tax revenue. Second, there will be great destruction of land and resources and the uprooting of hundreds of families with the loss of lifetime efforts by their members. The tax base of the counties, invaded by the dam-site, will be seriously depleted. Third, there is an alternate plan wherein the construction of small reservoirs in the heads of the mountain streams could be made to store great quantities of water without disturbing people or the destruction of valuable producing land. I shall elaborate upon these three objections in some detail in the remainder of my time.

I object to Government engaging in production enterprises in competition with taxpaying private industry because it is not the function of Government to engage in business under our economic system. The enterprise of the Nation pays taxes to support the Government and there is no justification for the invasion of the economy by Government so long as there is risk capital available to develop sound enterprises. We can tolerate Government as long as it governs and that consists of keeping the peace between and among citizens, regulating the activities of business organizations, providing for the common defense, protecting our commerce and those engaged therein,

providing media and methods of exchange and maintaining public schools and a system of free public roads. As it has developed, there are several other activities that Government has entered into, but none of these is in the field of primary production. They do not lend themselves to the production of profit and would not be sources of revenue from taxation. All governmental activity costs and must be paid for by taxation and the only source of taxes is a levy upon the property and business of the Nation, also the income of its members, citizens. Therefore, it is highly improper for the Government to engage in activity that will deplete the tax base from which it gets its revenue.

My second objection is concerned with the great destruction of property and human happiness occasioned by such great reservoirs as the one under consideration. When you cover large tracts of land with a lake such as this, you remove it forever from production. Consequently, it no longer exists as a base for revenue from taxation. The proponents of the proposition will tell you that much of the property concerned in this controversy is largely marginal and, as such, is not much of a base for taxes. I have been for over 20 years on the board of directors of the Western Montana Production Credit Association and we have served many loans to many farmers and ranchers in the area to be destroyed by the dam. I have not those figures here available, but they can be procured from our office, if necessary. Not only have we never had to foreclose any of these loans, but, it is a fact that many of them have paid off their obligations and have arrived at a condition wherein they no longer need financing from lending agencies.

In addition to this, they have paid taxes over the years to help support the Government that now intends destroying their lands, homes, and the fruits of their toil during a lifetime of effort. The places where they loved and lived will be no more and even the graves of their loved ones will be covered by a cold, wet flood and lost forever to the kindly ministrations of the survivors of the calamity that the Government will have perpetrated upon the land.

My third objection is that there is a better way in which to store water without destroying easily accessible land that is in production presently. Now, it is common knowledge that Dr. Pearl, Administrator of the Bonneville Power Administration, has stated publicly that the Northwest will have a surplus of power until at least 1970. There seems little justification for the construction of additional generating facilities at this time.

I will grant you that the storage of water in order to attempt to level off the flood stages in the Columbia River system makes a semblance of sense. I am informed that there are upwards of 200 sites in the headwaters of the tributaries of the rivers in the region that would feed the dams under consideration. Some of these may be quite small and others could be made to store large quantities of runoff water and most of them are in places where it would not destroy producing property.

It has been estimated that there will be about 300 million people in the United States to be fed, clothed, and supplied with necessities by the year 2000. That is not very far in the future, and will require several million acres more than we now have. Atomic power

is here now, and other sources of electric energy production may appear, and since we do not now need more, why should we destroy property that can never be replaced? Furthermore, these large dams are vulnerable to enemy action in this atomic age and the small ones are not.

I have here a copy of the Bitterroot Valley project supplement to the Columbia River Basin report. In this production by the U.S. Department of Reclamation, Bureau of Reclamation, they make mention of 18 small and large structures that can be built in the Bitterroot Valley to produce storage for water to the extent necessary for the project. It is interesting to note that about \$44 per acre-foot which can be gained from the report was the cost of the construction of the storage of water.

Now, this was in 1949. I will grant you that we can double that, probably, engineeringly, at the present time, and still we have only got \$88 per acre-foot. Now, I said I wasn't going to go into statistics, but this came to my attention after I had prepared that statement. I think it is interesting to estimate that about \$150, is it, would be the cost per acre-foot of the storage of water of the 3 million acre-feet of water that Paradise Dam or Knowles Dam—4 million I believe, a little over, for Paradise and about 3 million for Knowles Dam—would store.

Now, that isn't a great deal of water as time goes on, because it is estimated by the Army Engineers in the Columbia Valley report that about 10 percent, less than 10 percent actually, the figure is 3 percent of the total flow of the Columbia River over the year is contributed by the Clark Fork system. If you could completely store the Clark Fork system over the whole year, you would reduce the water in the Columbia River by approximately 3 percent. I ask you, gentlemen, if the 3 percent of the flow of the Columbia River this dam is going to completely remove from the Columbia River system would make a great deal of difference to the Columbia River at Portland where I have seen it 22 feet above low water, one of the largest floods in record, the major part of which came from the Willamette River. That was in the winter when our streams here were frozen up, in 1948. I thank you.

Senator GRUENING. Thank you, Mr. Maclay.

Mr. LOMAN. I would like to now introduce Mrs. Helen Stephens, of Paradise.

STATEMENT OF MRS. HELEN STEPHENS, PARADISE, MONT.

Mrs. STEPHENS. I am Mrs. Wendell Stephens. I am a farm wife and a member of the Plains Grange, and the master of the Grange. Mr. Bob Van Derhoff, and Mr. John Helterline, the secretary, were unable to come this morning because of their work. I have been asked to give the Grange statement.

This is a statement of policy on S. 1226, of the Plains Grange No. 101 of Plains, Mont.

(The document read by the witness, together with a statement filed by the witness, follow:)

STATEMENT OF POLICY ON S. 1226, PLAINS GRANGE No. 101, PLAINS, MONT.

Whereas Plains Grange No. 101 of Plains, Mont., has members in and near the area affected by this proposed legislation, engaged in the business of farming and ranching; and

Whereas said members own or lease or operate farms and ranches comprising a large area of land in Sanders County, these lands are composed of grasslands, meadows, hay lands, and farm land well adapted to the business of stock raising and farming; and

Whereas these lands provide financial returns to their owners and employees and constitute a substantial block of taxable property and otherwise contribute to the soundness and stability of the economy and tax structure of Sanders County; and

Whereas either of these proposed projects would have a permanent and substantial effect upon Sanders County and the members of this organization; and

Whereas existing commercial and service facilities such as stockyards, elevators, schools, and even towns will be separated or removed or made inaccessible by the construction of either project; and

Whereas the threat of flooding 60,000 acres and dislocating 3,000 people over the past 10 years has had a very serious effect on the natural growth of western Montana; and

Whereas the precise location and other specific details of these proposed projects have never been determined or released as of this date and such information when available might indicate even more serious and substantial disruption and damage to Sanders and Lake Counties of Montana and to the members of this organization; and

Whereas we are grateful for the privilege to appear at congressional hearings in the area affected, however it does not seem necessary to conduct three hearings in 1 year to acquire the wishes of the people; and

Whereas the Corps of Army Engineers has dropped the Paradise project from their comprehensive report to the Congress of the United States, therefore it seems strange that our congressional delegation introduces legislation such as S. 1226: Now, therefore, be it

Resolved, by this organization, That the Congress of the United States be urged and requested to disapprove and reject legislation to authorize construction of either Knowles or Paradise projects on the Flathead or Clarks Fork of the Columbia River in Montana.

RESOLUTION OF THE PLAINS GRANGE No. 101, JUNE 3, 1958, ON WATER RESOURCE DEVELOPMENT

Whereas it is of the highest importance to the citizens of Montana that one of our most valuable natural resources, water, be protected and conserved for the use of the future generations of Montana; and

Whereas the Upper Columbia Development Council has proposed that an engineering survey and study of the water resources of the Clarks Fork Basin in Montana be made for the purpose of obtaining all possible information on water supply and runoff in order that a plan of future development of water control and use be prepared: Therefore be it

Resolved, That the members of Plains Grange No. 101 do hereby endorse and approve the making of the proposed survey and study of the water resources of the Clarks Fork Basin, and earnestly recommend that the Members of the Congress of the United States do give favorable consideration to such a study.

STATEMENT OF WENDELL AND HELEN STEPHENS, PARADISE, MONT.

We are opposed to bill S. 1226 for all of the same reasons that we have had since 1948 when the first Paradise Dam hearing was held. This new approach is just as bad and the same old wolf is showing through the proverbial sheep's clothing.

One point that could be emphasized at this hearing and that has been brought out before but is becoming more and more important as the hearings come and go, is room for the fast-growing population to expand.

It would be a crime against posterity to waste good productive land under a large unnecessary bed of water such as the proposed James E. Murrey Lake would be.

And I am sure that Senator Murray should consider it a dubious honor to have such a permanent blight on western Montana named after him.

Senator GRUENING. Thank you very much, Mrs. Stephens.

Mr. LOMAN. I would like to introduce Mr. MacDonald, of the Northern Pacific Railroad.

STATEMENT OF L. S. MacDONALD, NORTHERN PACIFIC RAILWAY CO.

Mr. MACDONALD. Senator Gruening, Senator Martin, gentlemen of the committee, and ladies and gentlemen, my name is L. S. MacDonald; I am director of the Agricultural Development Department, Northern Pacific Railway Co.

I am appearing here in behalf of the company to oppose the enactment of Senate bill 1226, cited as the Knowles Dam Project Act. Due to the lack of time between the announcement of the hearing, which we first learned of through the daily press, and the date set for the hearing, it has been impossible for the company to make any new studies or surveys on the irreparable damage that would be done to its lines of railroad and to the economy of western Montana if a huge storage reservoir such as is contemplated were built. For that reason I wish to submit the statements prepared by various departments of the Northern Pacific Railway Co. and presented by Mr. Carl H. Burgess, vice president in charge of operations, at previous hearings held by the Corps of Engineers on the proposed Paradise and Knowles Dams.

I request that these statements be made part of the record of this hearing. It should be borne in mind that estimates used in compiling this material are now over 2 years old, and certainly there will have to be an upward revision in totals due to increases in costs of construction of the necessary line changes.

The Northern Pacific Railway's long and well-established record of assistance to the resource development of western Montana cannot be disputed. Our opposition to the construction of the proposed dam is based on the conclusion that the only prospects for resource development in this area lie in the development of agriculture and industries processing the products of its minerals, forests, farm and ranch lands. Full development will not come about by the flooding of large areas of productive farmlands with stored waters for flood control and power production.

Now, gentlemen, in view of the necessity to save time, you have the complete statement, which I will file. Mr. J. W. Haw will also represent this company, and I will not go further in this testimony of my own.

(The statement referred to, together with the other two documents filed by the witness, follow:)

STATEMENT OF L. S. MacDONALD, DIRECTOR, AGRICULTURAL DEVELOPMENT DEPARTMENT, NORTHERN PACIFIC RAILWAY CO.

My name is L. S. MacDonald. I am director of the Agricultural Development Department, Northern Pacific Railway Co. I am appearing here in behalf of the company to oppose the enactment of Senate bill 1226 cited as the "Knowles

Dam Project Act." Due to the lack of time between the announcement of the hearing, which we first learned of through the daily press, and the date set for the hearing, it has been impossible for the company to make any new studies or surveys on the irreparable damage that would be done to its lines of railroad and to the economy of western Montana if a huge storage reservoir, such as is contemplated, were built. For that reason, I wish to submit the statements prepared by various departments of the Northern Pacific Railway Co. and presented by Mr. Carl H. Burgess, vice president in charge of operations, at previous hearings held by the Corps of Engineers on the proposed Paradise and Knowles Dams. I request that these statements be made part of the record of this hearing. It should be borne in mind that estimates used in compiling this material are now over 2 years old, and certainly there will have to be an upward revision in totals due to increases in costs of construction of the necessary line changes.

The Northern Pacific Railway's long and well-established record of assistance to the resource development of western Montana cannot be disputed. Our opposition to the construction of the proposed dam is based on the conclusion that the only prospects for resource development in this area lie in the development of agriculture and industries processing the products of its minerals, forests, farm and ranch lands. Full development will not come about by the flooding of large areas of productive farmlands with stored waters for flood control and power production.

This company has been active in western Montana since the midtwenties in the work of colonization and the promotion of industrial and agricultural development projects. A program of bringing into the area new settlers and the businesses that are required in any good community was undertaken and completed with acknowledged success. Assistance was given in the promoting and completing of sound irrigation projects. Following this, new crops were introduced to increase farm revenues and provide for a well-balanced and successful agriculture. Take, for instance, the location of the sugar-beet-processing plant at Missoula. This was brought about by the willingness of the railway to relocate its Bitter Root branch from its original line on the west side to the east side of the valley. The cost borne by the Northern Pacific was in excess of a million dollars. Under the present acreage restrictions for sugar-beet production set up by the Government, the factory has been operating at about 50 percent of its capacity, and the loss of good beet-growing areas, such as the Moiese Valley, which would be affected by the act in question here, would raise grave doubts as to its continued operation.

Reference has been made as to the possibility of bringing in irrigable arid lands to offset the loss of good, well-established farms and ranches that would be eliminated by reason of the inundation of the valleys. No definite location of such lands has been made. Areas that have been mentioned from time to time have, because of poor soils, lack of drainage or difficult topography, been written off as unsatisfactory or not feasible. In some cases, the high cost not only of construction, but of maintenance and operation, has eliminated them as unfeasible. One of the proposed areas has had irrigation water available under the gravity distribution system of an adjacent operating project for many years, but the lands have been so unproductive that the application of water has been considered useless by the owners.

The Bureau of Reclamation during the past few years has examined some of these areas in the hope of finding sound projects that might be developed. To date none has been located which the landowners will accept under the terms required for authorization and construction. There has been a steady increase, however, in the acreage irrigated by the Flathead irrigation project which the proposed dam would impair. In 1925 there were approximately 20,000 acres irrigated. This area has increased until at the present time 100,000 acres are cropped under irrigation. The number of farms irrigated has increased from 700 to over 2,000. The project irrigation system is capable of irrigating 143,603 acres, and steady progress toward that goal has been recorded. If the proposed reservoir were created, it is estimated that 13,000 acres would be lost through inundation and seepage from the reservoir margin. The loss of irrigated land and irrigated farms would be a serious blow to the project. The repayment of project construction costs, as well as the costs of operation and maintenance, would be adversely affected. While disparaging statements have been made about present agriculture in the areas to be submerged, the fact remains that it has supported for many years and is now supporting a large farming population, as well as the towns which service these farming communities.

Northern Pacific revenues would be seriously affected. In the first place, the revenues from the stations to be submerged would unquestionably be lost. There is little chance that such towns as Dixon, Perma, and Molesse would be rebuilt above the reservoir. Highway and railroad relocation, as well as the barrier to their trade areas imposed by the reservoir would leave no reason for their existence. In the second place, stations other than those completely submerged, such as Paradise, Charlo, Ravalli, and Ronan, would suffer from the inundation of portions of their trade territory or by restrictions on convenient travel to territory which they serve at present or from which they enjoy farm trade or from which they secure forest or farm products. The present trade territories of Polson, Ronan, and Missoula would be limited as a result of both the loss of farmlands and the extended highway travel necessary to get around the reservoir. This is a loss, the amount of which can only be conjectured. The extent of the loss would be influenced by the location selected for reconstruction of main highways and feeder roads. It would also depend on future tonnage from farms and ranches, and on whether the increased transportation costs would permit the existing forest product industries to secure logs for their continued operation. In 1957 Northern Pacific rail freight revenues totaling annually approximately \$6,178,000 resulted from the operations of forest product mills in the general area of the project. Since 1957 eight new forest products industries representing an investment of more than \$21,800,000 and with an annual payroll of \$5,575,000 have commenced operations in the area and have substantially increased Northern Pacific traffic and revenues. Their logs are secured wholly, or in part, from the region subject to distortion of transportation routes by the reservoir. Many of these mills will register objection to this project on the basis that their log supply would be made either inaccessible from a transportation standpoint, or that transportation costs on logs would be greatly increased as a result of circuitous highways. Not a single mill operator in this area holds the view that he would be benefited by the project, or that the fluctuating reservoir could be useful in floating logs to mills located on its borders.

The mountains, streams, and valleys of western Montana, which lie in the proposed reservoir areas, have scenic and recreational values that equal or surpass those of any other region. Through advertising and direct solicitation, we have sought to capitalize these values with the intent of increasing passenger revenues. This also has been done by chambers of commerce, communities, and individuals who wish to attract tourists, sportsmen, and those seeking rest and relaxation. A storage reservoir with an unpredictable fluctuating shoreline would completely destroy these values. Annual drawdown of about two-thirds of the reservoir capacity, with release determined by lower river requirements, would expose large areas of bare reservoir floor in valley bottoms and unsightly shorelines during a considerable portion of the year. From a scenic standpoint, the attractiveness of the company's main line through this territory would be lost and its recreational values lowered.

STATEMENT OF CARL H. BURGESS, VICE PRESIDENT, OPERATIONS, NORTHERN PACIFIC RAILWAY Co., BEFORE THE U.S. ARMY DISTRICT ENGINEER, SEATTLE DISTRICT, OCTOBER 21, 1957

Northern Pacific Railway Co. is opposed to the construction of Paradise Dam because it is convinced that the benefits to be derived from the huge storage reservoir which it will create on the upper Clark Fork cannot possibly justify either the cost of its construction or the irreparable damage which it will do to the company's lines of railroad in the area to be inundated and to the whole economy of western Montana. Northern Pacific is, of course, vitally interested not only in the industrial development of western Montana but in the industrial development of the entire Pacific Northwest. If it felt that either objective depended on the construction of this dam it would not be here protesting its construction. But when other means of obtaining the same benefits are possible it cannot look with favor upon a proposal which would destroy favorably located segments of its main and branch lines and substitute precarious and unsatisfactory relocations, and would adversely affect the agricultural and industrial economy of the portion of western Montana which its lines were built to serve. Flood control can be achieved by construction of headwater dams and downstream levees and dykes, without inundating large areas of developed agricultural lands and displacing established highways, railroads, and public utilities. Power

at downstream dams can be firmed up by the construction of thermal plants near the load centers. But it is not possible to relocate Northern Pacific's lines of railroad in the reservoir area so as to give it as economical or as safe or dependable a line of railroad as it now has, and the economy of western Montana will certainly be injured rather than benefited by construction of this dam.

The following presents the facts:

1. Irreparable damage would be done to Northern Pacific's railroad and operations

In the area which would be inundated by the proposed dam, Northern Pacific's main transcontinental rail route consists of two separate main lines connecting De Smet and Paradise—one which follows the valley of the Clark Fork River on a water level grade via St. Regis, a distance of 93 miles, and is designed for freight service only, and the other via Evaro Hill and the valley of the Flathead River, a distance of 64 miles, which is designed primarily for passenger service but is usable for freight service, despite 8 miles of adverse mountain grades in both directions. The terrain traversed by the freight line, however, is such that the line is subject to periodic interruptions on account of washouts, rock slipouts, and mud slides. When these occur, freight train traffic is diverted to the passenger line via Evaro, which is a seasoned and stable line that is infrequently subject to interruptions and has provided dependable service for 74 years. The availability of this line enables the company to avoid the necessity of spending large sums of money on upgrading and maintenance of the water grade freight line, and the possession of two lines through this mountainous and difficult country insures the company against delays to its through transcontinental train service when interruptions occur on either line because it avoids the necessity of detouring trains over other railroads which, in this particular area, involve long and expensive detours.

Construction of the Paradise Dam would destroy our passenger line between Ravalli and Paradise, a distance of 34 miles, and leave no satisfactory location in the Flathead Valley to which it could be moved. It would also destroy our freight line between Spring Gulch and Paradise, a distance of about 30 miles, and inundate our Polson branch for a distance of about 8 miles between Dixon and D'Aste. No method of restoring both of Northern Pacific's alternate routes through the area has been suggested or is apparent. The furnishing of just one line of railroad for both freight and passenger service by rebuilding and relocating the existing freight line on the treacherous mountain slopes above the reservoir in the Clark Fork Valley could not restore the value or usefulness of Northern Pacific's existing transportation facilities through this area or adequately compensate it for the damage done to its railroad by the construction of the dam, no matter how much money might be spent on such a line. This is because the only available routes for relocation of the freight line involve steep mountain side construction, long tunnels and crossings of the reservoir pool on high bridges with foundations inundated so that such a line would be in constant danger from falling rocks, snowslides, and washouts, and in time of war, would be a particularly vulnerable target for sabotage and bombing attacks. Relocation of both lines so as to give Northern Pacific the equivalent of what it now has would be necessary to compensate it justly for the damage to its existing lines. But if, as we believe, such relocation of both lines is not physically or economically feasible, Northern Pacific would be entitled not only to reconstruction and relocation of the freight line to dual main line standards, but also to a substantial award of damages for loss of its alternate line and the traffic tributary thereto and for increased operating and maintenance expense that would be incident to use of the new line.

Flooding of the present passenger line between Ravalli and Dixon and of the portion of the Polson branch between Dixon and D'Aste would either require abandonment of the Polson branch or inclusion in that branch of the portion of the present passenger line from De Smet to Ravalli by construction of a new line, 14 miles long, on a steep side hill from Ravalli to D'Aste. Restoration of the Polson branch in this manner would make it a 69-mile branch, instead of 33 miles as at present, and it would serve an area with less traffic than at present, due to the flooding out of Moiese and encroachment of the reservoir on the Flathead irrigation project. Our estimate of potential revenues for the branch indicate that they would only slightly exceed the cost of operating and maintaining it, so that it would become a marginal or submarginal operation. We estimate that the cost of constructing the 14 miles necessary to continue it in operation would be \$6,076,495, which, in view of the doubtful prospects for

any return on investment in the line if continued in operation, could not be economically justified. Northern Pacific's best interests and possibly the interests of the Government would be better served by abandonment of the branch and payment to Northern Pacific of its present fair value in the event the dam is built.

2. Relocation and rehabilitation of Northern Pacific's freight line to dual main line standards would cost over \$150 million but would not provide a dependable or satisfactory line

If all traffic, freight, and passenger, is forced to use the one line via St. Regis, it is imperative that the portion of such line between DeSmet and Westfall be substantially reconstructed in order to permit increased speed and capacity. The character of the terrain traversed is such that the improvements to attain these ends will be very extensive and even when accomplished will not remove all the potential hazards to uninterrupted train operation. Without our alternate line via Evaro, such interruptions will be costly, both in extensive detours over other routes and losses in our competitive standings due to the very serious delays involved in detour of trains. Changes which slow down the service of the Northern Pacific or make it more hazardous or uncertain, or more expensive, are contrary to the interests of the people of the Northwest dependent on the transportation service of this company, and will also jeopardize the national defense in time of war.

An extensive section of the entire route from DeSmet to Spring Gulch is situated in a relatively narrow valley occupied by the Clark Fork River. In addition to the river, the valley now contains the main line of the Milwaukee Railroad, U.S. Highway No. 10, and the Northern Pacific freight line. The latter is restricted largely to the south side of the river due to other occupancies and developments on the north side. While grades on our freight line are favorable, the alignment leaves much to be desired when considering the use of such line for both passenger and freight traffic. The present alignment was influenced by the meandering of the river, by precipitous rock cliffs adjacent to the river, by unstable sand, gravel, silt, and poor rock deposits, by deeply cut streams entering the main river from plateaus high above, and by drainage problems directly related to the steep gradients and fast runoffs experienced in this mountain terrain. The Railway Co. since 1909 has expended large sums of money annually for improvements to this line, particularly between DeSmet and St. Regis.

Rehabilitation of the freight line to dual main line standards will involve considerable relocation to reduce and eliminate sharp curvature, flatten unstable cut slopes, widen cuts, place rock fills and riprap protection, adjust grades, excavate river channel changes, stabilize roadbeds subjected to the new pool level, together with extensive culvert, bridge and tunnel work. Higher ground water levels and occurrences of drawdowns due to the influence of the backwater pool will create new slide areas affecting the railway and reactivate others which have heretofore been stabilized. With the physical restrictions involved, it is most unlikely that all necessary construction can be fully anticipated and accomplished, with the result that passenger and freight train operation will still be subjected to interruptions.

A deterrent to complete rehabilitation of that portion of the route between DeSmet and Spring Gulch is the fact that the Montana Highway Department is at this time actively progressing planning and work of relocation of the Interstate Highway System in the valley. Such highway location contemplates occupation of certain areas, which will be required for railway relocation also. The highway work is currently being progressed and planned in detail while the railway planning is only preliminary. As a result, the final necessary railway plan will be difficult and expensive to obtain, or will be incomplete.

The St. Regis route from Spring Gulch to Eddy is proposed to be reconstructed to place the railway above the new Paradise Pool elevation. The routes offered are by all standards much inferior to our present route between these points in all respects but distance. The current proposal involves steep mountainside construction with constant danger to the completed line from falling rocks, snowslides, and washouts, and involving a long and expensive seasoning period. It involves two long and high bridge crossings of the pool with bridge foundations inundated, adding immeasurably to maintenance problems and costs. It involves five major tunnels, including one bore 8.31 miles in length. Such tunnel will actually have to be two tunnels of the same length to provide, in some measure, protection against delays due to derailments, expedite mainte-

nance and repairs of tracks and structures, minimize operational delays, and insure positive and safe ventilation at all times.

The proposed all-purpose single route via St. Regis results in a saving of 19.9 miles for freight trains, but the time savings normally represented by such reduction in mileage would be reduced by the necessary slow speeds through the long tunnels, plus delays due to the increased number of trains using the line. Passenger train-miles would be increased by 11.1 miles as compared to the present passenger route via Evaro. Studies indicate that the timesavings represented by the elimination of mountain grade usage on the Evaro route would be largely nullified by the added passenger mileage and by the long tunnel operation at slow speeds and by time lost due to density of traffic on the proposed St. Regis line. The installation of a centralized traffic control system will improve the overall situation but of course such a system cannot affect operating speeds within the long tunnels, as dictated by safe practices.

The present lines between DeSmet and Eddy were constructed wherever possible to take advantage of the protection afforded by a location away from the mountainous sides of the valley. Such locations as attained in many places resulted in the establishment of towns and industrial developments without which a railway cannot survive. The proposed relocation would force the railway to mountainside locations above the pool elevation with little or no room for trackside development. The relatively level valley floor would be flooded, forcing the present industries and investments to higher ground where most of them cannot exist. As a result, the proposed new railway location would serve merely to bypass an area which now produces a sizable revenue and whose future is bright. The present stations of St. Regis, Paradise, Perma, Dixon, Moiese, and Ravalli, together with intermediate production areas, would be flooded out with an annual loss to the railway of at least \$320,000 in current gross revenues. Furthermore, the loss of revenues from taxation suffered by the counties involved could well result in added assessments against our remaining property.

Based on the meager information thus far presented for the relocation of the Northern Pacific Railway, we have previously advised the estimated costs thereof to be as follows:

DeSmet to Spring Gulch.....	\$25, 284, 285
Spring Gulch to Eddy.....	125, 241, 690
Removals, less salvage.....	349, 160
Total.....	150, 875, 135

In addition to the above, the Northern Pacific will, under present planning, suffer considerable severance damages as a result of increased maintenance expenses of roadway and structures, and increased cost of train operations. A stub-end branch line will be left in place to serve Weeksville and Plains, which at present enjoy main line service. Increased operating expenses will result due to the line changes involved; also increased maintenance account long tunnels, ventilating plants, expanded signal system, and high bridges; also due to additional mileage charges account increased use of the Milwaukee Railroad trackage at St. Regis for the Wallace Branch trains; additional maintenance costs due to newly constructed roadbeds which will involve a long seasoning period; and additional costs due to increased investments in communication and other facilities.

The Army proposal for Northern Pacific main line relocation at the present time is based on the so-called alternate C, involving new construction from Spring Gulch to Eddy via the 8.31-mile tunnels. On the basis of meager information furnished in 1948 showing four proposed routes between approximately the same points, alternate C appeared to be the least objectionable location. None of the plans, however, are attractive, particularly in view of the fact that all of them were predicated upon the abandonment of our present alternate main line via Evaro. It is therefore imperative that exhaustive studies of all possible routes be made before the Northern Pacific can reach any conclusion as to the final relocation of its railway lines.

3. The dam would seriously retard the development of western Montana and Northern Pacific's traffic and revenues from this area

Full development of western Montana's natural resources is manifestly as much to the interest of Northern Pacific as it is to the people of Montana. Our opposition to the construction of Paradise Dam is accordingly based on our

conclusion from 75 years of experience in serving the area that the best prospects for this region lie in the development of industries processing the products of its forests and of its farmlands susceptible of cultivation and will not be promoted by the flooding of its valleys with stored waters for flood control and power production.

For many years the company has been actively engaged in promoting the industrial and agricultural development of this region and in the exploitation of its recreational attractions, with a view to increasing Northern Pacific's traffic and revenues. Colonization of the Flathead Valley was commenced in 1926 and measurable results have been achieved. While the area has limited mineral deposits, the company has provided rail facilities and competitive freight rates for the development of such mineral deposits as do exist in commercial quantities in accessible areas, principally phosphate rock and fluorspar, and has brought them into production in competition with other regions. And it has been active in developing conditions favorable to the location of industries in the area.

Attention is called to Northern Pacific's acquisition of favorably located industrial sites adjacent to its right-of-way, construction of industry spurs, and service trackage. It has been conscious of the need for adjustment of train service and freight rates in the interest of creating a favorable climate for industry, and to the extent that this has been found necessary, this company has modified its rates and made the service changes. Through sale or leasing of stumpage on company forest lands to prospective industries, it has played an important part in the location in western Montana of lumber, plywood, and other wood product plants.

The company was active beginning in the twenties and continuing well into the thirties, in colonizing the Bitter Root, Flathead, Clark Fork, Missoula, and Frenchtown Valleys and in promoting the construction of irrigation works to serve arable lands in these valleys. The location, for instance, of the sugar beet processing plant at Missoula was controlled largely by Northern Pacific's decision to relocate the Bitter Root Branch from its original line on the west side to the east side of the valley, south of Florence, at an expense in excess of a million dollars. In fact, such relocation was one of the conditions exacted by the Amalgamated Sugar Co. for their construction of the plant now owned and operated by the American Crystal Sugar Co. at Missoula. The new east side Bitter Root line was completed in 1928 and was immediately followed by the construction of the Missoula factory. The railroad relocation and the sugar factory led to the initiation of plans for bringing under irrigation a large block of previously dry farmed land on the east side of the Bitter Root Valley.

In an appraisal of the effects of the proposed Paradise Reservoir on the company's revenue one fact is indisputable; namely, current earnings of \$320,017 from stations to be submerged will be lost. Reconstruction above the reservoir of such towns as Ravalli, Dixon, Perma, St. Regis, and Paradise is highly improbable by reason of both highway and railroad relocation, as well as the barrier to their trade territories imposed by the reservoir. Additionally, stations other than those completely submerged would suffer, either from inundation of portions of their trade territory, such as Charlo and Ronan, or by restriction of convenient ingress and egress to territory which they serve at present or from which they draw raw materials, such as Superior and, to some extent, Plains, Polson, Thompson Falls, Missoula, and Bonner. The company's loss of revenue at these points can only be approximated. The extent of the loss would depend on such factors as the location of the main highways and county feeder roads in the territory, the decisions made as to abandonment of the Flathead Branch, and closing of the sugar plant, and, finally, on whether forest-product industries in or adjacent to these towns and cities could secure logs for their continued operation from other than present sources. Currently, Northern Pacific rail-freight revenues totaling approximately \$4,750,000 result from the operations of forest-product mills in the general area of the project. Their logs are secured wholly or in part from the region subject to major distortion of transportation routes by the reservoir. These mills will register objection to this project on the basis that their sources of log supply would be made inaccessible from a transportation standpoint or that transportation costs on both received logs and forwarded finished products would be substantially increased as a result of circuitous highway and rail routes. Indeed, some of these mills have laid aside expansion programs now on the drawing board awaiting decisions resulting from current Paradise Dam hearings.

The company has no way of accurately estimating the revenue loss to be incurred through anticipated curtailment of lumber, plywood, and log transportation, but that it might easily reach upward of \$900,000 yearly may conservatively be predicted. Not a single mill operator in this area holds the view that he would be benefited by the project or that the fluctuating reservoir could be useful in floating logs to mills now located on its borders.

Loss of the Flathead Valley Branch would result in loss of gross revenues of \$519,000, based on 1956 revenues. These revenues have shown a steady increase yearly as the irrigated area has expanded and as forest-product industries have increased the size of their operations at the foot of Flathead Lake. The loss of the sugar factory at Missoula would mean a reduction of \$188,000 in company revenues based on freight charges paid last year, and, if the dam is not built, it is believed these revenues will be doubled as sugar quotas are increased over the next few years.

The depressing effect on agricultural production in western Montana of the proposed reservoir is undeniable. It will blot out several hundred existing farms and thousands of acres of irrigated land within the boundaries of the present Flathead irrigation project. The river-bottom lands along the Jocko, the Flathead, and the Little Bitter Root, and along the Clark Fork between Westfall and Paradise, would be rendered useless for farming or for the wintering of livestock on valley meadows and pastures. Economical use for summer range of lands adjacent to these valleys at higher elevation would be difficult, if not impossible. While disparaging statements have been made by dam proponents about present agriculture in the submerged area, the fact remains that it has for many years supported and is now supporting a large farming population and the towns which service these farming communities.

There has been a slow but steady increase in the number of farms and acres irrigated in the Flathead irrigation project. In 1925 approximately 20,000 acres were irrigated. In 1957 slightly over 100,000 acres were irrigated. In the same period, the number of farms increased from 700 to over 2,000. The Flathead project irrigation system is capable of irrigating 140,000 acres and its growth has recently been at the rate of between 1,000 to 2,000 acres yearly. Some 13,000 acres of irrigated land would be lost through reservoir inundation.

Abandonment of the Flathead Branch, if it should occur, would constitute a calamity to this important western Montana project. Without rail transportation, crops produced in the future would be those which lend themselves to highway transportation by truck. Such crops are those of low per-acre value as compared with crops such as sugar beets and potatoes which require rail service.

4. There is no factual basis for expecting new irrigation projects to result from construction of the dam

The company's trained agricultural staff have been familiar for years with new areas claimed to be feasible for irrigation development by the use of low-cost power from Paradise Dam for pumping. Some of these proposed replacement areas have been repeatedly studied and investigated by irrigation engineers of both the Bureau of Indian Affairs and the Bureau of Reclamation. They have been found completely unsuitable for irrigation because of barriers of soil quality, topography, drainage, climate, excessive pump lifts and the high cost, not only of construction but of maintenance and operation. They have been rejected as so infeasible—regardless of low-cost power for pumping—as to fail to warrant even elementary studies of their soils or topography. Indeed, one of these areas has had water available under the gravity distribution system of the Flathead project for many years, but the lands have been considered by their owners as too unproductive to warrant application of irrigation water. The Bureau of Reclamation, in recent years, endeavored without success to interest landowners in the Kalispell, Deer Lodge, and Missoula areas in the organization of irrigation districts with a view to establishing projects. So far this effort has failed to secure landowners' acceptance of the terms under which Federal reclamation projects can be authorized and built. These areas all have factors of feasibility far beyond those now identified as projects to be irrigated in connection with Paradise Dam. It is therefore difficult for this company to feel any confidence in the statement of dam proponents that losses of existing farm communities and productive farmland will be offset by irrigation of other lands alleged to be located somewhere in the watershed of the Clark Fork. The Bureau of Reclamation, which has the responsibility for making surveys and investigations of areas which may lend themselves to successful irrigation proj-

ects, has found none in which the landowners either desire or would accept irrigation upon the required repayment terms in the area above the proposed dam and we know of none. We are in agreement with both landowners and soil specialists from the State college at Bozeman that from the standpoint of soil and topography the particular areas which the Army Engineers have suggested for irrigation are completely unsuitable.

5. Construction of the dam is not likely to attract large industries to western Montana

Proponents of the dam have stated that once the dam is built, industries will be attracted by cheap power to the valley of the Clark Fork River below the dam and provide tremendous stimuli to the economy of the area. Particularly, it is claimed the aluminum companies and phosphorous producers will establish plants in the area to take advantage of the abundant supply of low-cost Government power to be made available. After careful investigation, we are convinced that the facts do not support such optimism.

The most recent expansions in aluminum production have occurred with the building of aluminum reduction plants in the Ohio River Valley by the Reynolds Metals Co. and Kaiser Aluminum & Chemical Co. These plants were located in the Ohio Valley because firm power could be developed there in thermal plants at low cost. This power is being produced by public utility companies in generating stations fired with bituminous coal from nearby mines and is delivered to the aluminum companies on a firm basis. This ability to get the required amount of power on a firm basis at a reasonable cost was of vital importance to the aluminum companies because it meant that the plants could be operated continuously in contrast to some of the aluminium reduction works in the Northwest, which must be shut down in periods of power shortage. An additional and important reason for choosing the Ohio Valley sites was their proximity to both raw materials and markets for the finished metal products, with consequent savings in transportation costs. Montana is remote from both raw materials and products markets, and according to figures publicized by the Army Engineers, the proposed Paradise Dam will develop only 245,000 kilowatts of firm power at site. The power requirements for a single large aluminum reduction plant are in excess of that amount.

During 1954 and 1955, the Northern Pacific Railway Co. participated in a research study made by A. D. Little, Inc., of Cambridge, Mass., aimed at finding methods of stimulating industrial development in North Dakota and Montana. At that time, we were told that the Government would not make large blocks of power available to any industry in the Northwest area in the future. This statement of policy of the Government seems to be borne out by the fact that two big aluminum producers located their newest plants in the Ohio Valley despite the fact that additional dams were then being built and others projected for construction in the Columbia River Basin.

As far as Montana phosphate rock is concerned, its most important use is in the manufacture of phosphate fertilizers at a plant at Anaconda, Mont., and another at Trail, British Columbia. Fertilizer plants were located at these places in order to take advantage of a supply of sulphuric acid manufactured as a byproduct in the base metal smelters. The phosphate fertilizer industry does not use electric power in processing materials. The use of power is restricted to that needed for lighting and running machinery, and the amount used is comparatively small. In other words, cost of power to the fertilizer industry is a minor item.

Large volumes of power are consumed in the production of elemental phosphorous. Typical of plants of this kind is that of Victor Chemical Co. at Silver Bow, Mont. Elemental phosphorous is produced from phosphate rock in electric furnaces, and the power consumption is heavy. The principal markets for elemental phosphorous are in the Middle West and eastern sections of the United States. For that reason, we believe that future expansion of production of elemental phosphorous is likely to be in the Tennessee or Florida areas rather than in western Montana.

Northern Pacific is much concerned about the effect of Paradise Dam on existing forest products and mining industries which have located in the area because of the local natural resources which supply raw materials to the plants. The forest products and mining industries now in the area are not large users of power, and power from Paradise Dam will not help them to any great extent. In fact, some of them will be severely disturbed by the reservoir behind the

proposed dam, and their transportation problems will be accentuated both as to rail and highway service.

For the reasons stated here, we are convinced that the construction of Paradise Dam will not promote industrial development in western Montana.

6. Construction of the dam will destroy the scenic and recreational values of the area

We have long realized that the mountains, streams, and valleys of western Montana embraced in the proposed reservoir area have scenic and recreational values surpassed by no other region in western United States. Through passenger advertising and direct solicitation, the Northern Pacific has sought to capitalize these resources with the intent of increasing our passenger revenues. This also has been done in the interest of those who have invested their labor and capital in facilities to attract tourists, sportsmen, and those seeking rest and relaxation. Almost complete destruction of these values would result from imposing a storage reservoir of fluctuating shoreline on the valleys of the Flathead, Jocko, and Clark Fork from Superior, Arlee, and the Kerr Dam on the east to Plains on the west. Annual drawdown of about two-thirds of the reservoir capacity, with release determined by lower river requirements, would expose large expanses of reservoir floor in valley bottoms and unsightly shorelines during a major portion of the year.

From a scenic standpoint, the attractiveness of the company's main line through this territory would be marred beyond repair and its recreational values depreciated.

For all of the reasons above set forth, Northern Pacific protests against the construction of the proposed Paradise Dam.

STATEMENT ON BEHALF OF NORTHERN PACIFIC RAILWAY CO. BEFORE THE BOARD OF ENGINEERS FOR RIVERS AND HARBORS, MARCH 9, 1959

This statement is presented on behalf of Northern Pacific Railway Co. in opposition to the recommendation contained in the report of the division engineer that the Knowles Dam project on the Flathead River be authorized for construction. The construction of a dam at the Paradise site, also described in the division engineer's report, but not recommended, was opposed by the company in a statement filed at the hearing before the Engineering Division of the Corps of Engineers at Missoula, Mont., on October 21 and 22, 1957, which is set forth in vol. IV of the transcript of that hearing, commencing at page 679. While the Knowles project is somewhat less objectionable than the Paradise project, the objections of the Northern Pacific to the Knowles project are basically the same as to the Paradise project; namely, that it would be impossible to provide the company with satisfactory locations for its railroad through the area and that the huge reservoir created would seriously retard the development of western Montana and Northern Pacific's traffic and revenues from this area.

As stated in the division engineer's report (vol. I, p. 176), Northern Pacific operates two main lines of railroad from DeSmet to Paradise, Mont., one of which is routed via St. Regis along a line which follows the Clark Fork River and is used for freight traffic, and the other follows the valleys of the Jocko and Flathead Rivers via Ravalli and Dixon and is used for passenger service and for an alternate route for freight trains in the event of washouts or slides on the freight line. The railway company also owns and operates a branch line between Dixon and Polson, a distance of about 33 miles. The Paradise project would inundate both main lines and part of the branch line, and would preclude any relocation of the passenger line and compel the use for both freight and passenger service of the relocated freight line. It would also compel a relocation of the branch line in such manner as to make it a 69-mile branch instead of a 33-mile branch. The Knowles project, on the other hand, would require no relocation of the freight line and would lengthen the branch by only about 5½ miles in consequence of its relocation. The difficulty, however, is to provide a feasible relocation of the passenger line.

Preliminary relocation plans set forth in the report (vol. I, pp. 176, 177) propose removal of the passenger line from the north side of the river between Paradise and Perma to the south bank, with a 1.05-percent compensated grade between the Knowles Dam site and a tie-in with the freight line east of Paradise. Between Knowles and Ravalli the grade line for the relocated track

would be about level. The estimated cost of relocating the passenger line is stated to be \$65,562,000. The estimated cost of relocating the branch line is stated to be \$17,524,000 (report, vol. V, table No. 4). We cannot agree that this plan would provide a feasible route for relocation of the passenger line or a satisfactory route for the branch line, nor can we agree that the stated costs represent a reasonable appraisal of the cost of relocating the company's railroad facilities.

There are three major objections to the proposed plan of the division engineer for relocation of the passenger line. In the first place, all freight trains stop at Paradise, and the relocation of the passenger line between Paradise and the damsite on a 1.05-percent ascending grade would limit train tonnage or require the use of additional diesel units between these points and would greatly increase the cost of freight train operation when use of the passenger line is necessitated. While there is at present a 1-percent ascending grade eastbound for about 5 miles on the passenger line between Ravalli and Arlee, the use of more than the normal consist of diesel units is not required for operation of eastbound freight trains between Paradise and Arlee as high speed train approach provides satisfactory performance without delays.

In the second place, the 14-mile section of relocated route from a point about 3 miles above Perma to a point about 2 miles below Knowles is located in very rough and rocky terrain, as stated in the division engineer's report. At least one-half mile or more of tunnels would be required. Cut slopes would be high and hazardous to safe train operations. The south rim of the proposed reservoir is the least attractive with respect to wintertime operations due to snow and ice accumulation on the shady side of the mountains.

In the third place, a location on the south rim of the pool would create a very undesirable separation of the areas on either side of the pool. This would be particularly objectionable to the railway company in the vicinity of Perma, where we now enjoy a growing business in the transportation of products which reach the railway from points north of the present tracks by means of the improved roadways which now provide access to Perma from the north.

In order to provide the company with grades on any relocation of the passenger line comparable with the present grades it would be necessary to relocate the passenger line on the north side of the river west of Perma and extend it to a connection with the present main line in the vicinity of Plains. This would limit the easterly ascending grade to 0.5 percent maximum grade between Plains and the Knowles Dam site, and would necessitate a bridge crossing of the pool at Perma.

Due to the extremely rugged and difficult terrain bordering the proposed pool, it has not been practical to make a detailed study of proposed railway relocation routes, and our studies have necessarily been based on Army topographic maps and limited reconnaissance over existing roads in the region. On the basis of the limited information available, we estimate that the cost of such a relocation of the passenger line from Ravalli to Plains would be approximately \$96,500,000.

Relocation of the branch line would involve construction along a steep and high mountainside with embankments situated on unconsolidated and unstable soil materials deposited by a glacial formed lake, together with a long high bridge crossing over the Mission Creek arm of the proposed pool, involving serious foundation problems. We are unable to reconcile the division engineer's estimate of the cost of this relocation with our figures, and believe the figures in the report to be overstated. If, however, there are cost factors of which we are not aware justifying the division engineer's estimate of \$17,524,000, the cost of relocating our rail facilities would be in the neighborhood of \$114 million, or some \$31 million more than has been included in the estimated cost of the Knowles Dam.

With even the best relocation that could be provided, Northern Pacific would not be adequately compensated for the damage to its existing facilities. Cut slopes at numerous locations would be extremely high, and would create very hazardous conditions due to frequent rockfalls, slip outs, and slides. The roadbed would be literally carved in rock cliffs and extremely high reaches, and located along high and extensive talus slopes. Several miles of loose rock in immense deposits would be encountered and these would be a constant danger to railway operations. Construction of the roadbed into these formations would disturb their angle of repose and precipitate extensive slides. The removal of loose rock above the track would be but a temporary solution, since the continual

disintegration of the cliffs by weathering would create rockfalls and slides and result in constant hazard to safe train operations and greatly increased maintenance costs. Extensive detector fence installations would be required to protect as far as possible against train derailments and serious accidents to passengers and to passenger equipment, especially dome cars. Extensive deposits of unstable, unconsolidated silt, fine sands, and clay along the bottom and on the slopes of the valley, which are remnants of lake deposits formed during glacial periods (the extent of which is not known) when subjected to the weight of new high embankments, saturation by the proposed deep pool, and intermittent 80-foot drawdowns of the pool, would create undetectable hazards involving sudden settlements, slip outs or extensive foundation failures requiring costly roadbed and track maintenance over an indefinite period of time. The company's freight line is subject to recurrent damage from slides, falling rock, and settlement, and, in consequence, the probability of simultaneous interruptions to train traffic on both alternate lines, necessitating long detours over other railroads and serious delays to trains, would be ever present. To compensate for these hazards and the increased operating costs which they involve, a very substantial award of damages would be required.

In addition to these physical difficulties, the flooding of the valley and relocation of Northern Pacific's rail lines would deprive the company of the traffic of the existing towns of Perma, Dixon, Ravalli, and Moiese. The steep hillside locations of its railroad would not be suitable for new station grounds or industrial sites and its relocated railroad would simply bypass a flooded area which now produces sizable revenues and would otherwise have a promising future. We accordingly turn to the effect of the construction of the Knowles Dam project on the economy of western Montana and Northern Pacific's traffic and revenues therefrom.

Rapid and finally complete development of western Montana's natural resource potential is manifestly as much to the interest of Northern Pacific as it is to the people of Montana. Seventy-five years of experience in traffic development in this area strengthen our opposition to the proposed Knowles Dam. It would seem obvious that inundation of the upper Flathead Valley primarily for the purpose of flood control and power production in downstream areas in Washington and Oregon is a serious deterrent to capitalizing the resources of regions contiguous to the reservoir. The growth prospects of this area lie in the full development of arable farmlands—mostly located in this valley—and abutting rangelands suitable for grazing. They lie also in establishment of industries processing the products of these agricultural lands, of the forests that cover the mountainous terrain, and the minerals with which the region is endowed.

Since the completion of this railroad, Northern Pacific has been actively engaged in promoting the industrial and agricultural development of this region and in the sound exploitation of its many recreational attractions. Our viewpoint, understandably, was not only to increase Northern Pacific's traffic and revenues, but also to build a substantial economy tributary to the railroad. Colonization of the Flathead Valley and development of the Flathead irrigation project were commenced in 1926 and measurable results were achieved over the years. While the area has limited mineral deposits, the company has provided rail loading facilities and competitive freight rates and service for the development of such mineral deposits as do exist in commercial quantities in accessible areas, principally phosphate rock and fluorspar. It has brought these industries into production in completion with other regions. And it has been active in developing conditions favorable to the location of other types of industries in the area.

Attention is called to Northern Pacific's acquisition of favorably located industrial site adjacent to its right-of-way, construction of industry spurs and service trackage. It has been conscious of the need for adjustment of train service and freight rates in the interest of creating a favorable climate for industry. To the extent found to be necessary, this company has modified its rates and has made the train service changes. Through sale or leasing of stumpage on company forest lands to prospective industries, it has played an important part in the location in western Montana of lumber, plywood, and other wood-product plants.

The company's agricultural and land settlement department was active, beginning in the 1920's and continuing well into the 1930's, in colonizing the Bitter Root, Flathead, Clark Fork, Missoula, and Frenchtown Valleys, and it

took an aggressive and leading part in promoting the construction of irrigation works designed to serve arable lands in these valleys. The location, for instance, of the sugar-beet processing plant at Missoula was controlled largely by Northern Pacific's decision to relocate the Bitter Root branch from its original line on the west side to the east side of the valley, south of Florence, at an expense in excess of a million dollars. In fact, such relocation was one of the conditions exacted by the Amalgamated Sugar Co. for its construction of the plant now owned and operated by the American Crystal Sugar Co. at Missoula. The new east side Bitter Root line was completed in 1928 and was immediately followed by the construction of the present Missoula factory. The railroad relocation and the sugar factory led to the initiation of plans for bringing under irrigation a large block of previously dry-farmed land on the east side of the Bitter Root Valley.

In an appraisal of the effects of the proposed Knowles Reservoir on the company's revenue, one fact is indisputable; namely, current earnings of approximately \$130,000 from stations to be submerged will be lost. Reconstruction above the reservoir of such towns as Dixon, Perma, and Moiese is improbable by reason of both highway and railroad relocation, as well as the barrier to their trade territories imposed by the reservoir. Additionally, stations other than those completely submerged would suffer either from inundation of portions of their trade territory, such as Paradise, Charlo, Ravalli, and Ronan, or by restriction of convenient ingress and egress to territory which they serve at present or from which they enjoy farm trade or secure forest or farm products. The present trade territory of Polson and Missoula would be limited as a result of both farm land inundation and the circuitous highway mileage to avoid the reservoir. The company's loss of revenue at these points can only be approximated. The extent of the loss would be influenced by such factors as the final location of the main highways and county feeder roads in the territory. Also it will depend on reduction in the immediate and prospective future of sugar beet tonnage and on whether forest product industries in or adjacent to these towns and cities can secure logs for their continued operation from other than present sources. Currently Northern Pacific rail freight revenues totaling approximately \$6,178,000 result from the operations of forest product mills in the general area of the project. Their logs are secured wholly, or in part, from the region subject to distortion of transportation routes by the reservoir. Many of these mills will register objection to this project on the basis that their sources of log supply would be made either inaccessible from a transportation standpoint, or that transportation costs on logs would be increased as a result of circuitous highways.

The company has no way of estimating accurately the revenue loss to be incurred through anticipated curtailment of lumber, plywood, and log transportation, but that it easily might reach upward of \$500,000 yearly may conservatively be predicted. Not a single mill operator in this area holds the view that he would be benefited by the project or that the fluctuating reservoir could be useful in floating logs to mills located on its borders.

The Missoula factory of the American Crystal Sugar Co. has been operating on about 50 percent of the sugar-beet acreage required for efficient utilization of plant facilities. As acreage allotments assigned to this factory district are increased year by year under provisions of the present Sugar Act, it has been anticipated that the increase would occur largely in the Moiese area of the Flathead, which is to be inundated. Therefore, the factory will lose approximately 500 acres now producing beets and will be seriously handicapped in its future program of acreage expansion. The beet sugar industry in western Montana is threatened with abandonment if the Knowles Dam is built. The loss of this industry would mean a reduction of \$188,000 in company revenues based on current freight revenues; and if the dam is not built, it is believed these revenues will be doubled in the next 10 years.

The depressing effect on agricultural production in western Montana of the proposed reservoir is undeniable. It will blot out several hundred existing farms and thousands of acres of irrigated land within the boundaries of the present Flathead irrigation project. The river bottom lands along the lower Jocko, the Flathead, and the little Bitter Root would be rendered useless for cropping or for the wintering of livestock on valley meadows and pastures. Economical use of foothills land for summer range adjacent to these valleys, as well as those at higher elevation, would be difficult, if not impossible. The balance between winter and summer feed supplies for livestock would be completely upset. While disparaging statements have been made by dam propo-

nents about present agriculture in the submerged area, the fact remains that it has supported for many years and is now supporting a large farming population, as well as the towns which service these farming communities.

There has been a slow but steady increase in the number of farms and acres irrigated in the Flathead irrigation project. In 1925 approximately 20,000 acres were irrigated. In 1957, 99,734 acres were irrigated. In the same period, the number of farms increased from 700 to over 2,000. The Flathead project irrigation system is capable of irrigating 143,603 acres and its growth recently has been at the rate of between 1,000 to 2,000 acres yearly. It is estimated that about 13,000 acres of irrigated land would be lost through reservoir inundation and reservoir margin seepage.

The repercussions of this loss of irrigated land and irrigated farms will be a serious blow to this project. They will adversely affect repayment of project construction costs, as well as costs of operation and maintenance of project works.

The company's trained agricultural staff have been familiar for years with other areas in the watershed of the Flathead River which have been investigated for irrigation feasibility through use of low-cost power from Knowles Dam. Some of the areas proposed to be developed to replace the flooded-out irrigated lands have been repeatedly studied and investigated by irrigation engineers of both the Bureau of Indian Affairs and the Bureau of Reclamation. They have been found completely unsuitable for irrigation because of barriers of soil quality, topography, drainage, climate, excessive pump lifts, and the high cost, not only of construction but of maintenance and operation. They have been rejected as so infeasible—regardless of low-cost power for pumping—as to fail to warrant even elementary studies of their soils or topography. Indeed, one of these areas has had water available under the gravity distribution system of the Flathead project for many years, but the lands have been considered by their owners as too unproductive to warrant application of irrigation water. The Bureau of Reclamation, in recent years, endeavored without success to interest landowners in the Kalispell, Deer Lodge, and Missoula areas in the organization of irrigation districts with a view to establishing projects. So far this effort has failed to secure landowners' acceptance of the terms under which Federal reclamation projects can be authorized and built. It is difficult, therefore, for this company to feel any confidence that losses of existing farm communities and productive farmland will be offset by irrigation of other lands somewhere in the watershed of the Flathead. The Bureau of Reclamation, which has the responsibility for making surveys and investigations of areas which may lend themselves to successful irrigation projects, has found none in which the landowners either desire or would accept irrigation upon the required repayment terms in the area above the proposed dam. And we know of none.

Proponents have stated that once the dam is built, industries will be attracted by cheap power to the valley of the Flathead River below Knowles Dam and will provide tremendous stimuli to the economy of the area. Particularly, it is claimed the aluminum companies and phosphorous producers will establish plants in the area to take advantage of the abundant supply of low-cost Government power to be made available. After careful investigation, we are convinced that the facts do not support such optimism.

The most recent expansions in aluminum production have occurred with the building of aluminum reduction plants in the Ohio River valley by the Reynolds Metals Co. and Kaiser Aluminum & Chemical Co. These plants were located in the Ohio valley because firm power could be developed there in thermal plants at low cost. This power is being produced by public utility companies in generating stations fired with bituminous coal from nearby mines and is delivered to the aluminum companies on a firm basis. This ability to get the required amount of power on a firm basis at a reasonable cost was of vital importance to the aluminum companies because it meant that the plants could be operated continuously in contrast to some of the aluminum reduction works in the Northwest, which must be shut down in periods of power shortage. An additional and important reason for choosing the Ohio valley sites was their proximity to both raw materials and markets for the finished metal products, with consequent savings in transportation costs. Montana is remote from both raw materials and products markets, and according to figures furnished by the Army Engineers, the proposed Knowles Dam has an initial installed rate capacity of 256,000 kilowatts at site. The firm power requirements for a single large aluminum reduction plant would be in excess of that produced by such a plant.

During 1954 and 1955, the Northern Pacific Railway Co. participated in a research study made by A. D. Little, Inc., of Cambridge, Mass., aimed at finding methods of stimulating industrial development in North Dakota and Montana. At that time, we were told that the Government would not make large blocks of power available to any industry in the Northwest area in the future. This statement of policy of the Government seems to be borne out by the fact that two big aluminum producers located their newest plants in the Ohio Valley despite the fact that additional dams were then being built and others projected for construction in the Columbia River Basin.

As far as Montana phosphate rock is concerned, its most important use is in the manufacture of phosphate fertilizers at a plant at Anaconda, Mont., and another at Trail, British Columbia. Fertilizer plants were located at these places in order to take advantage of a supply of sulphuric acid manufactured as a byproduct in the base metal smelters. The phosphate fertilizer industry does not use electric power in processing materials. The use of power is restricted to that needed for lighting and running machinery, and the amount used is comparatively small. In other words, cost of power to the fertilizer industry is a minor item.

Large volumes of power are consumed in the production of elemental phosphorous. Typical of plants of this kind is that of Victor Chemical Co. at Silver Bow, Mont. Elemental phosphorous is produced from phosphate rock in electric furnaces, and the power consumption is heavy. The principal markets for elemental phosphorous are in the middle west and eastern section of the United States. For that reason, we believe that future expansion of production of elemental phosphorous is likely to be in the Tennessee or Florida areas rather than in western Montana.

Northern Pacific is much concerned about the effect of Knowles Dam on existing forest products and mining industries which have located in the area because of the local natural resources which supply raw materials to the plants. The forest products and mining industries now in the area are not large users of power, and power from Knowles Dam will not be of material assistance. That availability of power—cheap power—is not a prerequisite to making western Montana attractive to industry is attested by the location of two new substantial permanent industries in the area since 1957. One is the Waldorf Paper Products Co. of Montana, near Missoula; the other, the Plum Creek Lumber Co. at Pablo, in the Flathead Valley. These plants were located because of available forest products and the willingness of the railroads to adjust rate schedules to make them competitive.

For the reasons stated here, we are convinced that the construction of Knowles Dam will not promote industrial development in western Montana.

We have long realized that the mountains, streams, and valleys of western Montana embraced in the proposed reservoir area have scenic and recreational values surpassed by no other region in western United States. Through passenger advertising and direct solicitation, the Northern Pacific has sought to capitalize these resources with the intent of increasing our passenger revenues. This also has been done in the interest of those who have invested their labor and capital in facilities to attract tourists, sportsmen, and those seeking rest and relaxation. Almost complete destruction of these values would result from imposing a storage reservoir of unpredictably fluctuating shoreline on the valley of the Flathead from Paradise to Kerr Dam. Annual drawdown of about two-thirds of the reservoir capacity, with release determined by lower river requirements, would expose large expanses of reservoir floor in valley bottoms and unsightly shorelines during a considerable portion of the year.

From a scenic standpoint, the attractiveness of the company's main line through this territory would be marred permanently and its recreational values depreciated.

For all of the foregoing reasons Northern Pacific Railway Co. protests the recommendation of the division engineer that the Knowles Dam project on the Flathead River be authorized for construction.

Respectfully submitted.

CARL H. BURGESS,

Vice President, Operations, Northern Pacific Railway Co.

Senator GRUENING. Mr. MacDonald, I would like to ask you a question. Northern Pacific has a long record of aiding the development of this section. Do you not think that the new industries that will be

brought in with a large supply of low-cost power would help the development and would add to the transportation and traffic on the railroad?

Mr. McDONALD. Sir, I believe your question covers two points. In the first place, in regard to power, we do not believe that this power would attract new industries that would come in here. The industries that we have been getting, and it has been stated heretofore, have come in during the last 2 years, are industries which process the raw materials from this area. Then, of course, the second question is, and it is covered in this statement which I have filed, is that it would be impossible for us to secure as satisfactory a railroad on the location designated by the engineers as we now have. Our railroad has been on the floor of this valley for 75 years. Much improvement, hundreds of thousands of dollars have gone into it, and to put it up into this mountainous area where we would be troubled with rock slides, insecure footings, innumerable bridges, long tunnels, we would no longer have as good a railroad nor as satisfactory a railroad with which to meet our competition as we have today.

Senator GRUENING. Then one of your objections to this legislation is relocation of certain parts of your rail lines?

Mr. MACDONALD. Yes, sir. This material I have filed covers that in detail.

Senator GRUENING. You feel that the relocation proposed would not be as satisfactory as what you have now?

Mr. MACDONALD. That is correct, sir.

Senator GRUENING. Thank you very much.

Mr. LOMAN. Dennis Dellwo, of the Flathead Irrigation District.

STATEMENT OF DENNIS A. DELLWO, FLATHEAD IRRIGATION DISTRICT

Mr. DELLWO. Sirs, my name is Dennis Dellwo; I am one of the old homesteaders who settled up on the Flathead 40 years ago.

I found myself right away in public work on foot or horseback. In the 1920's we organized an irrigation district covering an irrigation project up there which project covers 150,000 acres. I have been a commissioner and a secretary of that district since 1927.

We have had many problems. I had to go before Congress a dozen times, I believe, to get authority to set up the type of project we wanted up there, but we have done that. We have a very, very stable economic structure up there. Our project consists of a power system and an irrigation system. Our power system goes out to way beyond our big county and serves farm people as well as rural people, and at very low rates, and so forth.

It would be very difficult for us oldtimers up there who have carried the ball and stopped the brickbats over the quarter of a century to stand still while a proposal as unfair and obnoxious to our common decency as this one is would be put over. We do not believe that the dam is essential.

That is the pathway of man out of Montana and into Montana since man came. One of the beauty spots of the West. We have had some experience up on my project with the theory that an act of Congress is the last word. Our power business up in our project

was required in spite of an act of Congress. Our project was required to deliver power to build Hungry Horse and our project still lacks \$360,000 of being paid for that power, although we have regularly besought and beseeched our Congressmen to look after it for us. So we do not believe that an act of Congress is the last word.

The cogent facts constituting this controversy are all face up on the table, for all to see. It is proposed to flood an area of central western Montana which is one of the beauty spots of the West, which has been the pathway of man into and out of this State since man came, and to make of that area a place of mud and swamp and the filthy things which go with that sort of an area.

Recreational area? Why? Why would people suggest a thing like that? Around the rim, around the rim of that great mudhole after the water is pulled down 80 feet there will be nothing but the most obnoxious of sights.

I was interested in the man who spoke about changing the location of the Northern Pacific Railroad. Living up in that country all those years, I have learned what happens when those chalk hills underlaid by solvent clay are wet by the backing up of reservoir water. We have reservoirs on our project which do that. The slides along that 400-mile rim, now mind you, 400 miles of the rim of that proposed reservoir up into every creek and crevice and back again will be those mud slides. I am sure that, including the unsightly slides which will occur along the 400-mile rim of the thing, that reservoir will destroy probably 80,000 acres instead of the little old 60,000, and disperse probably 5,000 people in compact communities, villages, church and school groups, neighborhood groups, dispersed like so much rubbish, their buried dead desecrated, a type of destruction for which there is no adequate restitution. Does anyone dispute this? No, they don't dispute it. The brutish process is admitted, but it is contended that the advantages for the rest of us are so great that the victims should be glad to make the sacrifice.

Not even one advantage can be assured to Montana or to those of us who will be left upstream to see and smell the thing. There is no authority in any agency of government to guarantee us anything. The promoters of this should be cursed by coming generations. They should die of shame. I think they will if they put that thing in. The areas proposed to be irrigated are completely unfit for irrigation; high rolling areas of clay and rock they point out as irrigable areas. If those areas were suitable to be irrigated, the Flathead project which I come from would have irrigated them.

Industries do not move in above large reservoirs. Where are the industries which should have come to Fort Peck or Canyon Ferry or above Hungry Horse? I recite the prayer of thousands who live above the area proposed to be flooded when I say: "Please leave us be." I thank you very much.

(Documents filed by the witness follow :)

STATEMENT OF DENNIS A. DELLWO, SECRETARY, FLATHEAD DISTRICT

I am directed by our Commissioners to protest the proposed desecration and destruction of one of the beauty spots of the West, and the substitution therefor of a vast loathsome area of death and stench and the slimy crawling things which always frequent the reeking mud and decay which would be the proposed

Paradise Reservoir each year after it would have contributed its storage toward stabilizing the overplanned dams and generators downstream.

I am filing with you a detailed statement as was presented to the Corps of Army Engineers when they were here. At the moment, I shall stress only a flash of the shocking picture which haunts us who live upstream where the putrid monsoons would be wafted to us on every summer breeze.

We have a stable economic structure. We have a combined power and irrigation project which serves our area and its people very adequately and economically. Industry, attracted by our resources and low-rate power is moving in. Tourists stream through the year around. Our electrical service extends far beyond the boundaries of our large county. It serves rural and urban users at the same rates. Notwithstanding our low rates, our net revenue is sufficient to meet our annual assessments on account of construction of both the power and the irrigation systems.

Those of us who carried high responsibility in a public way over the years, back to homestead days, during the trial and error period when doubters seemed sometimes to be in control—those of us who carried the ball and stopped the brickbats cannot now stand idly by and make no protest when those who should be safeguarding our welfare promote a plan so obnoxious to us.

We have experienced the necessity of eternal vigilance. Those who seem to believe us to be on the naive side repeatedly stress the contended finality of acts of Congress. Our very capable Senators and Congressmen should, themselves, put people right on that common deceit. The provisions of an act of Congress are subject to a change at any time. The bill for the proposed dam carries some attractive provisions. Those provisions would likely have disappeared from the law when time should make it desirable for us to invoke them. The main business of Congress is in changing its own laws.

For instance: We of the Flathead irrigation project felt a real thrill of accomplishment when we secured the passage by Congress of a law which provided that power available on our project would be sold at rates which would produce net revenues to pay or assist in paying costs of construction. Then, right out of a clear sky came an order by the then Secretary of the Interior instructing our project engineer to deliver power for the construction of Hungry Horse Dam, and to deliver same at cost. Hungry Horse presents no advantage to our project. In fact it caused our project to lose a block of very good power sales. Our project still lacks a large sum of receiving payment of the actual out of pocket costs.

We of Montana must never forget that there is no Federal agency which can honestly tell us that anything will be reserved for us from the proposed dams. When the stored water is needed downstream they'll pull the plug at Paradise. Our wishes will be of no consequence.

STATEMENT OF DENNIS DELLWO, SECRETARY, FLATHEAD IRRIGATION DISTRICT,
BEFORE THE CORPS OF ENGINEERS, OCTOBER 21, 1957

My concern in the possibility of a high dam near Paradise to impound water up to elevation 2,700 arises from my administrative responsibility as a member of the Board of Commissioners of the Flathead Irrigation District, and also from the fact that I have spent 40 years actively assisting in the development of that area. Under those circumstances, one becomes attached to his chosen community and to his people as to his family.

The Flathead irrigation project, of which our district covers the major part, was begun by the Bureau of Reclamation near 50 years ago. It was designed to make use of all the available unappropriated waters which could be economically diverted to the lands of the old Indian reservation, and to encompass, as nearly as possible, all the lands in that area which were of the type of soil and topography essential for a sound irrigation project. Over that period, and up to now, the accumulated experience and the element of "trial and error" have indicated very definitely the lands which can be successfully operated under irrigation. For amateurs, unfamiliar with the hazards involved, to attempt now, in offhand manner, to designate a large area of additional land is pure foolhardiness.

The suggestion by proponents of the proposed dam that some 60,000 acres of additional land be irrigated as a result of the proposed dam is completely untenable. It seems impossible that the irrigation of those areas from Paradise Dam

or through pumping with power from that plant could have been suggested with any degree of sincerity. Certainly if studies of soils in those areas, and of the transportation of water to them, had been made by competent persons, who would have seriously considered how best to get the most from those lands for the people who operate them, if they had considered the difficulties involved in converting from one type of agriculture to another, and if they would have considered the altitude and the latitude of the areas and the limited variety of crops which can be grown, and the short season in which to grow them, then those persons would never have recommended nor even suggested those areas for irrigation to supplant the very productive areas which will be lost to the Flathead project if the dam be built. We on the Flathead know much about pumping for irrigation. We lift water 335 feet from Flathead River, but only as a supplemental supply, that is to finish out the season, and we pump with power at 1 mill per kilowatt-hour. We still find costs plenty high.

As time goes on, on a project like ours, a sort of screening process goes on which applies to the farm personnel as well as to the lands. If a farm operator does not wish to learn and bother with the rather difficult problems involved in developing a farm under irrigation, he either does not settle in our sort of area or he soon moves on. This process has gone on here for 40 years. Our project is now moving along a well-established groove. Our water supply is reasonably adequate. We have set up a sound administrative arrangement with the United States through our district contracts. It logically follows that we are apprehensive, somewhat terrified in fact, lest the monstrous thing which haunts us might become a reality.

An attempt has been made to stigmatize those of us who are actively opposing the building of this dam. It is contended that we do not like so-called public power. In contradiction of that claim, I must point out that the Flathead project, through the efforts of a few of us, was far in the forefront in rural electrification. When we were well along in our venture, there were still only very few rural lines and they were being served from nearby municipal plants. Our project now serves virtually everyone on the former reservation at rates which compare with the lowest, and we serve the farmer out on the end of the line at the same rates as his city neighbor. We had to cut from whole cloth with no patterns to cut by.

No, this is not a question of public versus private power. Our remonstrance is against the wanton devastation of that area of mountain grandeur which has been the pathway of man into and out of central western Montana since man came—the brutelike dispersal of human beings, women, and children cast aside as so much rubbish—the rending asunder of the social and economic fabric woven through years of toil and dedication—the irreparable injury which such a project would wreak upon the remainder of western Montana.

They tell us now that 71,000 acres will be flooded. Of course that is the area below the thin meander-line at elevation 2,700. To some of us who have lived in this area and know our soils and subsoils it seems certain what will happen the length of the near 400 miles of zigzag perimeter. The towering chalk hills with their solvent base, miles and miles of them, will topple their mountainous mass into the lake, and sometimes the farmer's house and barn with it. That is still happening around the older reservoirs including some of our smaller ones on our project; of course it can happen only if sometimes the reservoir will be full. It seems very reasonable to assume that the area flooded and the adjoining area which will be destroyed through seepage and obstruction of the drainage because of the pressure of the stored water will go to 80,000 acres.

The area referred to above will include near 13,000 acres of lands irrigable under the Flathead project. Those lands are of more than average production. Also, it cost more to bring water to those lands. The construction cost on account of those lands is right at \$1 million. That presents one problem which the advocates of the dam have not solved for us.

The three irrigation districts covering the Flathead irrigation project have executed repayment contracts with the United States to repay all project costs. The power system in connection with the project has greatly assisted in making that repayment. With the loss of the area cited above and the loss of our power customers who live there, the remaining project lands will have a greater per-acre cost to repay as well as a greater operation and maintenance cost per acre. The power revenues will be greatly reduced through the loss of not only the residents of the lost land, but also through the loss of business firms which serve those people. That will result in a per-acre charge or assessment against the

remaining lands to offset the loss of net power revenues. No doubt the prodam people will tell us that this additional cost will be taken care by some process or other. The fact that such assurances are rank deceit will not deter them. Nobody can tell us what Congress might do, and only Congress can do anything about any of those problems.

The proponents are loudly proclaiming the advantages which they contend will come to us up here in the hinterland. They cite the provisions of a so-called bill which their conjurers have prepared. They do not seem to realize that they are indulging in more deceit. The purported bill is nothing more than a rash of language made up in the form of a real bill. If there were a bill before the Congress we would be completely in the dark as to what it would be like upon emergence. There is no definite concept of what this proposal portends. The so-called bill was prepared with the very obvious purpose of deceiving people who are not familiar with legislative processes, and they have been so deceived. One of the ardent proponents of the dam, in declaiming upon the broad scope of the bill pointed out that it contained numerous desirable provisions which have never before appeared in a similar piece of legislation. Of course most of the audience trusted the man. They did not realize that the rosy picture was the merest dreaming, dreaming in the dark, as an enthusiast dreams, of an oasis where there could be none.

In the area which would be the most injured, there are a few people who are directing much time and effort to the promotion of favorable sentiment toward the dam. They seem to be driven by some mysterious urge which seems never to relax nor give them time to think. They seem driven by it to use every type of persuasion to move others into line with their psychopathic obsession. We must not expect sound judgment from people who permit themselves to be thus engulfed. We who have taken time to ponder the matter, know that no one can give us the slightest dependable assurance of any benefits from the proposed dam, not the Corps of Engineers—no department of Government—not Congress itself. The corps can make recommendations. The Congress can pass an act today and amend it tomorrow.

The Flathead project has under the gravity system 170,347 acres to be ultimately irrigated. Of that area, 142,096 acres are now paying assessments and receiving water. The balance are lands which require considerable leveling and other preparation to bring them under water. It is readily seen then, that we have already taken in a considerable acreage of the lower grade lands. We couldn't very well handle 60,000 acres more.

Our diversions run far into the mountain areas and bring water from as far east as Placid lake, carrying it through a fortunate pass near the south end of the Mission Range. We pick up every stream along the west foot of the Missions. Then, far to the northwest, we bring Little Bitterroot Lake and River to the Camas division of the project in the Hot Springs and Lonepine areas. We draw water from a vast area which will not leave much to contribute to filling a dam at Paradise.

We demonstrate here the utility of the small dams, in 13 reservoirs we store 149,000 acre-feet. That is their capacity. We handle right at 300,000 acre-feet through those reservoirs. There is no flood damage from the watershed which supplies our project. We have done our part. And, we have developed a real recreational area. We should not be asked to do more.

We of the Flathead project have heretofore been the object of arbitrary and autocratic and, one might say, "malicious and mischievous" action by administrative officers. (1) An administrator of the Bonneville Power Administration attempted, by sleight-of-hand tricks to virtually take over our power system and dictate its operation (hearing 33, Committee on Indian Affairs, 80th Cong. 2d sess.). Thus, about the same time the Flathead project was ordered by the then Secretary of the Interior to deliver power to Hungry Horse during construction and to do that at bare cost; although the Congress in a special act provided definitely that the power sold by our project be sold at rates which would provide net revenues. Our project has not to this date been reimbursed for the actual out-of-pocket costs which it was put to in order to deliver the power to the Hungry Horse project.

It is presumed that if Paradise Dam be built and if electrical power be generated there, the same will be under the administration of the BPA. We are fearful that downstream influences will dominate its administration. We know from experience that downstream requirements will supercede the promotional

forecasts now being so enthusiastically heralded abroad. When they want their dams wet down there, they will pull the plug at Paradise and not ask us.

Mr. LOMAN. Mr. Winton Weydemeyer.

STATEMENT OF WINTON WEYDEMEYER, REPRESENTING THE MONTANA STATE GRANGE

Mr. WEYDEMEYER. Mr. Chairman, members of the committee; my name is Winton Weydemeyer; my address is Fortine, Mont. I am appearing on behalf of the Montana State Grange, an organization of 1,500 farm and rural people of western Montana.

If we understand the provisions of S. 1226, its enactment would force construction either of the proposed Paradise Dam on the Clark Fork of the Columbia, or of Knowles Dam on the Flathead River, sites within the area designated in the bill which previously have been promoted as feasible. It is obvious that authorization of a large storage dam such as is contemplated under either of these projects would eliminate the possibility of construction of private hydroelectric dams on the Flathead River below Kerr Dam. It would appear probable that expenditure of Federal funds for the project would precede any future comparable expenditures for watershed protection or construction of headwater storage structures in the Clark Fork drainage.

The bill thus involves some definite policies of our farm organization. First, we remain neutral on private versus public power issues as such, basing our stand on proposed water development projects upon general public welfare considerations. Second, while we have taken no official stand on the Knowles Dam proposal, we have consistently opposed the construction of Paradise Dam. Third, we have repeatedly urged that in the total field of flood control and water conservation measures, a substantial portion of the emphasis placed upon large downstream dams be shifted to watershed protection and headwaters control measures.

Our opposition to S. 1226 is based primarily upon two objections:

1. The bill, should it become law, would violate sound multiple-use principles by destroying valuable land uses of the flowage area in the interest of hydroelectric power production. In this instance, it is our belief that the benefits involved in future use of the area for agricultural and timber production, wildlife habitat, homes for Indians, sites for smaller hydroelectric projects, transportation routes and townsites, greatly outweigh the benefits which would result from restricted use of the area for water shortage and power development.

2. Thus far in the Northwest, we have failed to establish a balanced program of measures needed to provide adequate conservation of our water resources and insure retarded runoff in headwater areas. Undue emphasis has been placed upon large dams and reservoirs on major streams, while through neglect of watershed areas we continue to contribute to the rapid and heavy runoff conditions which provide a major excuse for the large downstream projects. Enactment of S. 1226 would further channel Federal funds, vitally needed for headwaters protection and stream control, into a large dam dealing with the effect rather than the cause of fluctuating streamflow. It is our position that a much larger share of Federal funds available

for water conservation and flood control be devoted to basic needs for reforestation and regrassing of deteriorating watershed lands; for soil conservation practices within watershed areas; and for the establishment of headwater protection and structures designed to provide optimum water yield and controlled runoff.

For these reasons, we recommend that the committee report unfavorably on S. 1226, the enactment of which we feel would interfere with wise management of Montana's varied natural resources and delay development of a sound, balanced water conservation program. Thank you.

Senator GRUENING. Thank you very much, Mr. Weydemeyer.

Mr. LOMAN. Now I would like to call Mr. Wesley Stearns, of Plains.

STATEMENT OF WESLEY STEARNS, REPRESENTING THE WESTERN MONTANA STOCKGROWERS ASSOCIATION

Mr. STEARNS. Senator Gruening, members of the staff, my name is Wesley Stearns; I am a cattle rancher near Plains, Mont., in Sanders County. I am a member of the executive committee of the Montana Stockgrowers Association, a statewide organization of Montana cattle producers with over 4,600 active members in all counties of the State of Montana. I am also president of the Western Montana Stockgrowers Association, with cattlemen members in Sanders, Lake, Lincoln, and Flathead Counties, in the area of dams proposed by the legislation under consideration at this hearing.

The livestock industry was one of the first industries to enter the State of Montana, and from that time until the present, the livestock people of Montana have been interested in the development of our natural resources, primarily because we use two of them for our livelihood, water and grass.

This proposed bill, S. 1226, states in the first paragraph that it is being introduced for advancing the integrated, comprehensive development of the water resources of the Pacific Northwest, and for other purposes.

Nearly 25 percent of the Columbia River has its headwaters in Canada, yet very little has been accomplished to reach a comprehensive plan with the Canadian Government. Private power companies are being forced to spend thousands of dollars for the privilege of helping develop our water resources. Private citizens, reclamation districts and the States themselves are losing their water rights to the Federal Government, and the Congressmen from the various States all have their pet bills to build a Federal monumental dam in their States. We do not believe this is a comprehensive plan for the orderly development of our water resources.

Also, in the first paragraph of this bill it states that this project will assist flood control on the Flathead River. When you build a dam at the confluence of this river and back water up to the tailrace of Kerr Dam, flooding forever nearly 40,000 acres of agricultural land, we cannot agree with the authors of this bill that this is flood control on this river.

In section 8(a), referring to the phrase "including existing projects which may be benefited by the provisions of supplementary water thereto," referring to reclamation districts, when you propose to put up to 50 feet of water over a considerable portion of the Flathead rec-

lamation district and the Jocko irrigation district, which are existing districts, we cannot agree that this is supplementary water.

It is difficult to testify intelligently on section 2(a) of this bill, because it actually authorizes either the Knowles or Paradise projects upon the recommendation of the Secretary. We do not believe the Paradise project should even be considered for the following reasons: It has been dropped according to the Corps of Engineers' report to a "B" project from an economic feasibility standpoint. With an estimated cost of construction a few years ago of \$450 million, which is sure to be low, the cost-benefit ratio was 1.2 to 1. Due to the increased costs of construction at this time, it is doubtful if there is any benefit ration today. We sincerely hope that no Congressman will vote for a proposed project that has less than a 1 to 1 ratio, even if it is in his own State.

This bill is seriously lacking in protection of the interests of Montana and its people, such as State water rights, individual water rights; no provision for educating the children, or taking care of other services for a 5,000 worker force brought temporarily into a small Montana county; and the Secretary in Washington, D.C., determines the fair value of all property in the inundated area, and many others.

We have heard a lot of talk about cheap power the last few years, especially today. If this is the best method to have the Federal Government take over the natural resource water to produce cheap power for the people, then it is reasonable to assume the Federal Government should take over our natural resource timber and give the people cheap lumber; take over the mineral and oil lands and give the people cheap gasoline; take over the grass lands and give the people cheap beef. But we can assure you that if you do progress, as some people like to call it, along these lines, and finally get to raising cheap beef, we unsubsidized cowboys will still give you a run for your money.

I thank you.

(Two additional documents filed by the witness follow:)

**SENATE INTERIOR COMMITTEE,
Missoula, Mont.**

GENTLEMEN: The cattlemen of Montana have a sincere and serious interest in the development of the State's water resources. The Montana Stockgrowers Association, a 75-year-old organization with a present membership of in excess of 4,600 active cattle producers, has expressed itself in convention resolution in the following manner:

At Butte, Mont., on May 25, 1957—

"RESOLUTION No. 14—MULTIPLE-PURPOSE DAM

"Whereas Federal Government organizations and public power interests contemplate the construction of 'so-called' multiple-purpose dams in Montana; and

"Where many farms, ranches, towns, utilities, and natural resources would be inundated and permanently lost to the economy and tax rolls of our State; and

"Whereas in most instances such dams would be of down stream benefit only, and a loss to our State: Now, therefore, be it

Resolved, that we oppose construction of such dams until the adoption of a well-planned system for developing all our resources with Montana and her people the first consideration."

And at Miles City, Mont., on May 22, 1959—

"RESOLUTION No. 9—WATER RESOURCES

"Whereas legislation has been introduced in the Congress that would authorize a monumental dam at either Knowles or Paradise, Mont., on the Clark's Fork River in western Montana; and

"Whereas this legislation is contrary to the water resources policy of this association: Now, therefore, be it

Resolved, That this association be on record as opposing this and similar legislation until the present active natural resources study committee submits their report, due in 1961."

Your consideration of these expressions in connection with the legislation now in your committee, and their inclusion in the record, will be appreciated.

THE MONTANA STOCKGROWERS ASSOCIATION,
By RALPH MIRACLE, *Secretary*.

STATEMENT OF THE WESTERN MONTANA STOCKMEN'S ASSOCIATION

The members of the Western Montana Stockmen's Association, having members in Lake, Lincoln, Flathead, and Sanders Counties in Montana have opposed the building of a Federal dam at either Knowles or Paradise for the past 10 years, even more so today.

These people live near or in the proposed inundated area. We probably realize more than most people the adverse effect this project would have not only to us, but all of Montana.

We have heard the same story many times, progress, attract industry, recreation, and others, none of these having any facts to support these claims. The facts are to the contrary, check any Federal dam built on the Columbia River system, and there is no industry moved close to these dams, except the aluminum plant near Columbia Falls. In regards to recreation, the Park Service, another Government agency, has stated there would be wonderful recreational benefits on the lake created by this project, yet 2 years prior testified that similar lake above Glacier View or Smokey Range would ruin Glacier National Park. Not much fact there.

In section 8(a) this bill proposes to furnish supplementary water for existing reclamation projects, of which there are two. This is not a fact. The fact is that this bill proposes to flood a large portion of both existing projects with up to 60 feet of water during the entire growing season. We know of no crop that will stand that much water for that length of time.

There are many parts of this bill that are inadequate to protect the people of Montana. All through the bill it mentions the downstream benefits, but nowhere can we find where Montana is being compensated for them.

Being our membership is opposed to any proposal to build a Federal dam in this particular reach of this river, we will not take time here to further argue certain parts of it.

We are not a group of people that object to these things unless we have something better to offer. Our members in convention have approved a proposal to build small head-water dams on many of our tributary streams, thus storing water for recreation, flood control, upstream storage, and irrigation for the people of Montana as well as downstream States.

We are just average American citizens, but we do realize today, that it will be a sad day in these United States, when the Federal Government gets full control of our water resources, and the electric energy produced from it.

WESLEY W. STEARNS, *President*.

Mr. LOMAN. I would like to call Mr. Jack Corette, of the Montana Power Co., in Butte.

STATEMENT OF J. E. CORETTE, PRESIDENT, MONTANA POWER CO.

Mr. CORETTE. Senator Gruening, Senator Martin, ladies and gentlemen, because of the time involved, I have handed to the counsel for the committee a rather lengthy statement, but I will make a verbal statement, which will be very much briefer, and which will cover only a small part of the statement which has been handed to the committee. However, I now ask that the entire statement be incorporated as part of the record, Mr. Chairman.

Senator GRUENING. It will be inserted following your oral presentation.

Mr. CORETTE. My name is Jack Corette; I am president and general manager of the Montana Power Co., with headquarters in Butte. I am here opposing Senate bill 1226.

We are opposed to Senate bill 1226 for the following reasons:

First, after long and careful study, we are convinced that neither Knowles nor Paradise is in the best interest of the United States or the State of Montana.

Second, we are completely satisfied that neither of these projects is required for any flood control purpose.

Third, we are convinced that either Knowles or Paradise results in an enormous loss to the United States each year and that this loss must be borne by the taxpayers, and, fourth, we feel strongly that S. 1226 does not adequately safeguard Montana and its interests.

I would like to very briefly give you the background of the territory served by our company and the power supply situation in the State of Montana. We serve approximately 70 percent of the State of Montana and about 500,000 people. We have been in this business since the very earliest days of power operation. We have in Montana for the year 1960, assuming the return to prestrike conditions of all the industrial activities in Montana, about 120,000 kilowatts of surplus power. Now, that is assuming the return of all industrial activities. However, immediately preceding the strike, there was 40,000 kilowatts of industrial zinc load which was not on the line. But assuming that that goes back on the line, we still have a surplus of 83,000 kilowatts in this coming year.

It has been the policy of our company at all times to have surplus power. We have had it and we sell the surplus into Oregon, Washington, and Utah.

Now, looking to the future, our company has acquired in eastern Montana a coal reserve of 62 million tons of low cost coal which we have bought for the production of coal for steampower. In addition, we have a dozen hydroelectric plants in Montana, and this combination of low cost coal and the ability to install additional units at our hydroelectric plants for peaking purposes will give us for the indefinite future one of the lowest cost power supplies in the Nation. And we will see to it that at no time will there be a shortage of power in Montana, because we will build the plants in advance of load, as we have through the years, to supply the entire requirements.

Now, if I might turn first to the flood control features of Paradise Dam or the Knowles Dam. We believe that there is absolutely no justification from a standpoint of flood control for these projects, and our reasons are these:

The Engineers' report states that about 18 million acre-feet of usable flood control storage is required to control the largest flood of record to 800,000 cubic feet per second at The Dalles, and that 10,500,000 acre-feet of this storage already has been built or is under construction.

The Mica Creek and Arrow Lakes storage projects in Canada are low-cost projects, compared with Knowles or Paradise, and they certainly will be built when an agreement is reached between Canada and the United States. On December 4 of this year, the Honorable

Howard Green, External Affairs Minister of Canada, announced that the International Joint Commission's report on Columbia River Development should be made within the next few weeks and construction on the Columbia River projects should start next year. Mica Creek and Arrow Lake are the two primary projects in the Canadian program.

The Army Engineers' report shows that if Mica Creek and Arrow Lakes are installed, 8,834,000 acre-feet of additional storage would be achieved. This is more than enough to reach the objective of 800,000 cubic feet per second control at The Dalles.

When you consider that non-Federal sponsors are prepared to go ahead with the High Mountain Sheep project in Idaho, with 1,550,000 acre-feet of storage, and Wanapum project in Washington, with 330,000 acre-feet of storage, it means that the Columbia River Basin, by adding these four projects, could achieve 21,254,000 acre-feet of usable flood control storage, or 18 percent more than is required to control the greatest flood of record.

In view of this situation, there is absolutely no justification for flooding 45,500 acres of good Montana land by Knowles, or 56,800 acres of good Montana land by Paradise, with the enormous dislocation these projects would create.

The fact is that Knowles or Paradise would serve no useful flood control purpose because Mica Creek and Arrow Lakes will be built in any event. This lack of any need for flood control in the United States must have been recognized when it was decided to reduce the flood control storage at Priest Rapids and John Day by 3,100,000 acre-feet.

The obvious conclusion is that the basic flood control plan will be accomplished and that flood control cannot be used as a justification for Knowles or Paradise.

Now, our company favors the building in the area that would be flooded by either Knowles or Paradise of Buffalo Rapids No. 2 and No. 4 projects. We are prepared to apply to the Federal Power Commission for a license on those projects if and when the controversy about Paradise or Knowles is out of the picture and it appears feasible and possible for us to obtain a license on those projects. Those two projects at present tax rates would add to the tax base of Lake and Sanders Counties \$620,000 per year.

I would like now to go to the power benefits of this project. The Army Engineers' report credits Knowles with power benefits of \$19,692,000 and Paradise with power benefits of \$27 million, but these benefits are based on alternate steampower costs of 7.8 mills per kilowatt-hour for Knowles and 5.97 mills for Paradise, and they are not based on what the Government would receive for the power.

The fact is that power from Knowles or Paradise would be sold by Bonneville Power Administration at its regular rate, which was 2.4 mills per kilowatt hour in fiscal 1958.

In addition, the report uses an interest rate of 2½ percent, while, at the present time, the interest rate on long-term Federal money would exceed 5 percent.

The report recognizes that rental would have to be paid to the Flat-head Indians for flooding out powersites owned by the tribe, and it recognizes that these rentals would be on substantially the same basis

as our company pays the Flathead Indians for the Kerr project immediately upstream from Paradise and Knowles. The Kerr rental is \$1.46 per kilowatt, based on payments of \$175,000 a year for 120,000 kilowatts.

Now, I have prepared two charts which show the annual losses which the taxpayers would have to bear if either Knowles or Paradise were built and if costs and benefits were adjusted to reflect only the three following items: First, present-day 5-percent interest cost; second, power benefits based on the Bonneville rate, which is what the Government will receive for the power; and third, the Indian rentals to be paid to the Government.

The first chart shows that annual costs at Knowles would be \$14,806,000, while benefits would be only \$6,593,000, leaving a loss of \$8,213,000, which the taxpayers would have to make up.

The second chart, which relates to Paradise, shows annual costs of \$30,867,500, compared with annual benefits of \$11,516,000, or an annual loss to the taxpayers of \$19,351,500.

Now, I call to your attention that I have included under annual benefits flood control and recreation, even though they do not produce any revenue, and I believe it is recognized by all that those are non-reimbursable benefits which are borne by the taxpayers, so actually the loss borne by the taxpayers would be in excess of these figures shown at the bottom of these charts.

Now, it is particularly interesting that if you multiply the annual loss at Paradise by 50 years, you have a loss to the American taxpayers over the life of the project of almost \$1 billion.

Now, for many years I have been a director of the Federal Reserve bank for this district, and in that capacity I have great concern about inflation and about the Federal budget, and I think that to build a project knowing that it would suffer an annual loss of \$20 million is almost inconceivable.

I would like to say this: Senator Murray has been most courteous to me throughout all of my life. He has known me since boyhood. We have disagreed, as you can well imagine, on many things, but we have exchanged many ideas. I had not studied this adequately to prepare these charts until a day or two ago or I would have presented them to Senator Murray in advance, because I feel certain that Senator Murray has never realized that the power benefits for Knowles were at almost 8 mills per kilowatt-hour in spite of the fact that the power would be sold for 2.4 mills per kilowatt-hour, and that he has never realized that these enormous losses would result from this project.

Now, if I might address myself to whether Federal power will attract industry. Federal power advocates have claimed that projects such as Knowles and Paradise will attract new industry to the State. That this claim cannot be demonstrated is evidenced by the experience on Fort Peck and Canyon Ferry, which have been mentioned to you.

Today, in the Ohio Valley, steampower can be generated for approximately 2.26 mills per kilowatt-hour. Last month Norman Krey, representing the Pacific Northwest aluminum industry, spoke to the Bonneville customers meeting and told them that aluminum plants in this region now require a differential of 2 mills per kilowatt-hour to offset other factors that favor the Ohio Valley plants. With power being available in the Ohio Valley between 2 and 3 mills, you can see

how it would be impossible in the future to attract new aluminum plants to this area.

Now, in summary, we strongly urge that this committee recommend against the passage of this bill for the following reasons:

First, repeated hearings over the past dozen years have demonstrated that the people of Montana do not want Knowles or Paradise. Montana is assured of adequate power at reasonable rates and does not need this power. Our residential rates throughout Montana are lower than the national average in spite of the fact that the population is only one family per square mile on our land and our industrial rates are among the lowest in the entire United States for tax-paying companies.

These projects are not necessary to and make no contribution to the basic flood control plan of the Columbia Basin because Mica Creek and Arrow Lakes will be built and provide all the additional storage needed. And, last, the loss to the taxpayers of the Nation is enormous from these projects when realistic interest costs, Indian rentals, and actual BPA power revenues are used, so that on the basis of power, these projects are completely unjustified.

I thank you very much for allowing me to present this statement.

Senator GRUENING. Thank you, Mr. Corette.

Mr. CORETTE. Could I make this one remark?

Senator GRUENING. Yes.

Mr. CORETTE. I would like to show for the record that the Glasgow Airbase is served by the Montana Power Co. under a very long-term contract, that the Air Force looks entirely to the Montana Power Co. to supply the power throughout the period that that base exists, and that we cannot throughout that period buy the power from Fort Peck because of the preference clause, and we have been told that the small amount of power we do get from Fort Peck will not be available for more than a few years.

As to the Great Falls Airbase, the same situation exists. We have supplied it from the beginning and have a long-term contract to supply it.

As to the REA's in western Montana, there is no possibility of their having any real interest in this project because they are preference customers, and the Hungry Horse allocation to Montana is 15 times the annual use of the REA's, so that for generations ahead there is Federal power available for the REA's of western Montana.

Senator GRUENING. Thank you.

Mr. CORETTE. Thank you, sir.

(The statement referred to follows:)

STATEMENT OF J. E. CORETTE, PRESIDENT AND GENERAL MANAGER, THE MONTANA POWER CO.

I am J. E. Corette, president and general manager of the Montana Power Co., and I am appearing for that company. We oppose S. 1228 for the following reasons:

(1) After long and careful study, we are convinced that neither Knowles Dam nor Paradise Dam is in the best interest of the United States of America or of the State of Montana.

(2) We are completely satisfied that Knowles or Paradise Dams are not required for any flood control purposes.

(3) We are completely satisfied that either Knowles or Paradise results in an enormous annual loss to the United States which must be borne by the taxpayers.

(4) In addition, we feel strongly that S. 1226 does not adequately safeguard Montana and its interests.

So that you may understand the basis for our interest in this bill and in its effect on Montana and its future, I would like to give you some facts about our company.

Montana Power Co.'s interest

The Montana Power Co. is an electric and gas utility operating almost entirely in Montana. Our service area covers approximately 90,000 square miles. It extends from the main line of the Great Northern Railway across northern Montana on the north to the State's southern border, and from the Montana-Idaho boundary on the west to Glasgow and Colstrip in eastern Montana. We supply electricity to more than 500,000 people, or 73 percent of the population of Montana. In addition, more than 200,000 people depend on us for natural gas service. Obviously we are vitally interested in anything that affects Montana and its economy, and because we are thoroughly convinced that Knowles or Paradise are detrimental to Montana and the Nation, we appear in opposition to S. 1226.

I can think of no better way to test the impact of Knowles on Montana, and to demonstrate that the advantages from the construction of Knowles actually accrue to downstream States, than to take up, one at a time, the factors considered by the Corps of Engineers, as set forth in the 308 review report and approved in substance by the Army's Board of Engineers for Rivers and Harbors.

The principal factors are—

- (1) Navigation.
- (2) Irrigation.
- (3) Flood control.
- (4) Recreation and fish and wildlife.
- (5) Power.

Navigation benefits nonexistent

So far as navigation is concerned, the division engineer reports as to Knowles, "Navigation benefits from the project would be incidental, accruing principally through local use of the reservoir for lumbering and for recreation, and have not been evaluated" (vol. I, p. 180). Clearly, there are no real navigation benefits.

Project does not enhance irrigation

On the subject of irrigation, also on page 180, the report states: "Replacements for irrigated lands flooded by the reservoir are available in Camas Prairie, Little Bitterroot, and Plains areas. However, the cost of development of replacement areas and the overall extent of irrigation which might be feasible with Knowles project in operation have not been determined. A study of potential irrigation should be undertaken by the appropriate Federal agency if the project is authorized for construction."

John Haw, as a result of 35 years of service as an agricultural development agent for the Northern Pacific, probably knows more about this question than any other person. Mr. Haw testified as follows at the hearing held by the Board of Engineers for Rivers and Harbors held here at Missoula on March 9 of this year:

"The Flathead irrigation project has been one of the happy spots in western Montana and you have been advised as to what it would mean to lose some 15,000 to 17,000 acres of irrigated land out of that beautiful valley. There has been something said in the report about compensating in lieu of irrigated land elsewhere. But in my 35 years of experience as an agricultural development agent for the Northern Pacific Railroad—and I have traveled every foot of this country—I am here to testify there are no suitable irrigated areas in this western Montana territory at the present time that can be reached by an economical pump lift and where the soils are satisfactory for irrigation development. The Bureau of Reclamation has combed this country backward and forward trying to locate an area upon which they could pump water and that would be fertile and productive, but without success. In the few areas where it would be sketchily possible, the landowners are unwilling to subject themselves to the payments for operation and maintenance, as well as construction costs" (record of hearing, p. 27).

Furthermore, if there were additional irrigable land in this area, why should thousands of acres of presently irrigable land be flooded out? Certainly it

would be better for Montana to retain this acreage and develop such additional lands as the need arose.

Finally, the loss of this fine bottom acreage which would be flooded would render virtually useless upland grazing lands which furnish summer range to supplement feed grown on the river bottom.

Flood control benefits downstream States

Turning to flood control, the division engineers' report states, in volume I, page 179:

"If Knowles were operated in the basic system for control of major Columbia River floods to a flow of 800,000 cubic feet per second at The Dalles, flood control benefits along the lower Columbia River amounting to \$2,860,000 would be creditable to the project as compared to benefits of \$131,000 per year along the Clark Fork near Plains and near Pend Oreille Lake and along the Pend Oreille River to Canada, and if Knowles were constructed after the basic flood control objective was obtained, the benefits downstream would be reduced to \$316,000, with the \$131,000 remaining the same."

The obvious conclusion is that there are no appreciable flood control benefits if Knowles or Paradise are constructed after the basic flood control objective is obtained.

The 308 review report states that about 18 million acre-feet of usable flood control storage is required in the Columbia Basin to control the largest flood of record to 800,000 c.f.s. at The Dalles, and that 10,500,000 acre-feet of this requirement already has been constructed or is under construction.

Mica and Arrow Lakes supply needed flood control

The Mica Creek and Arrow Lakes storage projects in Canada are low-cost projects compared to Knowles and Paradise. They will certainly be built when an agreement is reached between Canada and the United States. On December 4, 1959, the Honorable Howard Green, External Affairs Minister of Canada, announced in Victoria, B.C., that the International Joint Commission's report on Columbia River development should be made within the next few weeks and construction on the Columbia River project should start next year (Edmonton Journal, Dec. 5).

Mica Creek and Arrow Lakes storage projects involve no railroad, powerline, or important highway relocation and practically no dislocation of people.

The Army Engineers' report shows that if Mica Creek and Arrow Lakes storage projects were installed in Canada, 8,834,000 acre-feet of additional storage would be achieved. This is more than enough to reach the objective of 800,000 c.f.s. control at The Dalles. When you consider that non-Federal sponsors are prepared to construct High Mountain Sheep in Idaho, with 1,550,000 acre-feet of storage, and Wanapum in Washington, with 330,000 acre-feet, it means that the Columbia River Basin could, by adding these four projects to storage already assured, achieve 21,254,000 acre-feet of usable flood control storage which is 18 percent more than required to control the greatest flood of record.

In view of this situation, there is absolutely no justification for flooding 45,500 acres of good Montana land by Knowles or 56,800 acres of good Montana land by Paradise, dislocating thousands of Montana people and major Montana railroads and highways under the guise of downstream flood control. The fact is that if Knowles or Paradise were built, they would serve no useful flood-control purpose because Mica Creek and Arrow Lakes will be built in any event. This lack of any need for flood control must have been recognized when it was decided to reduce the flood-control storage at Priest Rapids and John Day by a total of 3,100,000 acre-feet (report, vol. 1, p. 26).

The obvious conclusion is that the basic flood-control plan will be accomplished and that flood control cannot be used as a justification for Knowles or Paradise.

Recreation and fish and wildlife

With reference to recreation, the report states on page 177 in volume I:

"The National Park Service considers that the reservoir would provide favorable camping and picnicking sites and opportunities for swimming, fishing, and boating. Annual recreational use of the area is estimated to increase from the present 23,500 man-days to 60,000 man-days."

On the same page the division engineer reports:

"The U.S. Fish and Wildlife Service and the Montana State Department of Fish and Game consider that the project reservoir would flood stream habitat and spawning areas of resident game fish and encourage increase of rough

fish species. There would be a loss of rangeland for big game species, decreased habitat for upland game and fur bearers, and flooding of island and shore areas utilized for Canadian geese nesting purposes. As previously indicated, the reservoir also would inundate the headquarters of the National Bison Range and a portion of the bison rangelands."

The benefits suggested in the first quotation are more than offset by the detriments pointed out in the second. Moreover, recreation benefits would be greatly diminished if the flows of the late 1930's should recur.

Using actual flows for 1937, 1938, and 1939, and assuming that Hungry Horse, Kerr, and Knowles were all fully drawn down at the end of March 1937, that Kerr was filled each year, that Hungry Horse was refilled as soon as possible, and that all available water was stored at Knowles above the amount required for average generation, Knowles would not fill until the end of 1939. Mudflats are not conducive to recreation uses.

Power is real purpose of project

This leaves for consideration only the power issue, which is, of course, the only possible justification for either Knowles or Paradise.

Montana is, and always has been, a surplus power State. For 1960, our company has approximately 83,000 kilowatts of surplus power. The Montana Power Co. is an active participant in the Northwest Power Pool. Over the years it has sold large quantities of power to other companies in Wyoming, Utah, and Washington on a temporary basis and always on the basis that permits us to withdraw the power when it is needed for Montana customers. There never has been a brownout in Montana, nor has any industry considering locating here been unable to secure an adequate supply of electricity. Our fundamental policy has always been that all power developed or purchased by Montana Power is dedicated to Montana people and to Montana business needs, and that we have a continuing obligation to make certain that we can meet the demands of a growing State and of an expanding industry.

In furtherance of that policy, we completed the 60,000-kilowatt Cochrane plant on the Missouri River near Great Falls in 1958. That same year we filed with the Federal Power Commission an application for a license authorizing the redevelopment of the Thompson Falls plant in the Clark Fork with a resultant increase in the installed capacity from the present 30,000 kilowatts to 65,000 kilowatts.

Construction of Buffalo Rapids favored

If and when it is determined that neither Knowles nor Paradise will be constructed, we are prepared to seek a Federal Power Commission license for dams at Buffalo Rapids No. 2 and Buffalo Rapids No. 4 sites. Either Knowles or Paradise would flood out both of these powersites.

It is of interest that, while Knowles or Paradise would remove property from the tax rolls, the construction of Buffalo Rapids Nos. 2 and 4 by the Montana Power Co. would provide additional tax revenues for Lake and Sanders Counties of \$620,676 annually. This is practically the same amount of taxes paid by the aluminum plant in Flathead County which has been cited as an example of Federal power development influence.

Other power developments

Pacific Northwest Power Co., which is owned by Montana Power and three other northwest electric utilities, is actively prosecuting an application for a plant at High Mountain Sheep on the Snake River with 1,330,000 kilowatts of power.

Realizing that the time is not far off when baseload will be carried by steam generating plants, we have acquired the Northern Pacific coal properties near Colstrip, Mont. There is a virtually unlimited supply of good quality coal, assuring economical fuel costs for steam generation.

On the nuclear front, Montana Power is one of more than 50 electric utility companies participating in High Temperature Reactor Development Associates, Inc. This enterprise will contribute to the research and development costs in connection with Philadelphia Electric Co.'s proposal to build and operate a 40,000-kilowatt, gas-cooled, graphite-moderated reactor. In exchange, Montana Power will have access to all of the information and data, and our operating personnel will have an opportunity to become familiar with nuclear power.

These are the major items in our program to keep ahead of the demands for electricity. Also incorporated in the program will be the installation of additional units at existing hydroelectric plants as need arises.

We cannot tell where market requirements and technological developments will lead, but our program is sufficiently flexible to assure Montana an adequate supply of power.

Power benefits unrealistic

The proponents of Knowles and Paradise use cheap power as an argument. The report uses power as creating \$27 million of the \$31,129,000 total benefits for Paradise and \$19,692,000 of the total benefits of \$22,741,000 for Knowles (report: Paradise, p. 189; Knowles, p. 180).

The report derives these dollar benefits by using the total Knowles at-site and downstream generation of 2,523 million kilowatt-hours and applying an alternate steampower cost of 7.8 mills per kilowatt-hour (report: vol. 1, p. 179).

For Paradise, the report takes the Paradise at-site and downstream generation of 4,521 million kilowatt-hours and multiplies it by an alternate steam-power cost of 5.97 mills.

The fact is that this power will be sold by Bonneville Power Administration at its regular rate which, according to its report, was 2.413 mills per kilowatt-hour in fiscal 1958.

In addition, the report uses an interest rate of 2½ percent and at the present time the interest rate on long-term Federal money would exceed 5 percent.

The report recognizes that a rental would have to be paid to the Flathead Indians for the flooding of the Buffalo Rapids sites but does not include a dollar figure for this rental. The report does recognize that the rentals would be on substantially the same basis as the Montana Power Co. pays the Flathead Indians for the Kerr project immediately upstream from Paradise and Knowles. The Kerr rental is \$1.46 per kilowatt, which is based on \$175,000 per year on 120,000 kilowatts.

If you adjust the table set forth in the report for Knowles and Paradise to reflect the following three items—(1) present-day interest cost of 5 percent, (2) power benefits based on Bonneville rate, and (3) Indian rentals—you get for Knowles and Paradise the following results and the following annual losses which must be borne by the taxpayers of the Nation:

Knowles

Annual costs:

Interest at 5 percent.....	\$9, 183, 000
Amortization.....	4, 524, 000
Replacement.....	163, 000
Operation and maintenance.....	535, 000
Indian rentals at \$1.46 per kilowatt.....	374, 000
Recreation cost.....	27, 000
Total costs.....	<u>14, 806, 000</u>

Annual benefits:

Local flood control.....	181, 000
System flood control.....	316, 000
Power at BPA rate.....	6, 088, 000
Recreation.....	58, 000
Total benefits.....	<u>6, 593, 000</u>
Annual loss.....	<u>8, 218, 000</u>

*Paradise***Annual costs:**

Interest at 5 percent.....	\$19,264,000
Amortization.....	9,895,000
Replacement.....	242,000
Operation and maintenance.....	802,000
Indian rentals at \$1.46 per kilowatt.....	630,700
Recreation cost.....	14,000
Economic costs, forests.....	19,800
Total costs.....	30,867,500

Annual benefits:

Local flood control.....	160,000
System flood control.....	419,000
Power at BPA rate.....	10,909,000
Recreation.....	28,000
Total benefits.....	11,516,000

Annual loss.....	19,351,500
-------------------------	-------------------

It is interesting to note that if you use the Army Engineers' 50-year life and multiply the Paradise annual loss by 50, you have a loss to the American taxpayer over the life of this project of almost \$1 billion.

Montana public agencies will not benefit

The western Montana REA cooperatives do not benefit because there already is more than enough power available from Hungry Horse project to take care of their requirements throughout the foreseeable future. Energy sales from Hungry Horse in fiscal 1958 were more than 15 times the total requirements of the western Montana REA's. When the time comes that these REA's are using all of the Hungry Horse energy now allocated to them, they can withdraw power from other BPA customers in Montana due to their status as preference customers entitled to first call on all federally produced power.

Paradise would cause serious dislocation

Turning now to the detriment to Montana from Paradise, compared with Knowles, Paradise would flood 56,800 acres (p. 184) compared with 45,500 acres which would be flooded by Knowles (p. 175). This would seriously aggravate an already highly undesirable situation and would disrupt the economy of two fertile valleys instead of one. Paradise would dislocate an estimated total of 2,412 people (p. 184), compared with 1,284 for Knowles (p. 176).

Paradise, according to testimony by officials of the Northern Pacific Railway, would create an even more serious problem in relocating its lines and in conducting its operations than would Knowles, and anything that affects freight and passenger service would have a very serious effect on the economy of northwestern Montana.

According to the report, Paradise would remove from the tax rolls of the affected counties 1,058 buildings (p. 185) while Knowles would remove only 527 (p. 176); the tax loss to Lake and Sanders Counties is estimated to be the same in each case; the tax loss to Mineral County by the construction of Paradise is estimated to be \$46,000 (p. 185).

On all counts, Paradise is much more detrimental to Montana and to its economy than Knowles.

At-site power reservation does not protect Montana

As I stated at the beginning, we feel strongly that S. 1226 does not adequately safeguard Montana and its interests.

Section 3(a) provides that the full amount of at-site firm power production attributable to the project, or such portion thereof which is required from time to time to meet loads under contract made within this reservation, shall be made available for use within the State of Montana.

In addition to the at-site firm power, there should be allocated to Montana not less than one-half of the power generated downstream from releases by the project.

In negotiations with the Canadian Government, our representatives on the International Joint Commission have recognized the principle that the government furnishing upstream storage is entitled to a substantial share of the energy produced downstream from that storage. The reservation of at-site power for use in Montana does not adequately protect the interests of Montana.

Tax provisions are inadequate

Section 10, which deals with financial assistance to local governments which may lose tax revenues, leaves much to be desired. Payments equal to the average tax received from lands and properties acquired during the 5 years preceding the removal of that property from the tax rolls is not an appropriate measure of the taxes which will be lost once the property is taken. Moreover, the provision that such payments shall continue until the value of the taxable property in a county equals 125 percent of the taxable value at the time of acquisition is inadequate.

At the present time, Montana lands are being classified and reappraised for tax purposes and it is probable that, without any additional taxable property, the value of taxable property in a county will, as a result of such revaluation, exceed 125 percent of the present taxable value.

The provisions of section 10 commencing in line 22 on page 15, to the effect that the payments for tax revenues lost shall be reduced by the amount of taxes paid on any properties which have been relocated or replaced at the expense of the Federal Government and by the amount of any reduction in the cost of local governmental services resulting from construction, is so ambiguous as to raise serious questions as to its intent and effect. Furthermore, local governmental units would not be compensated for loss in bonding capacity resulting from the removal of property from the tax rolls.

Finally, section 10 fails to take into account the loss of taxes which Lake and Sanders Counties would collect if the Buffalo Rapids Dams were built by private entities.

Federal power alone will not attract industry

Proponents of these dams paint rosy pictures of the new industries which will be attracted to Montana if the dams are built. Experience in Montana is to the contrary. No new industry has come to the State as a result of the construction of Fort Peck. The same is true of Canyon Ferry. The Anaconda Aluminum plant at Columbia Falls uses Federal power, but, with the development of giant steam-generating units in the Ohio Valley, new plants like the one at Columbia Falls no longer locate in the Northwest.

In this regard, Norman Krey, representing the aluminum companies of the Pacific Northwest, stated in an address before the BPA customer meeting at Spokane, November 19, 1959, that it is more economical to build aluminum smelters in the Ohio Valley than in the Northwest. He added that Pacific Northwest aluminum plants now require a differential of about 2 mills per kilowatt-hour in their power costs to offset other factors that favor Ohio Valley plants. This means that aluminum plants must have power costs of from 1½ to 2¼ mills per kilowatt-hour to offset advantages of locating in the Ohio Valley.

Electrical World magazine, on October 5, 1959, stated that modern, efficient steam-electric generating stations such as operate in the Ohio Valley now have power costs as low as 2.26 mills per kilowatt-hour. This certainly would indicate that Federal power alone—or projects such as Knowles—cannot attract new industry to this area.

Summary and conclusions

To summarize, we strongly urge that the committee recommend against the passage of S. 1226 for the following reasons:

First: Repeated hearings over the past dozen years have demonstrated that the people of Montana do not want these projects;

Second: The dislocations and losses and adverse effect on the economy of western Montana are so great that these projects should never be built;

Third: The projects are not necessary to, and would make no contribution to, the basic flood-control plan for the Columbia Basin;

Fourth: The alleged recreation, navigation and irrigation benefits are non-existent and of absolutely no importance;

Fifth: When realistic interest costs, Indian rentals and actual BPA power revenues are used, the resulting loss to the taxpayers of the Nation is enormous and completely unjustified;

Sixth: Montana is assured of adequate power at reasonable rates and has no need for the power from Knowles or Paradise.

Mr. LOMAN. Call Mr. George Deihl.

STATEMENT OF GEORGE DEIHL, REPRESENTING THE MONTANA FARM BUREAU

Mr. DEIHL. My name is George Deihl. Mr. Chairman and members of the committee, I am happy to appear before you today to present the stand of the Montana Farm Bureau Federation for your consideration before authorization of the building of dams on the Flathead or Clarks Fork River.

As a member of the Montana Farm Bureau, I represent to your group the action taken by the voting delegates of the member county organizations from throughout the State in regard to the construction of the dam on the Flathead or Clarks Fork River. Farm Bureau is opposed to the construction of a dam at the Paradise or Knowles Dam sites. This action was taken at the 40th annual meeting of the Montana Farm Bureau members held at Livingston, November 18, 19, and 20, 1959.

In addition to the specific opposition to the construction of a dam in this general area as would be authorized under Senate bill 1226, Farm Bureau reaffirmed their belief regarding government in these words:

The most dangerous form of monopoly is big government, benevolent or otherwise. Other forms of monopoly may be restrained by the Government, but if big government develops to the point that it may perpetuate itself in office by support of those to whom it grants benefits, favors, and vested interests, then freedom and liberty are lost.

We believe that in the development of this area by the Federal Government in building a multipurpose dam this would further allow the Federal Government to encroach upon our competitive free enterprise system by denying private enterprise the opportunity to use this area for further development to serve the people in Montana and surrounding areas prior to allocating power production downstream through the Bonneville power system.

In reviewing this bill we find that provisions are made in it for replacement in a 5-year period of tax revenues lost to local government by construction of the project. Farm Bureau members have stated they believe State or Federal Governments should reimburse counties and State for loss of revenue through taxation when such projects as this are developed. In view of this stand, we do not believe that replacement of tax revenue for only 5 years would in any manner compensate the local governments for the loss of revenue by such a project.

The 40th annual meeting of Farm Bureau members adopted the following policy in regard to water rights in Montana, as follows:

We recommend present water rights be respected and future rights of water, both underground and surface, for water originating in Montana, be preserved for Montana and future generations prior to any waters released to interests at lower elevations.

In the past the Montana Farm Bureau has opposed the development of the Columbia River Development Corporation, an operation similar to the Tennessee Valley Authority, in favor of private enterprise developing the general area where possible.

In closing, we believe that the citizens of Montana and the United States can best be served by the Federal Government withdrawing from their proposed plan to build a dam in this general area.

I thank you for the opportunity of appearing here on behalf of the farm and ranch families throughout Montana and the United States who belong to Farm Bureau. Thank you.

Senator GRUENING. Thank you, Mr. Deihl.

Mr. LOMAN. I would like to call Mr. Ralph Maxwell.

STATEMENT OF RALPH MAXWELL, REPRESENTING THE BOARD OF COMMISSIONERS, LAKE COUNTY, MONT.

Mr. MAXWELL. Honorable chairman and Senator, it is with regret that we are limited to so little time that I will have to forego the greater portion of our statement. It is to the Senate Interior Committee from the Board of Commissioners of Lake County, Mont., who are unanimous in this statement.

(The witness read in part from the prepared statement referred to, which follows:)

PREPARED STATEMENT OF RALPH MAXWELL

It is becoming ever increasingly apparent that this board must exercise eternal vigilance in protecting the interests of Lake County and its inhabitants. We quote the following from our statement made at the hearing conducted by the Corps of Army Engineers in Missoula, Mont., on Monday, March 9, 1959:

"The Board of County Commissioners of Lake County, Mont., has during the past dozen years consistently protested the building of Paradise Dam and now protests the building of the alternative, Knowles Dam, even though the personnel and political complexion of this board has changed several times during that period of time.

"As long ago as May 26, 1948, at a hearing held in Hot Springs, Mont., this board submitted a resolution opposing the construction of Paradise Dam.

"Again and on December 5, 1956, this board addressed a letter of objection re Paradise Dam to Brig. Gen. Louis H. Foote, Division Engineer, Corps of Engineers, at Portland, Oreg.

"And again and on October 8, 1957, this board addressed another letter to Brigadier General Foote, specifying its objections to the construction of Paradise Dam in response to a notice of public hearing dated September 28, 1957.

"And again and on April 25, 1958, this board addressed another letter of protest to the District Engineer, U.S. Army, Corps of Engineers, regarding the construction of Knowles Dam in response to your bulletin of March 31, 1958.

"Likewise, oral testimony on behalf of this board in protest against Paradise Dam was adduced at the hearing held in Missoula, Mont., on October 21, 1957, when the construction of that dam was again under consideration.

"This testimony, resolution, and letters are all matters of record in your files or at least ought to be.

"The grounds and reasons for the protests against the construction of Paradise Dam apply equally as well against the construction of Knowles Dam as far as Lake County is concerned, since the pool levels (2,700 feet) of both dams are identical and the destruction of Lake County property and the serious adverse impact on the Lake County tax base would be the same."

In their recent report on the Knowles project, the Army Engineers describe the project reservoir with these words:

"The project reservoir would have a full pool capacity of 5 million acre-feet at elevation 2,700. Normal minimum operating pool would be at elevation 2,620 with a dead storage capacity of 1,920,000 acre-feet. Usable storage for

flood control and power would be 3,080,000 acre-feet with a drawdown of 80 feet. The gross head for power would be 230 feet between a full pool elevation of 2,700 and a tailwater elevation of 2,470.

"The reservoir area at full pool would be 51,554 acres, including 6,040 acres within the present river meander lines. In addition, 7,760 acres above full pool are required for shore protection and miscellaneous project lands exclusive of lands required for relocations and for fish and wildlife purposes. Lands required for relocations are included as a relocation cost, and lands required for fish and wildlife purposes are discussed in a subsequent paragraph and in appendix D. Reservoir land would be acquired in fee to an elevation which would permit public access to the shore around the entire perimeter of the reservoir and which would provide for areas subject to wave erosion or sloughing damages. For estimating purposes, the real estate taking line for the reservoir has been assumed at elevation 2,710, 10 feet above full pool level. This taking line would be adjusted for topographical and existing land usage in final planning studies. In addition, fee title would also be obtained for lands occupied by permanent structures at the dam, for recreational use of the reservoir, and for project operation and maintenance.

"The reservoir would inundate 28 miles of the main line of the Northern Pacific Railway, used primarily for passenger service, and 7 miles of the Polson branch line of the Northern Pacific Railway. It would also inundate 14 miles of the petroleum pipeline of the Yellowstone Pipe Line Co., 28 miles of U.S. Highway 10-A and 87 miles of county, farm, U.S. Forest Service, and National Bison Range roads. Buildings and improvements within the reservoir include about 367 groups of buildings with 428 residences, 71 miles of power lines, and 73 miles of telephone lines. The residences and buildings are principally in the unincorporated towns of Perma, Dixon, parts of Ravalli, at the Indian agency near Moiese, at the U.S. Forest Service station near Perma, and at the headquarters of the National Bison Range. The total population within the reservoir area is estimated at 1,284 persons, on the basis of three persons for each residence.

"The growth along the Flathead River is principally brush and trees which have no merchantable value. Approximately 9,000 acres of irrigated land and 1,600 acres of unirrigated cultivated land, most of which is privately owned, and 36,400 acres of pasture and grazing land, about one-half of which is under private ownership, are located in the reservoir area.

"Private property removed from the tax rolls of counties would comprise 527 buildings, principally in the towns of Perma, Dixon, and parts of Ravalli, and 30,067 acres of land of which 7,934 acres are under irrigation, and 1,447 acres are cultivated land which is not irrigated. This removal would result in an initial tax loss of about \$22,000 for Lake County and \$7,000 for Sanders County annually. Further detailed studies are required to establish the long-term effect of the project on local taxes. The loss of income from cultivated and irrigated land acquired for the project could be offset by the availability of water from the reservoir for irrigation, either through pumping or by gravity from the reservoir. This would firm up the water supply for existing irrigation and permit the development of new irrigated areas. The potential for irrigation from the project or for industrial or business development as a result of the project has not been evaluated, in this report, but in all probability it would offset the initial adverse impact resulting from loss of taxes."

We note that an additional 7,760 acres (10 feet above full pool level) will be required for shore protection and miscellaneous project lands and would provide for areas subject to wave erosion or sloughing damages. Much stress is made on the claim that the construction of this project would provide great recreational benefits. The National Park Service is quoted as saying it considers that the reservoir would provide favorable camping and picnicking sites and opportunities for swimming, fishing, and boating. In our opinion this claim is either just wishful thinking or wholly fallacious and without any provable foundation. The annual submergence of the lands in the reservoir site between maximum pool level (2,700 feet) and the drawdown level (2,620 feet), a drawdown of 80 feet, would permanently wrest such lands from vegetation and render them unfit for recreational or any beneficial use. No development, recreational or otherwise, would be possible upon areas which would be at waters edge at one season and, in the same year, be removed from access to the water by miles of desolate and barren mud flats. We do not think that muddy and barren hillsides and flats are inviting either to swimmers or picnickers. An example of the dis-

astrous attempt to establish recreational facilities under such conditions may be seen at the newly inundated area adjacent to Canyon Ferry Dam northeast of Helena, Mont., on the Missouri River.

A computation of the amount of taxable land in Lake County lying below elevation 2,700 feet within the perimeter of the reservoir site shows 6,759.50 acres of irrigated farmland, 509 acres of dry farmland, and 5,910.92 acres of grazing land, a total of 13,179.42 acres. This figure does not include the Lake County land lying above elevation 2,700 which will be required for shore protection, miscellaneous project lands, and wave erosion, and sloughing damages.

Expert and well informed appraisers for the Bureau of Indian Affairs making 455 appraisals during the past 4½ years on the Flathead Reservation of lands comparable in value to the Lake County taxable lands to be inundated fixed an average value of \$120 per acre for irrigated farmland, \$40 per acre for dry farmland, and \$12.50 per acre for grazing land. On that basis, the value of the taxable Lake County land would be \$905,365. Add to this improvements of a market value of \$622,001, we have a total value of \$1,527,366.

As this board has previously cited, Lake County is already embarrassed in its tax structure by reason of the fact that approximately 50 percent of its geographic area is nontaxable for many reasons, among which is that much of the land is held in trust by the United States of America for the tribe and individual members of the Confederated Salish and Kootenai Tribes on the Flathead Indian Reservation; also, the State of Montana Fish and Game Department has undertaken a program of land acquisition for fish and game purposes that has removed from private ownership and taxable status, many acres of rich farmland in this county, and, finally, the local electric and power distribution system operated by the Federal Government has necessitated the removal of many acres of land from taxable status, and, too, the lines and equipment of that agency are nontaxable. Due to this condition, Lake County has preserved its existence by recourse only to the maximum tax levies. Add to this the harmful impact of the removal of thousands of acres of land and improvements from the tax rolls and the displacement of hundreds of residents from the area would spell the death knell of Lake County.

To increase the tax levies in this county beyond the present level not only would impose a serious burden on the remaining taxpayers, but would prohibit further agricultural and industrial development in this area.

The tax revenue from the present privately owned dam and power facilities at Kerr Dam site makes it possible for Lake County to exist and the construction of either the Knowles or Paradise projects would forever remove and destroy the two damsites on the Flathead River below Kerr Dam, long since under consideration for construction by private industry which would provide additional tax revenue for this ever increasing burden.

The construction of these two dams on sites owned by the Flathead Indians on Flathead River would provide additional rental income for the already oppressed Indians. We should also add that the construction of either the Knowles or Paradise project would inundate nearly 8,000 acres of power reserve (Indian tribal) lands in Lake County now used by the Indians for grazing livestock.

Investigation also shows that 12,874.52 acres of the taxable Lake County land and improvements of the value of \$596,447 to be submerged are located within school district No. 28. Like Lake County, this school district exists only by resort to the maximum levy of taxes allowed by law.

The farmers of Lake County have an additional burden in that virtually all farmland is within the Flathead irrigation project and the Federal agency administering the project has found it necessary to continually increase the operation and maintenance charges for the project and, consequently, the farmers of Lake County simply cannot pay additional taxes on their lands. Any increase in taxes would cause disastrous results and would be confiscatory.

True, S. 1226 provides that local governments shall be reimbursed for the loss of tax revenues due to the acquisition of land and properties in the project area necessary for the construction of the project, until the value of the taxable property within the jurisdiction of such local government shall equal 125 percent of such taxable value at the time of the acquisition of such land and properties. But anyone knows that as the value of the property increases in any local government, the cost of government increases accordingly, and so when the value of the property in Lake County increases to 125 percent and such payments in lieu of taxes stops, Lake County will be shortchanged and will have to suffer the consequences of the loss of taxable property.

To repeat—the statement of the Army Engineers says: “The potential for irrigation from the project or for industrial or business development as a result of the project has not been evaluated in this report but in all probability it would offset the initial adverse impact resulting from the loss of taxes.” And so the fantastic claims of uninformed proponents of this project would seem to be born of fanciful imagination.

For these reasons, we express our opposition to the passage of S. 1226.

Senator GRUENING. Thank you very much, Mr. Maxwell.

The morning time of the opponents has now also expired, each side having had 1 hour and 33 minutes. Former Gov. John Bonner has requested time and desires to be heard, not as a representative of either side, and we will be very glad to hear him now. The time will not be charged to either side.

STATEMENT OF JOHN W. BONNER

Mr. BONNER. Thank you, Senator. Senator Gruening, Senator Martin, ladies and gentlemen, my name is John W. Bonner; I reside at Helena. I am appearing here for myself. I am a former attorney general of the State of Montana; I am a former special assistant attorney general, the Montana State Highway Commission, the Montana Public Service Commission, the Montana Railroad Commission, the Montana Trade Commission; and I am a former Governor of Montana.

I have had a great deal of legal experience, as well as experience relating to all the people of Montana as far as these types of projects are concerned. I was at Fort Peck and campaigned for Fort Peck. I was for Hungry Horse and campaigned for Hungry Horse Dam. I was one of the pioneers in this State for rural electrification. I am still for rural electrification.

I have advocated in my time the Havre transmission line, Havre-Shelby transmission line, the Glendive transmission line, and I went to Washington and was able to get for the people up in the Flathead at Niarada that rural electrification line.

I happen to have been reared on a cattle ranch outside of Perma, Mont.; I punched cows in that country, Niarada, all through that country, and went down to Thompson Falls as a little fellow with my dad when he went on jury service. I played basketball at Plains, Mont., and I think I know pretty well the western part of the State and particularly the Flathead Indian Reservation.

Now, I know and I feel that this is one of the greatest States in the United States and I feel like you, Senator Gruening. I know of your record. You, more than any man in the United States, are responsible for Alaska becoming a State, and you wanted Alaska to become a State because you believed in Alaska and you wanted to defend Alaska, her resources, and I have the same philosophy, and that is why I am appearing here today. I believe in Montana and I am jealous of Montana's resources, and I think we should do everything in our power to protect them.

During my term as the Governor of Montana, with the good help of the people of Montana and with Senator Mansfield, who was then a Representative, and our great Senator Murray, we were able to get for this State the plant at Columbia Falls which there has been so much evidence here today about. We also got the Victor chemical

plant at Butte, and during that time also we got the Superior Match Co., and then, too, we were able to dedicate two great oil refineries at Billings, Mont. Now, I only mention those things to show that I have had some experience with electrical energy and that I believe in Montana.

When I became Governor of this great State, I found confronting me a State that wanted to get our water. North Dakota wanted water out of our Missouri River for the Souris project. Nebraska wanted all the priorities for REA power in Montana. Nebraska wanted more water from the Missouri River that rises in Montana for a 15-foot channel down the river near Omaha. I fought all of those with you people and we were able to knock that channel out. We were able to preserve our REA system in Montana. And then on the Columbia River I found the State of Oregon, all those States, including California, wanting to get our water, and I was on that compact; I was governor of the compact committee of the Columbia and we had to fight night and day to preserve the water for Montana.

Now, because of these fights and the proponents of this project today were with me on those propositions, and because of these fights in the year 1950, at Bismark, N. Dak., while Governor of Montana, I announced with the approval of the people of this great State the water policy of Montana people at the interagency committee. This policy was Montana water for Montana people. And I think it is the only policy that we should pursue. I say it is the only policy unless we want to give up our birthright, unless we want to erase the boundaries of Montana and become a territory, unless we want to be the supplier for all the Western States and give up and forget the pioneers that built this great State.

Now, this policy was based upon the proposition that Montana had the first priority to rivers and streams arising within the State of Montana. And that any plan for development of Montana waters must have to be a feasible one and of benefit to Montana. The priorities named consist of water for domestic use, water for irrigation, power, and a split in power or power profits for power generated downstream on the Columbia River.

While the present bill provides for its at-site power for Montana, nevertheless, it does not provide for one-half of the power generated downstream as does the agency creating Hungry Horse, nor in lieu thereof does it provide for a split in profits from power generated downstream. In other words, Montana does not get any part of the power generated down the Columbia River. There is no provision in the bill for priorities for Montana for domestic use or irrigation use. The consideration for building the proposed project, as far as Montana is concerned, is a loss of Montana water, a loss of some Montana irrigable and nonirrigable land forever, relocation of communities, community facilities, and families displaced by the project which will entail added mental suffering and pecuniary loss, as exemplified by the Canyon Ferry project, and I know because I had a case for some of those people before the Court of Claims. I speak firsthand.

Surely this consideration mentioned entitles Montana to feasible and equitable priorities. Canada, if you please, is demanding one-half of the power profits from power generated downstream on the

Columbia River, and this insistence on behalf of Canada has stalemated the building of Kootenai Dam.

Not too long ago the press revealed that the International Water Commission, composed of Canadian and United States representatives, is giving serious consideration to the request of Canada for one-half of the power profits from power generated downstream on the Columbia River. If Canada, and I ask you this question in all fairness, is entitled to one-half of the power or power profits for power generated downstream on the Columbia River, why is Montana not so entitled? Canada knows the value of water, and because of our lack of vigilance in developing our water rights, we have lost at the present time all of our rights to the water in the Belly River to Canada, from a practical standpoint.

Legally we still have the treaty of 1912 between Canada and the United States relative to these rivers, but Canada has developed her water projects in these rivers in conformity to the treaty while we have not. We have also lost much water in what is known as Sage Creek to Canada because of our lack of vigilance. I do believe Montana should ask as much as Canada for power generated downstream.

Now, Montana abounds in natural resources, and if we do not insist on our rights we will lose these resources. The downstream States certainly want to get our water, and it is our duty to preserve this water, or as much of it as possible for Montana. Already the Congress of the United States is investigating a plea to send electrical energy from Bonneville to California temporarily. This includes Montana waters. A decision undoubtedly will be made by the next Congress on this plea, and you can just take it for granted that if Congress approves this plea and sends the electrical energy to California, we will never get it back.

The same thing was brought out at a Columbia interagency meeting at Montana State College several years ago, and upon some of the Federal men being questioned as to how they would return the power to Montana from California, they replied a steam generator plant would be constructed in California in order to generate electrical energy for transmission to Montana. Of course, this plan was so fantastic, impractical, expensive, that it was discarded then and there by those who had any conception of our water problem.

It is revealing to note that the Bonneville Administration last year went into the red almost \$3 million. Why? Only because of a surplus of power in the Northwest; and, hence, in order to operate at a profit, Bonneville wants to sell the electrical energy to other States like California. The question, therefore, that presents itself, as far as Montanans are concerned, is whether or not we want to give our water away for the benefit of other States.

Of course, we do not want to be selfish or act like that dog in the manger, but just the same we should reserve to ourselves sufficient benefits of water arising in Montana for this generation and for future generations to come in Montana.

A few years of prosperity for labor and business in the vicinity certainly is not a valid consideration for the loss thereafter of our water.

The bill before us raises not the question between those who favor public power or private power, or whether you are a Democrat or a

Republican, but presents the question to all of us who are loyal Montanans: Does this bill protect Montana waters and is it in the best interest of Montana today and for the future of Montana?

Now, today I was amazed when I heard some of the proponents, and I know they are sincere, but they are not informed, trying to discard this policy, Montana water for Montana people. Now, my friend, the former attorney general, Arnold Olsen, left the impression that that was originated by the power companies. I enunciated the policy with his approval and the entire Democratic party of Montana, and though Mr. Olsen was 8 years in the attorney general's office, I know of no case where he ever went to fight for the right of the people of Montana to water.

I am not getting personal about this, but I think a person should be honest. This is my State and it is your State and we have to fight for the waters.

Now, one thing before we close. On the Cabinet Gorge Dam, I was your Governor at that time, and the Washington Power Co. wanted to construct a dam there. This priority, we insisted on the priority and we had quite a battle. We got priority for irrigation in Montana, but you look at the record. The bill passed in the legislature with a great majority and practically all our Democrats voted for it. My friend, Gene Mahoney, was one of the few, if not the only one, that didn't vote for the bill. Well, for the first time in the history of Montana, I wrote a message, which was unusual. You write one when you veto a bill; I wrote a message to the legislature approving the bill and again enunciated the policy "Montana water for Montana people," and that we be given a priority.

I want to say this in closing: That these bills take time, and you have these hearings. But I say those, and to the spectators, who heard me at the last meeting here in Missoula advocating priorities, that there was some opposition to my talk, but there were no priorities, and this bill gives you at-site priorities. I tell you that, but I don't think it is enough, and I think that this great State shouldn't be a territory; I still believe in the boundaries of Montana and I think we should all fight with our lives to see if we give our water away that at least we reserve enough for industry and for the benefit of the future generations to come. That is my attitude and that is why I am here today, and I think that should be the attitude of every man, woman, and child.

I am not one of these people that believes in regions, the great Northwest region. I believe in helping the other States in the Northwest, but I don't want to give up my birthright, erase the boundaries—I repeat—of Montana. Let's be sensible about this; let's get the priorities that we deserve.

Senator Gruening, I want to compliment you and Senator Martin for the fine meeting that you are conducting. You are getting the witnesses through here very rapidly. This has been one of the finest meetings that I have ever attended, and you have been very considerate. Thank you again.

Senator GRUENING. Governor Bonner, I wish you would tell the committee, are you in favor of or opposed to Senate bill 1226?

Mr. BONNER. I am opposed to it for the reasons I have heretofore enumerated.

Senator GRUENING. Are you familiar with the provision in section 3 (a) which provides that the full amount—I am reading from it—

of at-site firm power production attributable to the project, or such portion thereof as is required from time to time to meet loads under contracts made within this reservation, shall be made available for use within the State of Montana.

Mr. BONNER. Yes; I am, Senator.

Senator GRUENING. You feel that that does not protect—

Mr. BONNER. No. I would like to see the language plainer when we get a half of the power generated down the Columbia River or in lieu thereof a half of the power profits.

Senator GRUENING. If the language were such that you felt adequate protection for Montana were provided, would you then favor the bill?

Mr. BONNER. I would reconsider my attitude, because my main objection here is that priorities which I want to see first in that bill—

Senator GRUENING. I would like to ask that you submit to the committee the language that you think should be put in the bill which will satisfy your objection that not enough safeguarding of waterpower for Montana is provided, and as a former attorney general you certainly are in a position to draft such language.

Mr. BONNER. Thank you, Senator Gruening. I will do that.

(Mr. Bonner later sent the following letter and enclosure to Senator Murray:)

HELENA, MONT., *January 28, 1960.*

HON. JAMES E. MURRAY,
U.S. Senator,
Washington, D.C.

DEAR SENATOR MURRAY: Herewith I enclose a copy of a letter which I this day sent to Senator Gruening concerning S. 1226, which is self-explanatory.

You will note in the press that the Columbia Compact Commission at its last meeting agreed in principle that Montana should get a percentage of the waters downstream on the Columbia. However, as yet the percentage has not been determined. As you know Canada is insisting on one-half of the energy generated down the Columbia River because of Canadian streams feeding that river.

When I was Governor of Montana it was conceded by all of the Governors of the Northwest that Montana not only get site power but also a percentage of the power generated downstream. Before we could agree on the percentage I was succeeded by the present Governor.

I would be pleased to have your views in the premises.

With best regards, I remain,

Sincerely yours,

JOHN W. BONNER.

HELENA, MONT., *January 28, 1960.*

HON. ERNEST GRUENING,
U.S. Senator,
Washington, D.C.

DEAR SENATOR GRUENING: Pursuant to your request at the hearing on S. 1226 at Missoula, Mont., on December 15, 1959, that I draw an amendment to the bill to conform with my views expressed at the hearing I beg to submit the following:

After studying S. 1226, my proposed amendment is as follows:

Amend section 3(a) of S. 1226, 86th Congress, 1st session, in the Senate of the United States, on line 2 on page 4 of said bill by eliminating the period after the word "Montana" and adding the following: "and all of the nominal prime power at the Knowles Dam project but not in excess of one-half of the increase in total prime power from downstream Federal plants and attributable to Knowles Dam project is reserved for marketing and use within the State of Montana and when said power is not utilized within the State of Montana that

payment representing one-half of the net profits derived from prime power generated from Federal plants downstream which power is attributable to the Knowles Dam project be paid to the State treasurer of the State of Montana for the benefit of the State of Montana and to be used by said State as it's State government directs. Reservation is hereby made of the water to the State of Montana because of Knowles Dam project for domestic and irrigation use within the State of Montana."

With best regards, I remain,
Sincerely yours,

JOHN W. BONNER.

Senator GRUENING. Thank you very much. It is now 4 minutes after 1, and we will adjourn until 2 o'clock, at which time we will hear Mr. McDonald in behalf of the Indians, and then the other testimony will continue with the opponents going first.

(Thereupon the hearing recessed at 1:05 p.m., reconvening at 2 p.m.)

AFTERNOON SESSION

Senator GRUENING. The meeting will come to order. Mr. McDonald, we will be very happy to hear you.

STATEMENT OF WALTER W. McDONALD, PRESIDENT, CONFEDERATED SALISH AND KOOTENAI TRIBAL COUNCIL OF FLATHEAD INDIAN RESERVATION

Mr. McDONALD. Honorable Senator, members of this committee, my good friend, Vic Reinemer, and ladies and gentlemen, I am privileged to be here today to say a few words on the importance of the real estate on the Reservation of the Flatheads.

About 9 miles south of here, or west of here, in 1855, July 16, we signed a solemn treaty with the U.S. Government that we would reside on lands on the Flathead Reservation of today, which we retained in our possession at that time. Many times the public has not realized the importance of our valuable resources. And I will say a few words on that.

On November 30, 1959, last month, my tribal council went on record opposing any downstream dams that may affect our valuable resources. It is true that this dam will be built off our reservation, but in all respects, 65 miles of our river and our land will be inundated.

We have two feasible power sites up there. It has been our interest that these may be developed and we have never argued the point of public power or private power. There probably is a place for both of them. But in the meantime, since we have given permits to exploratory drilling and found these valuable sites to be feasible, we want to see them developed on our own reservation.

There is no reason why we should support a bill whereby we are granting or giving a section of land and our waters when we have the potential on our own power sites.

We look at these things as a long range program. Back in the early thirties under the administration of President Roosevelt, the reorganization bill was ratified by my people, for the sole purpose of self-government. We worked with that program; we consolidated our lines. Some of the lands on this long-range program will be inundated by this body of water.

We feel we are very important people. We have a sacred treaty; 16,000 acres of our land will be inundated. We are not speaking like people who may have 40 acres of land, 80 acres of land. That is only a drop in the bucket. We want to treat our resources like the Canadian Government. Today, if the Canadian Government would have conceded to the United States, probably Libby Dam would have been built, and we are going to be just as tough as the Canadian Government.

I never have wanted to put ourselves in a position that we were taking a public power side or the private power side, but we have this one very thing in common.

Now, as we have progressed on the Flathead Reservation, and our people are integrated, six public high schools up there, we are getting very educated people. We have people in all professions of life, lawyers; we may some day even have a Senator as an Indian from my tribe. Then maybe those people will come back and say we want to develop our own power sites. They may just do that.

So we are looking forward to a long-range program and it is our obligation to our young people to look forward.

A word about Senate bill 1226. The provision in there of just compensation to the tribe. If we do not agree, then we go to the U.S. district court. We think we are important people and should not have to rely on the courts for our compensation. Maybe some day a bill will be passed when they will say "down with the Flathead Indians themselves," and say, "this is it." You fellows want to go along with this on an agreed price, maybe we'll do these kind of things. And I just hope you honorable Senators and the committee and ladies and gentlemen, that the words I have to say here today remembered to the extent that we have a sacred treaty. The land we retained was ours as long as the grass grows and the water flows. And certainly, since we do not have any, we haven't lost anything yet, we can be skeptical, and we will go down to the wire and take the position that one of the biggest real estate owners that will be affected will be the Flathead Indians.

And I am glad to be here today, and many people have brought out different provisions of the bill, and personal opinions, which I will not go into, but I only want to say this: I have got three statements to submit. Vice Chairman William Morigeau has one. My statement is on the background of the Flathead Indians. The other one is on the legal aspect of our jurisdiction.

So I will only say this: that I represent over 4,000 members, and for the economic development and for their interests, I appear here to bring out this most important part. Thank you.

Senator GRUENING. Mr. McDonald, I take it you are in opposition to Senate bill 1226.

Mr. McDONALD. That is right, Senator.

(The statements filed by the witness follow:)

PREPARED STATEMENT OF WALTER W. McDONALD, PRESIDENT, CONFEDERATED SALISH AND KOOTENAI TRIBAL COUNCIL

Honorable chairman, members of the committee, and visiting friends, my name is Walter W. McDonald, president of the Confederated Salish and Kootenai Tribal Council of the Flathead Indian Reservation of western Montana. I appear here today in behalf of the tribal governing body on the important con-

roversial issue of S. 1226, which would provide for the Knowles Dam on the Flathead River, in the State of Montana, for the protection and development of the Flathead and Columbia River Basins.

Many years have passed since the day the Confederated Tribes first appeared at a public hearing and opposed the construction of Paradise Dam. This hearing was held in Hot Springs, Mont., during the year of 1948. Since then different council members have taken office on the Flathead Tribal Council. However, the picture hasn't changed and the motive is we have a great country that we retained in the treaty of 1855. We are opposed to any construction that may cause our valuable resources such as land and feasible damsites, to be covered by water. The tribes own two feasible damsites on the Flathead River, Buffalo Rapids Nos. 2 and 4. However, our first consideration must be for our Indian people. Therefore it is our duty to protect and develop our resources so that we shall receive a maximum income for our people. We have never in our previous testimonies argued public or private power nor are we going to argue those points today. But, certainly as landowners, and as a group who owns feasible powersites on the Flathead River, above the Knowles site, we are here to present our views and to have those views recognized.

On July 16, 1955, about 9 miles west and a little north of the city of Missoula our first experience in the cession of land to the U.S. Government was witnessed when we signed the Treaty of Hellgate. We were then forced to give up our native country—the great Bitterroot Valley. It was Chief Charlo, whom we all honor and remember—especially we descendants, that never agreed with the treaty and was the last Flathead to leave the Bitterroot Valley, by force, only to die in Jocko Valley in 1911 of a broken heart. The treaty granted that the Flathead Reservation would be ours as long as the water flows and the grass grows. Different episodes come into our history, the reservation was thrown open to homesteading in 1909 against the protests of the Indians; irrigation systems were introduced on the reservation over the protest of our people; the bison range was taken from us by an Executive order for which we were paid little compensation, again against our wishes. And wildlife refuges were set up, none with the consent of the Indian people. However, S. 1226 does allow us just compensation for our holdings and if we do not agree on a figure of just compensation we are then permitted to rely on the U.S. district court for litigation. We have previously indicated that if we received an agreed-on price for our resources, which would run into millions of dollars, we would consider negotiations. We have mentioned the possibility of including a block of power as part of the compensation to be received. And we have stressed, not a sale of our resources, but an annual lease of our resources. None of these items are or have been set forth in S. 1226.

On November 30, 1959, at a special meeting of the Flathead Tribal Council at which a quorum was present, action was taken in opposition to the S. 1226, or any other proposed dam on the Flathead River that would affect our resources. We are 100 percent for the development of our own damsites—Buffalo Rapids Nos. 2 and 4.

I have previously indicated that we are no different than the Canadian Government. Before the Libby Dam can be built the United States must meet the demands of the Canadians and before Paradise Dam is built we expect our Government to do the same for us.

If Knowles or Paradise should be built we would lose at least 16,000 acres of Indian grazing lands that are presently being used by four Indian stock associations. We speak of long-range programs, if and when one of these dams are built. The Indian stock associations are the result of long-range planning brought about by the Indian Reorganization Act of 1934 under President Roosevelt's administration. If these lands should be flooded it would destroy the economy of those stockraisers who depend upon this area to raise cattle. Our best grazing areas are along the Flathead River and the hills to the west of the river. The loss of this land would not only affect the Indian cattleraiser, but the white cattleman as well. Because some of the land is leased to non-Indians for hay land as well as grazing land.

If our two damsites and the 60 miles of our river is inundated, we are losing two feasible damsites forever. We lost 16,000 acres of land and lose the chance to expand our cattle association herds. Also, fishing and hunting treaty rights would enter into the picture.

When we set our 16,000 acres of land on the block with two powersites that would bring in revenue which would amount to \$18 or \$20 million within a 50-year period we are thinking of the economy and welfare of 4,600 people.

STATEMENT OF WALTER W. McDONALD ON THE LEGAL ASPECTS

I am the chairman of the Tribal Council of the Confederated Salish and Kootenai Tribes of the Flathead Reservation, whose interests would be materially affected by passage of this bill. I wish to make it clear at the outset of my remarks, that the Confederated Tribes support the concept of economic growth for the State of Montana, and particularly through the development of dams in the Flathead River Basin in western Montana. However, the enormity of the contemplated economic development in the area proposed by S. 1226 so substantially affects the interests of the tribes, including lands, cattle business, power and damsites, fishing and hunting rights, and so forth, that the Confederated Tribes believe their rights and unique position in this area require that certain conflicts be resolved prior to any development.

The Flathead Tribes want their tribal damsites within the reservation developed, and made a source of annual production for the tribes. They oppose any development especially off of the reservation, which would take their sites for exploitation by others.

In order to understand and appreciate the interests and rights of the Confederated Tribes in this area we call your attention to the fact that when white men first came to what is now northwestern Montana, they found there the Salish and Kootenai Tribes in undisputed possession of a vast area of land. By the Treaty of Hell Gate of July 16, 1855 (12 Stat. 957, art. I), this vast acreage was ceded to the United States, reserving (art. II) from the cession, however, a relatively small area including the south half of Flathead Lake and Flathead River beyond the site known as Buffalo Rapids No. 4. So far as these lands and waters are concerned, the treaty has never been modified or changed in any way. Even if there never had been a treaty, the Supreme Court has recognized that the Indians' "right of occupancy has always been held to be sacred; something not to be taken from him except by his consent, and then upon such consideration as should be agreed upon." *Johnson v. McIntosh* (8 Wheat. 543, 574). With the Treaty of Hell Gate of July 16, 1855, this right of occupancy became a contract right to which the faith of the United States is pledged.

This sacred right specifically includes the right of the Confederated Tribes to use tribal property for the highest and best use which a provident owner might make. In addition to land, this includes such things as navigable waterways, exploitable value of damsites, and the value of the Flathead Lake for waterpower. The value of the Flathead Lake for waterpower was preserved to the Confederated Tribes through reservations required in patents for all tracts of land bordering Flathead Lake, pursuant to the act of March 3, 1911 (36 Stat. 1058 at page 1066), as amended by the act of August 24, 1912 (37 Stat. 518, 527). Likewise, when development was proposed of the site at which Kerr Dam has since been built, the right of the Flathead Tribes to the value inhering in the site as a damsite was specifically recognized by act of March 7, 1928 (45 Stat. 200, 212-213), and by the act of March 4, 1929 (45 Stat. 1623, 1639), which provided that rentals from the licenses for use of Indian land should be paid to the Indians as a tribe. Accordingly, when the license of the Federal Power Commission (Montana No. 5) for the Kerr Dam was issued, it provided for yearly rentals payable to the tribes.

Now there are other known valuable damsites located within the reservation of the Confederated Tribes. We are given to understand that the highest value which the tribes might develop from these damsites, in terms of return for power and use of existing grazing lands within the powersite withdrawal, would be to construct low dams at sites known as No. 2 and Buffalo Rapids No. 4. Non-Government sources have evinced an interest in developing these sites for power purposes. Permits have previously been issued under the Federal Power Act, section 5, for damsites on the Flathead River below Kerr Dam at these two sites. The tribes could realize a great return from such a development, and lose a very small amount of our irreplaceable grazing land.

A dam at the Knowles site on the Flathead River or at the Paradise site on the Clark Fork as contemplated by S. 1226 would make use of the entire head

developed on tribal land by flooding clear to the tailwaters of Kerr Dam and flood out all of the known valuable damsites located within the reservation. Accordingly, the Confederated Tribes would be deprived of the most economical exploitable value of their damsites, and in addition would be deprived of much tribal grazing land. If the project is to be undertaken, the consent of the tribes must be obtained in recognition of the rights retained by them under the Treaty of Hell Gate of 1855, and those values must be compensated in one way or another. This has been judicially recognized in Montana. We call your attention to *United States v. 5,677.94 Acres & c.* ((Mont., 1958), 162 F. Supp. 101); *Montana Power Co. v. Rochester* ((C.A. 9th, 1942), 127 F. 2d 189).

Section 7(a) of the proposed bill authorizes the Secretary of the Interior to negotiate a contract with the Confederated Tribes for conveyance to the United States of all tribal land required for carrying out the purposes of the act, and provides for "just compensation" as payment. Such a provision, which looks to outright taking of an asset of continuing and increasing value in exchange for a payment which would probably be quickly spent, is not satisfactory to the tribes.

If the consent of the tribes is to be obtained under this or similar legislation, it must be specifically understood that "just compensation" means not outright purchase, and does include the exploitable value of damsites. Compensation for their destruction must be in the form which the tribes could have obtained had the sites not been destroyed. This is not in terms of an outright purchase of the tribal interests. We have no damsites for sale. We have always insisted upon the annual value of their exploitable head as we know how that value increases over the years. Further, we are reluctant to permit further reduction of tribal lands through outright sale. We suggest that the most satisfactory way of securing our consent to the use of these tribal properties is to negotiate and agree with the Confederated Tribes on some payment of rent, or share of power with similar arrangement for regular income from the properties, fully equal to what the sites on tribal lands, if most productively developed, would produce, and short of their being purchased outright. Settlement could be made on the basis of an annual cash rental (subject, we suggest, to recalculation periodically to reflect the increased value of the power in comparison with other or alternative sources of power). The Confederated Tribes do oppose and will oppose any move to take their property in these sites totally and for no more than a jury of local people—which we are told would probably exclude the tribal members—might be willing to pay.

The Confederated Tribes welcome the economic development of western Montana. We believe our interests can be best served by the construction of low dams at Buffalo Rapids No. 4 and No. 2 sites. However, we will cooperate, as businessmen, in reaching reasonable conclusions for the development of the dam elsewhere provided that tribal rentals for our interests can be settled with entire fairness for our continuing interest.

STATEMENT OF E. W. MORIGEAU, VICE CHAIRMAN, TRIBAL COUNCIL, CONFEDERATED SALISH AND KOOTENAI TRIBES

I am the vice chairman of the tribal council of the Confederated Salish and Kootenai Tribes of the Flathead Reservation. I concur in the remarks of our chairman, Mr. McDonald, that the Confederated Tribes support the concept of economic development of the State of Montana, and particularly of the development of the tribal damsites—which we are told have great value if only the threat of Paradise or Knowles Dam was not always held over them.

The Confederated Tribes possess some of the finest damsites in the United States. These sites are known, and nongovernmental interest has been expressed in them, as outlined by Mr. McDonald. We believe that the highest value which the tribes might develop from these sites is to construct low dams at sites known as Buffalo Rapids No. 4 and as site No. 2. We believe that the most practical utilization of the entire head for power purposes, and therefore the greatest economic benefit to the tribes, can be achieved by construction of dams at these locations. Not only would the expense of the two smaller dams be less than constructing a single larger dam at Knowles or Paradise, but it would preserve use of existing grazing lands now available to the Confederated Tribes. The preservation of grazing lands is of utmost importance to the tribes, as their

destruction would constitute an irreparable loss. The construction of dams at the No. 4 and No. 2 sites would also enable the tribes to more adequately preserve their present hunting and fishing rights. These have always been an integral part of our tribal heritage.

The present proposal as outlined in S. 1226 would not only destroy important tribal grazing lands and alter hunting and fishing rights but it would, whether the dam is constructed at the Knowles site or the Paradise site, make use of the entire head developed on tribal lands by flooding clear to Kerr, and inundate all of the valuable damsites of the tribes. Accordingly, the Confederated Tribes would be deprived of the highest economical exploitable value of their lands and interests to which they are entitled. This cannot be done without the express consent of the tribes, save in disregard of our 1855 treaty, which has never been renounced to this day.

The Confederated Tribes are interested in the development and use of their property in the manner that will provide the best potential of income. They are not interested in blocking developments by merely being harsh or unreasonable. If the tribes can be assured of receiving income from one development that fully replaces another, and if the income has the same regularity that it would if they developed the property themselves, then I believe that the consent of the Confederated Tribes might be obtained to use their property.

It is clear that the existing damsites of the tribes would be developed by the tribes in a manner that would provide for annual cash rentals or an annual amount of electric energy. We would not consent to being permanently deprived of these valuable tribal assets which provide a yearly income, only to see their value steadily increase in the hands of someone else.

Accordingly, negotiations with the tribes must be on the basis of annual cash rentals, or a block of energy which will furnish us income and enhance over the years, rather than in terms of an outright purchase or condemnation at a fixed amount. If this is done, and if the potential exploitable damsites of the tribes are recognized, then I believe it is possible to reach an agreement. That is the basis on which we permitted development of Kerr Dam under FPC license No. 5 of Montana Power Co. We believe that the same procedure should be adopted with regard to our other equally valuable assets.

This is my alternative for Paradise or Knowles high dam.

I feel that this Senate bill No. 1226 should be amended to read that the following low head dams should be constructed: Buffalo Rapids No. 2 low head, Buffalo Rapids No. 4 low head, and Paradise or the Knowles Dam with a low head. This will utilize the entire river on the Flathead Indian Reservation and cause not near the land damage that Paradise or Knowles would create with a reservoir of 2,700 feet elevation.

Senator GRUENING. Thank you very much; we appreciate hearing your testimony.

We will now hear again from the opponents of the bill. It is 10 minutes past 2. For the moment we will give each side an hour and a half.

Mr. LOMAN. Thank you, Senator Gruening. I would like to call Mr. Stanley M. Doyle.

STATEMENT OF STANLEY M. DOYLE, REPRESENTING THE ELMO ELECTRIC COOPERATIVE ASSOCIATION, INC.

Mr. DOYLE. Senator Gruening, I am going to restrict my remarks. I appear here as the attorney for the Elmo Electric Cooperative Association, serving both Lake and Sanders Counties.

We admit we are grateful to Senator Murray and Senator Mansfield for making that possible. We borrowed from the Government \$220,000. We built the lines. The Indian Service are now purchasing it from us on a 35-year amortized loan. If this dam be built, our cooperative becomes defunct and bankrupt. The money that we have borrowed we cannot repay. Therefore, the Elmo Electric Cooperative,

under their signature and seal of the president and of their secretary, are opposing this bill in writing, a copy of which has been handed to you.

(The document referred follows:)

ELMO ELECTRIC COOPERATIVE ASSOCIATION, INC.,
Polson, Mont., December 15, 1959.

The U.S. SENATORS,
Special Interior Subcommittee,
Missoula, Mont.

GENTLEMEN: The Elmo Electric Cooperative, Inc., a Montana corporation, would be less than grateful, if they failed to make mention of the fact that the Honorable James E. Murray and the Honorable Mike Mansfield, U.S. Senators for Montana, brought into being and made a reality of our corporation after 20 years of struggle with the Indian Service of the U.S. Department of Interior.

The Indian Service has a complete monopoly on the furnishing of private and commercial power to the reservation of the Flathead Indians within Lake and Sanders Counties, Mont., under the Stevens treaty of 1855. We have no quarrel or objection to this contract between the Flathead Indians and the United States. The contract, which is valid and binding should be and is observed by the signatory parties.

To implement the building of the transmission electric powerlines in Lake and Sanders Counties, Mont., this corporation borrowed from the REA the sum of \$220,000 and without the personal aid of U.S. Senators James E. Murray and Mike Mansfield of Montana, this construction was impossible, by reason of the Indian Service, U.S. Department of Interior. We appreciate and are grateful for their invaluable aid. This loan was to be repaid by the Indian Service in 35 years, as the result of a legal contract for purchase.

If the proposed Paradise or Knowles Dam is constructed as proposed, then a substantial portion of this \$220,000 of taxpayers money, allocated by the REA to our project is a useless expenditure of taxpayers money and a part of the project will be flooded and rendered useless to us, with particular reference to project B of our corporation.

It is to be remembered that approximately 47 percent of the property owned in Lake County pays all the tax bill for the operation of the county. The same situation exists in Sanders County, Mont.

Our REA loans were made at Washington, D.C., in the year 1948, after many conferences.

The proposed construction of one of these dams is utterly inconsistent, contrary, and repugnant to the best interests of our many power users on the project. Nowhere in the estimates of construction of the dam does the loss of taxpayers' money advanced 10 years ago by the REA appear as one of the items of cost. It will bankrupt this corporation.

For the reasons above stated, the officers and directors of this corporation, still indebted to the REA, strenuously oppose and resist this proposed dam construction, as it means to us, the inability to repay the REA money still due the United States. It means the displacement of our members, and can only serve to result in the disintegration of Lake and Sanders County, as separate political subdivisions of Montana.

We would like to have the record show our unalterable opposition to this proposal.

Dated at Polson, Mont., this 7th day of December 1959.

MELVILLE FRENCH,
President, Elmo Electric Cooperative Association, Inc.

Mr. DOYLE. I would like to, Senator, if permissible, to speak for myself in opposition to Senate bill 1226. I know Senator James E. Murray's family, together with his office personnel. My record will show that legal work for Senator Murray in 1953. I am grateful to him and to his office for his many courtesies and the same is true as to Senator Mansfield.

I am going to have to reluctantly resort to the perpendicular pronoun for the reason of the fact that I am no longer a young man. I am not able to start in a new location in my profession of the law. All

my possessions, real and personal, are located in Lake County, Mont. I am a volunteer of two wars for our Nation.

I have opposed the building of these dams since 1948 in open hearings. Their construction would be fatal to me in the sunset of my life and to my family.

I do not appear here before you as the president-nominee of the Montana Bar Association, nor as the oldest living national commander of one of our veterans' groups, or as a member and at times a legal representative of organized labor for the last 45 years. I appear here now in my capacity as a private citizen only.

I sincerely regret that the Honorable James E. Murray is not present, which would enable me to state these personal facts to him in person, which has been my lifelong policy and personal credo in dealing with my fellow men. I feel that in justice, fairness, and equity I should be entitled to say these things in person to Senator Murray. Denied the right to protect my interests and myself by personal objection to the Senator, I respectfully request the privilege of adding this statement to the record of this committee, and with grateful appreciation to you, Senator, I am sincerely yours, Stanley M. Doyle.

Senator GRUENING. Thank you, Mr. Doyle.

Mr. LOMAN. I would like to call Mr. Harold Hagen, of the Montana Reclamation Association.

STATEMENT OF HAROLD HAGEN, PRESIDENT, MONTANA RECLAMATION ASSOCIATION

Mr. HAGEN. Honorable Senator, my name is Harold Hagen and I am a farmer living in Stevensville, and I am president of the Montana Reclamation Association.

We wish to express our appreciation for this opportunity to present the views of our association, and respectfully submit the following statement for your consideration.

This organization was founded 16 years ago and is dedicated to plan, promote, and consummate a comprehensive system of land and water development and utilization for the entire State of Montana.

The principles which have guided the action of the organization in regard to water and resource development was best expressed in testimony given at a hearing called by the Corps of Engineers in 1948. The position of the Montana Reclamation Association in regard to water development was stated at that time by President O. P. Balgord, and has continued to be the basic policy of the organization to this time. Senator Balgord said—

It is to be expected that any plan for resources development will give full recognition to and protection of western Montana's needs. Such a plan, if it receives the support of Montana citizens, must provide for the preservation and development of all possible irrigated and cultivated land in order that the area may have a base for further development of its natural resources.

The Montana Reclamation Association will protest vigorously any program that will reduce the number of acres of land that can now be irrigated in the State of Montana. The State is a producer of raw materials. Not more than 5 percent of its land area is capable of being irrigated. Under such circumstances, any plan for water use development in the State much recognize that every acre and fraction

of an acre with soil suitable for producing crops must be preserved for this purpose. Montana's water resources must be safeguarded for agricultural purposes before water can be diverted for other uses. This means that storages should be located where the water can be most effectively and economically brought on the land. It is much easier to transport electric power long distances to points of consumption than it is to transport water for irrigation. It should make little difference in use of storage water for regulation of streamflow, where the storages are located.

Another factor in Montana's economy is its scenic attractions. Montanans insist that improvements placed within their borders will not desecrate nor destroy forever large segments of this scenery. It may take considerable effort to find the method, but Montana's citizens will insist upon the protection of its major scenic assets at the same time it urges full development of its streams.

The proposed dam to be located at either Paradise or Knowles cannot be considered as a scenic attraction. The drawdown feature of the water storage will create unsightly mud flats, and make it undesirable as a recreation area.

One of the reasons given for the need for this dam and storage basin is the fact that it would firm up and increase the power output on downriver installations.

It is important for us to realize that action taken now in the construction of a large dam will affect the economic development and the lives of the people living in the area for all time to come. With the prospect of an expanding population, it is inevitable that at some time in the future, perhaps within a generation, the production from the fertile land inundated by such a dam will be desperately needed by our people. If this be true, would it not then follow that in future years the same need would exist for the proposed dam? We could expect then that at other upstream locations more dams would be proposed and constructed until little if any good productive land would be left uninundated, and western Montana would become one vast water storage area for the benefit of downstream users.

In Montana we have, relatively speaking, an abundance of water, and we recognize it to be one of our most precious resources. We sincerely hope that in the development of that resource we will not inundate the fertile soil of our valleys and become merely a vast storage area for water to be used for beneficial purposes downstream.

Our Montana Reclamation Association supports aggressive action in the promotion of sound irrigation proposals and positive opposition to proposals deemed inimical to such development. We oppose the construction of the Paradise or Knowles Dam because it would limit the tax base, destroy thousands of acres of farm and forest lands, and would hinder rather than help the economic development of the area.

Senator GRUENING. Thank you very much, Mr. Hagen.

Mr. LOMAN. I would like to call Mr. John W. Haw, of the Northern Pacific Railway.

STATEMENT OF JOHN W. HAW, REPRESENTING THE NORTHERN PACIFIC RAILWAY CO.

Mr. Haw. Senator Gruening, Senator Martin, ladies and gentlemen, my name is John W. Haw; I live in St. Paul, Minn. From May of 1924, 35 years ago, until my retirement on November 1 of this year, I was employed by the Northern Pacific Railway, first as agricultural development agent; and since 1927, 32 years, as director of the Agricultural Development Department for the Northern Pacific.

I am a graduate of the School of Agriculture of the University of Minnesota. For 14 years prior to employment with the Northern Pacific, I was in agricultural extension work in Minnesota and North Dakota, the last 6 years as State county agent leader in North Dakota.

I appear in opposition to this legislation at the request of the Northern Pacific Railway and in the interests of my farm, business, and industry friends and associates in the area critically affected by this legislation. May I say in justification for my interest in a hearing of this type following my retirement that it was under my supervision that the Northern Pacific engaged actively in the promotion, settlement, and development of irrigation projects in western Montana, among them the Bitter Root, Frenchtown, and Flathead? And there are many people in this room who know of my activities in connection with the initiation and promotion and the settlement and the development of those projects. I think I can say that I am much better acquainted in western Montana than I am in my home State of Minnesota.

Over a period of 15 years, between 1925 and 1940, my department maintained two agricultural and colonization agents at Charlo in the Flathead Valley and one at Missoula. Many of you people remember them as Bill and Pete Larson. They were located at Charlo to bring settlers from the Snake River Valley up into the Flathead project back in the twenties and the early thirties.

Thousands of acres of land upon which we fostered irrigation development, and later had an important part in settling, would be inundated by the dam proposed in this legislation. Certainly this committee will understand, therefore, my concern with preserving the agricultural potential which Northern Pacific spent time and money to establish. Certainly, I hope, Senator Gruening, that it is not necessary for me to make an apology for my appearance here today, and my concern with preserving the agricultural industry which we fostered and which we nurtured for so many years as a backlog to the economy of western Montana.

As a piece of authorizing legislation, the Knowles Dam Project Act, S. 1226, has many unusual and unique features for a piece of legislation which proposes to authorize a structure costing almost a half-billion dollars. May I recite them?

First, it proposes the building of a dam across an important river at a location described only in general terms; second, and at a cost which can only be approximately estimated, but somewhere in the wide range of \$235 million to \$492 million, based on figures which are

already several years old. The committee is asked to decide on a project of that kind with its varying construction costs. And these figures mind you, are, as to Paradise Dam at least, 2 years old.

Aside from a contribution to flood abatement in the lower Columbia and power generation, its alleged benefits are cloaked in vague generalities, and I will refer to that later in connection with the irrigated lands. The development of irrigated land, the only offset to the 50,000 to 65,000 acres submerged, is totally lacking in substantiation. And, finally, it designates as the construction agency a department of the Government which has neither investigated nor recommended the project.

It is important for this committee to understand that the proposed structure will interrupt the natural flow of the second most important stream in the State of Montana and the 75-mile shoestring reservoir back of the dam with its many side arms and branches, radically changes the geography of western Montana. Several seasonal reservoir drawdowns will make ingress and egress to areas encompassed by the arms of the reservoir difficult, if not impossible. It will have a demoralizing effect on time-tested and presently satisfactory local units of government lying in the basin of the Flathead and Clark Fork Valleys. It will distort the present efficient transportation system in and through the affected area, both rail and highway. Telephone, telegraph, power transmission, and oil pipelines will be forced to less favorable and more circuitous routes. It will not abet but will hamper continued progress in capitalizing the natural resources of the area by burying its fertile farming valleys as a floor for the reservoir and by imposing a transportation hurdle to the economical concentration of products of mines, forests, and farms for industrial utilization. Such a project, affecting the livelihood, the property, and economy of a large and important section of the country, should not be undertaken until there is substantial agreement that provable benefits far outweigh probable costs computed at realistic interest rates—and that is not 2½ percent—or until the Government is certain that the ends sought to be achieved cannot be otherwise secured.

I trust all members of the committee understand that a costly dam, either across the Clark Fork or the Flathead River, constructed to store spring runoff primarily for the purpose of firming hydroelectric power generated at dams on the main stem of the Columbia in Washington and Oregon, is neither a new or a novel proposal. Its alleged benefits, its cost, and its depressing effect on the economy of western Montana were explored and analyzed by the Corps of Engineers in the midforties, 15 years ago, and it has since been restudied in great detail. Since that time, hearing after hearing has been held, beginning at Camas Hot Springs in May 1948. Some local, but mainly imported advocates, have continuously attempted to soften or brainwash the opposition to this expensive and debatable project. Nevertheless, in the face of all the arguments proponents have been able to muster, and in spite of some of the statements made this morning, which are purely speculative, the number of those who will oppose approval of this project have steadily increased. In the name of the people of the State, three Governors of Montana—Ford, Bonner, and Aronson—have appeared at hearings to voice opposition to either the Knowles or Paradise Dams and the inundation of western Montana valleys. A

joint memorial to Congress urging construction of the project was introduced in the Montana Legislature in 1957 and failed.

Whatever may be said at this hearing, neither the Knowles nor Paradise Dam has heretofore been a politically partisan issue. Nor is it an issue as between public and private power adherents, or between business on one hand and labor and farmers on the other. Boiled down to its essence, the question is whether the people of Montana are willing to sacrifice two of the western part of the State's fertile agricultural valleys to serve as an unsightly storage reservoir and suffer an irreparable blow to its economy in order to firm up hydroelectric power, further cheapen already cheap power, for industries in metropolitan areas on the northern Pacific coast.

Much has been made by dam proponents of the need in Montana for the additional power generated at the Knowles or the Paradise site with unsubstantiated statements that it would serve as a magnet for a light metal industry or a chemical or fertilizer industry in the area under discussion. The unlikelihood of this type of industry locating in the Clark Fork or Flathead River Valleys, regardless of how much or at what price power was obtainable within practical transmission distance, is fully covered in Vice President Burgess' testimony in 1957 and 1959, which has been given the committee for inclusion in the record and was well covered this morning, I believe, by representatives of the Montana Power Co.

The committee's attention is called to the establishment within the area, since 1957, of eight important forest product industries. Their names, location, approximate investment, and yearly payroll follow.

(The matter referred to follows :)

	Location	Approximate investment	Annual payroll
Plum Creek Lumber Co.....	Pablo.....	\$2,500,000	\$875,000
Dupuis Lumber Co.....	Polson.....	300,000	175,000
Cascade Plywood Lumber Co.....	do.....	2,000,000	800,000
Waldorf-Horner Lumber Co.....	Missoula.....	12,000,000	600,000
Van-Evan Plywood Lumber Co.....	do.....	2,500,000	1,500,000
Inter-Mountain Lumber Co. No. 2.....	do.....	1,800,000	1,200,000
Mt. Lolo Lumber Co.....	do.....	500,000	150,000
Mission Homes Lumber Co.....	do.....	200,000	275,000
Total.....		21,800,000	5,575,000

I will not read that, except to summarize and say that in the last 3 years, that is, since 1957, forest-product industries have located in the direct area which would be affected by this dam, with a total investment of \$21,800,000, an annual payroll of \$5,575,000, with a payroll, mind you, directly in these mills of over a thousand, and the alleged salaries up at Columbia Falls are about 500 employees in the plant with a payroll of about \$3,500,000, and here we have eight industries, permanent industries, running all the year around on our natural resources right in this reservoir area with a payroll of over a thousand men and a payroll amounting to almost \$6 million and with no assurance of this so-called cheap power. They located with no assurance whatsoever as to available low-cost hydroelectric power. They were located because of the supplies of raw material, competitive freight rates to areas of consumption, an adequate water supply, and convenient disposal of wastes. From an employment standpoint, men

provided jobs in the mills, in the woods, in transportation, and in provision of supplies for these industries far exceed the number that would be employed, for instance, in several modern highly mechanized aluminum or chemical plants.

The point here is made—I want to emphasize this—that preservation of opportunity for full industrial utilization of the natural resources of the area is of greater importance, employmentwise, to western Montana than the attraction of a nebulous industry located, if at all, because of cheap power. Well may the question be asked, Would this area swap these forest-product industries for a Columbia Falls aluminum plant?

Montana wants to be friendly and take a philanthropical attitude toward its neighbor States to the west, but not at the expense of foreclosing utilization of its own natural resources, particularly when accomplishment of objectives which dam advocates have in mind can be achieved by other means; and that has also been discussed this morning.

The imbalance between firm power and seasonal or dump power now prevalent in the coast States by reason of heavy dependence on hydroelectric dams will not be cured by constructing another similar dam. Rather, the imbalance is further aggravated. Resort to thermal or nuclear-generated power is necessarily inevitable to fill in the valleys between seasonal generating peaks at the river plants. Storage of excess runoff, if required, is otherwise available in the Columbia River watershed without severe impacts on the existing economy.

I should now like to be specific about the effect of such a structure on the Northern Pacific Railway. And there has been talk here today of these vested interests disparaging the representations that are made by those who represent profitmaking industries and businesses. Now, the Northern Pacific Railway is owned by approximately 36,000 stockholders, many of which are investment trusts, life insurance companies, foundations, churches, and so on. They represent an enormous number of people; by about 32,000 bondowners that hold the first mortgage on the roads, so to speak. The railroad represents about 32,000 employees that are interested. We are spiked down to this territory; we can't move out of it; we are a part of it. We are going to be dislocated just as surely as Mrs. Stephens is going to be dislocated, and disadvantageously. This is the first time in history that the main line of a transcontinental railroad serving local territory, as well as bridging the transportation gap between the Midwest and the Pacific coast, has been seriously threatened by a proposal that it be subjected to a major and damaging relocation to accommodate a simple water-storage project. It is proposed that the railroad be moved, and at Government expense, from its present secure floor-of-the-valley water-grade location to a line notched into precipitous cliffs of disintegrating rock through numerous tunnels and over long trestles and bridges. Anyone who knows the Clark Fork Valley and who knows that when the floor of the Clark Fork and the Flathead Valley is submerged under several hundred feet of water, the water will not only submerge the immediate valley of the river, it will submerge all the benchland. The only place that remains for a railroad is to get up into the side of these cliffs with great loose rock, slopes, or jutting outcroppings, or across draws, a perfectly hideous place to locate any

railroad. A perilous place; an expensive place. We don't feel, Senator Gruening, that we could ever have a secure railroad at any of the locations that are proposed for us—and regardless of how much money was spent.

We have realized in the last 75 years that the territory between Paradise, Mont., and DeSmet was a very difficult terrain, very difficult rock foundations; and in order to guard ourselves against interruption of service, we went to the expense of building and maintaining continuously two alternate lines out of Paradise—one following the Clark Fork, the other following the Flathead—so that when one is in trouble we can go to the other, and we can shift back and forth. That was the nature of the country and the only reason that we have these two duplicating lines is our realization of the character of that country and the dangers of an interruption to a transcontinental service which is running 20 to 25 freight trains a day and 12 to 15 passenger trains a day. Obviously, as I said, such a line will be hazardous to operate, expensive to maintain, and would require slow speeds over long distances.

Our operating vice president says that from a point east of Arlee until we come back down to river grade at Plains, in the case of the Knowles Dam, our speeds would have to be reduced to about 25 to 30 miles an hour through that difficult country, where we now maintain freight train speeds of around 50, passenger train speeds of 60 to 65. This at a time when we are faced with the keenest competition from transcontinental trucks for fastest service, and here we are located over a stretch of territory where we must maintain slow speeds. And if the Paradise Dam is built and we have to negotiate that 8½-mile tunnel which you see up there on the map, our tunnel speeds reduced to not over 20 miles an hour at the very most. We would probably have to change engines and go to electrical power through the tunnels in order to navigate that long tunnel, which is longer, and through more difficult rock foundation than anything heretofore known in this country.

In other words, I would like to impress the committee with the fact that, besides these economic considerations, we feel that it is impossible for either the Bureau of Reclamation for the Department of the Interior, or the Corps of Engineers, money consideration entirely aside, to give us the type of a line which we demand through this territory.

The Northern Pacific can document the fact that we have cooperated fully with Government agencies without protest in minor relocations to accommodate needed or genuinely constructive river utilization projects. And, if Congress should finally authorize and appropriate the funds for this project, Northern Pacific's effort will still be to secure construction of a new line that will stand the test of time and enable us to continue in peace or in a national emergency to give dependable service. And right there let me say that this type of a line, in thinking back to the traffic that was imposed upon our lines during the last war, it would seem to me as though there is a national defense hazard, both with respect to the reservoir and possible bombing of the dam, but more importantly to the bombing of our line and the interruption of our traffic that would be a tremendous national catastrophe if the line should be interrupted.

The committee should understand that it will be both difficult and costly. Vice President Burgess testified in the Paradise Dam hearing to a Northern Pacific relocation cost of \$156,951,630, and at the Knowles Dam hearing, to an estimated cost of approximately \$114 million, which gives you some idea of the kind of a task that would be imposed upon the engineers who constructed this project.

I now call the committee's attention, and in conclusion, to section 8 of S. 1226, authorizing studies of irrigable arid lands in the Clark Fork-Flathead Basin. The Bureau of Reclamation has made studies of agricultural areas in this region in an attempt to find arable land areas of suitable topography and soil fertility to justify the application of irrigation water. It has failed so far to report any area which could remotely be considered a feasible project under the repayment terms of the Reclamation Project Act of 1939. And I here and now defy anybody to bring forward a report of any Government agency which has studied this area and will name and pinpoint and delineate an area that is a practical irrigation project under the terms of the 1939 act, which provides for the repayment, which provides for the elimination of all excess lands, and so on.

Mr. MacDonald and I, under assignment for many years to locate and promote irrigation development in the territory of the Northern Pacific, have been unable to find an area suitable for irrigation development. We have traveled every highway and byway in this entire area. We know it by heart. We have studied the topographical maps; both of us are agricultural college graduates; we know something about soils. We have spent our life in connection with irrigation projects, and we know of no area that is a feasible project in the area that is proposed to be developed.

The illusion that there are suitable bodies of land adaptable to irrigation development has been assiduously cultivated by advocates of this project for many years. But so far they have failed to identify and delineate any such area. In view of the fact that paragraphs (c) and (d) of this act provide in great detail for the resettlement of irrigation farmers whose lands are submerged, on new lands which can be irrigated, the committee should make searching inquiry as to the existence and availability of such land. No one familiar with the territory believes they exist except in the imagination of the itinerant promoters of these dams.

Senator GRUENING. Thank you very much, Mr. Haw.

Mr. LOMAN. I would like to call James Murphy, from Kalispell.

STATEMENT OF JAMES E. MURPHY, REPRESENTING THE KALISPELL CHAMBER OF COMMERCE

Mr. MURPHY. Senator Gruening, Senator Martin, members of the staff, ladies and gentlemen, I ask that the statement of Robert C. Sykes, president of district No. 1 of the Montana State Wildlife Federation, be included in the record.

Senator GRUENING. I so order. It will follow your presentation.

Mr. MURPHY. Mr. Chairman and members of the committee, I am James E. Murphy, of Kalispell, Mont., representing the Kalispell Chamber of Commerce. It is not our purpose here today to endorse or oppose either Paradise or Knowles Dams as such. It is our pur-

pose to oppose Senate bill 1226 for the reason that we believe this bill to be highly detrimental and dangerous to western Montana.

In February of 1959 the Kalispell Chamber of Commerce adopted a water resources policy which we hope will become a guide and provide standards for all future water development projects in western Montana.

The Kalispell Chamber of Commerce believes that water is the most important natural resource in the Pacific Northwest and especially in western Montana. The growth and development of western Montana has not kept pace with that of our downstream neighbors. Each year the demands for water increase in the downstream States, so that in the foreseeable future these prior rights, established by prior use, may well foreclose Montana's right to the use of its own waters for irrigation and other beneficial purposes and prevent the growth and development of our entire area, since our growth and development will depend in large part upon our right to the use of our waters.

In our quest for protection we ask for nothing that is not fair and equitable, and for which precedents are not already established. Nor do we ask for anything that would in any way jeopardize or impede the progress, growth, or development of our downstream neighbors.

Mr. J. R. Riter, Chief Development Engineer of the Bureau of Reclamation at Denver, probably the foremost authority on depletion and water use in the Western States, estimates that, if all of the foreseeable beneficial uses of water in the upstream States of the Columbia River system were completely developed, the flow of the Columbia River would be reduced by only about 7 percent. With complete development of the upstream area we cannot hurt the downstream States. But unfortunately the reverse is not true, for the complete development of the downstream area, without adequate protection for future beneficial uses upstream, could cut off forever the right of western Montana to develop and prosper.

All of our Western States have as their law the doctrine of he who first lawfully appropriates the water and uses it, obtains a prior right to the use of that water, and this without regard to State lines. So, if a water user in Washington or Oregon establishes a prior right to the use of water originating in Montana, we in Montana would have to let the water go down the river to supply that prior right as against any subsequent need for that water in Montana.

The major part of Montana's growth and development is yet to come. We have only to look at the predictions of world population growth to realize that some day it will be necessary to irrigate every available acre in Montana to supply food for our Nation and our world. But if prior rights, established downstream, prevent us from using our waters for these purposes, then either we let those lands lie idle or we use those waters in defiance of the law, which is anarchy.

We have been asked how in the world could Montana ever be hurt in view of the enormous volume of water carried by the Columbia River system. The answer is simple and lies in the use of those waters for the generation of power downstream.

The main stem of the Columbia River is now plugged with dams. All of the existing power sites are either built, building, or authorized. The only sources for additional power on the main stem of the Colum-

bia are from waters stored in Idaho, Canada, and Montana. Canada has so far been able to say, "Give us protection and benefits or we will store no water." Montana has not been so fortunate. The downstream dams have now acquired a prior right to the use of our waters for the generation of power to the extent of the power they are now producing with the present flow of the river.

If we store water in Montana by which the downstream dams are enabled to generate additional power by the coordinated release of our stored waters, then under Senate bill 1226 they will gain a prior right to the use of our stored waters for the production of the additional power. For example, let us suppose that Grand Coulee Dam is capable of producing 1 million kilowatts of power with the present flow of the river. Then suppose that Paradise or Knowles was built under the present bill. Suppose further that by the release of these newly stored waters during the season of the low flow of the rivers, Grand Coulee became enabled to generate 2 million kilowatts of power. Then, under this bill, which has no provision whatever for the protection of Montana's waters, at the instant water is stored by Knowles or Paradise Dams, we in Montana have lost forever our right to the use of those stored waters, as against the rights established for the production of additional power, not only at Grand Coulee, but at each dam between here and the ocean.

Under this bill we could be deprived of any right to use even 1 gallon of these stored waters for irrigation or any other purpose, on the theory that the downstream dams had acquired a prior right to have these waters stored for the production of power during the period of low flow of the river.

We believe that in all fairness any bill authorizing the storage of water in Montana should contain a provision that Montana's right to the future use of her waters be protected. This protection could be given by a provision subordinating the downstream uses of our stored waters, for any purpose, to the absolute right of the people of Montana to the future use of these waters for all beneficial purposes. That such a provision is only fair and reasonable is made manifest by the fact that by no future use of our waters, now foreseeable, can we deplete the flow of the river by more than 7 percent. Surely no one would deny us the right to such protection at so small a cost.

To assure the future growth and development of Montana we must also be assured of a fair and equitable portion of the power generated by our waters. Here again S. 1226 fails to give us adequate protection. This bill provides, and I quote—

the full amount of at-site power production attributable to the project, or such portion thereof as is required from time to time to meet loads under contracts made within this reservation, shall be made available for use within the State of Montana.

The at-site power of Paradise Dam is rated at 231,000 kilowatts. We in Montana could get this amount of power by a run of the river dam which would not flood Montana's lands, nor cause the disruption that would be created by the high dam for storage. So, in effect, the bill gives us nothing for the flooding of our lands.

If Paradise were built, then after all the dams are in downstream, these downstream dams, located mostly in Washington and Oregon, will be enabled to produce almost 2 million kilowatts of additional

power that they would just never have had without this Montana storage.

By this bill there would be created by the flooding of Montana's lands a lake capable of producing about 2,231,000 kilowatts of power, of which we might get 231,000 kilowatts, if it is not first contracted for sale downstream.

We all know that it may be many years before Montana is ready to use the power generated by her waters. And prior to that time, all this power may be contracted for sale downstream. Under this bill this power could not be recalled for use in Montana when it is needed.

We believe that in all fairness any bill authorizing the storage of water in Montana should provide an absolute reservation for use in Montana of the at-site power and at least one-half of the power generated at downstream plants by our stored waters.

Provisions should also be made that the power reserved may be sold elsewhere until needed in Montana at which time it must be returned for use in Montana, upon some reasonable notice.

That this is only fair and equitable is demonstrated by our negotiations with Canada on Canadian storage. It is almost common knowledge that if Libby Dam, or any other dam storing waters in Canada is built, the Canadians will be given from one-third to one-half of the power generated in the United States by waters stored in Canada.

Surely, if justice and fairplay require that Canada should be given, without cost, a fair share of the power generated downstream by waters stored in Canada, then the same sense of justice and fairplay should require that there be reserved for sale in Montana, a fair share of the power generated downstream by waters stored in Montana.

We do not ask that we be treated as favorably as Canada and be given the power without cost, we only ask that we be given the right to buy, when needed, a fair share of the power generated by our stored waters.

S. 1226 is unfair to the State of Montana in yet another way. This is the failure of the bill to provide for payments in lieu of taxes to the local governments for the property taken from the tax rolls for use in the project for so long as the property is so used. The bill recognizes this basic unfairness, but provides for such payments for only a limited period.

It is our belief that when Montana lands are flooded to provide storage for the generation of additional power downstream, Montana should be compensated for the taxes lost so long as the lands are used for such storage. We believe further that it is only fair that such compensation be made from the revenues derived from the sale of such additional power, since this power could never have come into existence without the flooding of Montana lands. Montana should be reimbursed from these power revenues so long as Montana's lands are used to create such revenues.

In its water resources policy the Kalispell Chamber of Commerce states that it favors the development of all feasible water resource projects to the end that maximum benefits will be realized not only in the State of Montana, but also in the downstream area.

Our policy states our belief that for any project built in Montana reasonable benefits to the State of Montana would include:

- (a) Reservation of the at-site power for sale in Montana.
- (b) Reservation of a reasonable share of the power generated at downstream installations by use of the water stored in Montana.
- (c) Sale of such power downstream until needed in Montana, at which time it could be recalled for sale in Montana.
- (d) Payments in lieu of taxes for property removed from local tax rolls for use in connection with any project.
- (e) Protection of beneficial use of Montana's waters in Montana.
- (f) Protection and enhancement of recreational areas.
- (g) Reasonable protection of fish and wildlife, with the requirement that the feasibility study of any project includes a study of and recommendation on protection of fish and wildlife features.
- (h) Prohibition against diversion of water or power outside the Columbia River Basin.

We have heard advanced here, and at the many other hearings on the subject, the pros and cons of the feasibility and desirability of Paradise and Knowles Dams.

We feel that if there is any question as to the feasibility or desirability of these dams that such questions could be avoided by the choice of other projects in unsettled areas which can be built without disrupting established areas and creating havoc with the economic balance of large segments of western Montana.

Probably the best and most feasible project in the Pacific Northwest is the Glacier View site on the Northfork of the Flathead River. This site could be commenced immediately since no water is backed into Canada. This project could be built without the destruction of any appreciable amount of privately owned property or the disruption of any significant number of people. Most of the storage area is already owned by the United States, there are no railroads or main traffic arteries to relocate, 3 million acre-feet of storage would be provided in the most remote headwaters of the system, which would firm up all possible downstream plants. All this could be done at not much more than the cost of the floodage area and the relocation of the highways, railroads, and utilities for the Paradise site.

In addition to all this, Glacier View would provide another beautiful lake in Glacier National Park which could accommodate additional thousands of people in an area of the park which few people now visit. It would thus relieve the now crowded conditions of the recreation areas of the other lakes in the park and make the western part of the park available and attractive to the thousands of people who visit Glacier Park annually.

All this could be done without setting any dangerous precedent concerning the taking of park lands for other purposes, since the act creating Glacier National Park envisioned such use when a reservation was made in the act of creation for the construction of a reclamation project.

The Kalispell Chamber of Commerce favors the development of all feasible water resource projects in western Montana. However,

we do not feel that any project storing waters in western Montana should be authorized without giving to Montana at least the minimum of protection and benefits.

We believe that the minimum protection and benefits to which we are rightly entitled are these:

1. An absolute reservation for use in Montana of the at-site power and at least one-half of the power generated at downstream plants by our stored waters. With provision that it can be sold elsewhere until needed in Montana, at which time it must be returned to Montana upon some reasonable notice.

2. A provision that payments in lieu of taxes on the taxable lands flooded be made to the State and counties from the power revenues created by the stored waters so long as the lands are flooded.

3. That Montana's right to the future use of her waters be guaranteed by a provision subordinating the rights of the downstream States to the use of our stored waters for any purpose to the absolute right of the people of Montana to the future use of these waters for all beneficial purposes.

4. Protection and enhancement of recreation areas.

5. Reasonable protection of fish and wildlife, with the requirements that the feasibility study of any project include a study of and recommendation on protection of fish and wildlife features.

We thank you for the opportunity of meeting with you. We want to support all projects which can be constructed without detriment to the State of Montana and its people. However, we feel that we are justified in our belief that Montana cannot afford to have built within her borders any further storage dams without at least the minimum benefits and protections which are contained in our water resource policy and outlined herein.

Senator GRUENING. Thank you, Mr. Murphy. I take it that if provisions were written in the bill in accord with the five points that you mention, you would then be in favor of the bill.

Mr. MURPHY. We would have to look at the bill as written.

Senator GRUENING. Well now, that isn't answering my question. Would you or would you not be in favor of it? You have stated five conditions which would make the bill acceptable, and I asked you whether if those provisions were written in the bill, whether you would then accept it.

Mr. MURPHY. Are you asking me as an individual, Senator, or as a representative of the chamber?

Senator GRUENING. I am asking you as an individual.

Mr. MURPHY. Then I am not speaking for the Kalispell Chamber of Commerce now.

Senator GRUENING. Well, speak for yourself in this case.

Mr. MURPHY. I would still be against the construction of these dams, because I don't think they are necessary.

Senator GRUENING. Then in that case, all these arguments you present are meaningless. You say that these provisions must be put in the bill in order to make it satisfactory, and I ask you whether if they are put in the bill it would be satisfactory, and you reply you would still be against the bill.

Mr. MURPHY. Our feeling is that any project in western Montana should include these benefits and that is the position of the chamber of commerce, Senator.

Senator GRUENING. But if they were included you would still be opposed to the bill?

Mr. MURPHY. Now you're asking me as an individual?

Senator GRUENING. I am.

Mr. MURPHY. And I say that I don't think that the projects are necessary, but if they are built, and my opinion is discarded, which it frequently is, then any bills of authorization should include these minimum protections.

Mr. REINEMER. Mr. Murphy, will you clarify one point in this testimony? You say that the bill fails to provide adequately for the payments in lieu of taxes to the local governments for the property taken off the tax rolls.

Mr. MURPHY. Yes.

Mr. REINEMER. Now, section 10 of the bill provides for payment to continue until the value, for payments to these local governments, of the taxable property has equaled not a hundred percent, but 125 percent of the taxable value at the time of acquisition. Now, does that mean that you are suggesting that even after this, the counties getting more from the Federal Government than they originally got from taxes, that this subsidy should continue beyond that time?

Mr. MURPHY. I don't agree with your word "subsidy." I say this payment in lieu of taxes should continue so long as the lands are flooded, and the bill doesn't provide that they will be, that they will be paid so long as the lands are flooded.

Mr. REINEMER. Well, the bill relates to the former tax value. The bill would provide that the payments would be made until the local government was receiving more revenue than it got before the acquisition.

Mr. MURPHY. Well, but it would be deprived of all the future taxes for time immemorial that would be paid if the land were not flooded.

Mr. REINEMER. So this is your position, as stated then in your testimony?

Mr. MURPHY. Yes, sir.

Mr. MAPES. I have a question, Mr. Murphy, concerning your analogy with the Canadian situation, because I have worked on that problem for almost 5 years now. You stated the Canadian position correctly. They desire the at-site power generated by their project plus approximately half of the downstream benefits. I should say that the U.S. view is that half of the downstream benefits will be those derived after the amount invested by the United States to produce them will be repaid to the United States. In other words, the excess downstream benefits will be what will be divided half and half. That is a minor correction, perhaps, but in this case you have the Canadian Government developing Canadian resources as a result of which the United States will profit. In the case of the bill in point, as I understand it, we have the U.S. Government developing U.S. resources, and I don't quite see your analogy with Canada. In other words, is it your position that the State of Montana maintains the same relationship to the U.S. Government as Canada does?

Mr. MURPHY. No. My position is that we are not treated as favorably by the U.S. Government as the Government is willing to treat Canada.

Mr. MAPES. Are you proposing that the State of Montana should build this project with its own money?

Mr. MURPHY. No more so than the Canadian nation would build it with its own money.

Mr. MAPES. But the Canadian nation does propose to build the Canadian projects. That is my point.

Mr. MURPHY. I am thinking of Libby Dam at the moment.

Mr. MAPES. Libby Dam is an entirely separate problem. There has been a proposal for a sharing of the benefits and a sharing of the costs, but with respect to the Mica Creek and Arrow Lakes, the other projects in Canada, they are to be built entirely with Canadian funds.

Mr. MURPHY. Well, but let's limit it to Libby then. Let's make our analogy there. We can't find an analogy that is akin to Mica Creek because there will never be such a thing, but we can find one with Libby.

Mr. MAPES. No one knows, of course, as yet what the decision on Libby Dam is going to be, so I guess there is no sense in discussing that.

Mr. MURPHY. A Canadian addressed our water resources committee yesterday and said there would be an announcement shortly where it would be 50 percent that Canada would receive. I don't know whether he knows any more about it than I do, but at least he predicted that that announcement would be forthcoming shortly.

Mr. MAPES. The other question I wanted to ask you about was the figure of 2,231,000 kilowatts which would result from the Paradise project lake. Could you give us your source for that figure?

Mr. MURPHY. My source is what my estimate is when they get all of the projects in, all the additional generators, that will be available by this stored project, but if my figure of 2 million kilowatts is wrong, then I will accept any figure that you want to give and apply my principle to that figure.

Senator GRUENING. One more question, Mr. Murphy. Under condition No. 4 you ask for the protection and enhancement of recreation areas. How would you spell that out in the bill?

Mr. MURPHY. In this bill?

Senator GRUENING. Yes.

Mr. MURPHY. Well, like, there is no reason for providing fish ladders on this bill because it won't do any good at this site. But we should have a study made of the effect that this dam might have on the spawning habits of the fish.

Senator GRUENING. Well, that is covered in No. 5.

Mr. MURPHY. Yes.

Senator GRUENING. I am talking about No. 4. You say protection and enhancement of recreation areas, and I wondered how you would define your desire in this way and how you would spell it out in the bill. In what way should recreation areas be protected and enhanced? How would you accomplish that?

Mr. MURPHY. I have not applied that to this bill, Senator. I mean I am stating there the policy of the chamber of commerce and I hadn't thought about how you would go about providing recreational areas under this bill.

Senator GRUENING. Well, then you simply feel that something should be written into the bill that would develop the idea of recreation areas further; is that what your thought is?

Mr. MURPHY. That is the position of the chamber of commerce; yes, sir.

Senator GRUENING. Now, No. 5, reasonable protection of fish and wildlife with the requirement that the feasibility study of any project includes a study of and recommendation on protection of fish and wildlife features. Would you elaborate on that a little?

Mr. MURPHY. Whenever a dam is built and a storage area is created, that has an effect upon the fish of that area. In the Flathead Lake, it is believed, although studies have not been completed, that Flathead Lake is to the mountain trout of Montana the same as the ocean is to the steelhead and the salmon, and that they migrate down to the Flathead Lake and then winter there, or spend some time there, and then return up to the upper reaches of the river to spawn. We don't know what effect Hungry Horse Dam has had on the fish in the South Fork area. We feel that there should be a study made prior to the time the project is authorized so that if something is developed that can be done to help the fish problem, that it can be done before the dam is built and before it was rendered impossible to ever do anything about it.

Senator GRUENING. Now, Mr. Murphy, have you read the bill carefully?

Mr. MURPHY. Well, I thought that I had.

Senator GRUENING. Well now, section 4 (a) creates a planning board with representatives of all the various interests, the Park Service, the Forest Service, the Bureau of Sports Fisheries and Wildlife, and they propose to make these very careful studies, and that is pretty well spelled out, it seems to me, especially for the benefit of the people of the project area, including but not limited to the relocation of communities and community facilities, the resettlement of residents, the development of recreation facilities, and the preservation and development of fish and wildlife resources within the project area. Now, it seems to me that covers it pretty well.

Mr. MURPHY. Senator, may I say this: that the fish and wildlife was—well, at least fish was not my primary area of interest, and I would be glad to refer you to the statement of the Montana State Wildlife Federation, the president of district No. 1, who does not feel that the bill is adequate for the protection of fish and wildlife, and I don't propose to be any expert on that, but I do feel that I have studied the bill as to power and water protection and I feel that I am competent to talk on the bill on those subjects, and that is the matters that are of primary interest to you, to me, and I would be very happy to refer you to an expert on fish and wildlife, whose statement I have filed, and who can tell you better than I what the objectionable features of the bill are.

Senator GRUENING. Well, it would be very helpful if you would file for the committee some specific recommendations for language that would meet your objections.

Mr. MURPHY. On the power and water?

Senator GRUENING. On all five of your points. And we might have Mr. Sykes do the same thing on the field in which he is interested, if you are in communication with him, you might ask him to do the same, or the committee will communicate with him.

Mr. MURPHY. You don't feel I have sufficiently pointed out in my statement?

Senator GRUENING. No. I think that you have made some points which I think should be spelled out specifically so that language could be written into the bill, assuming that the committee feels it desirable, that would meet your objections.

Mr. MURPHY. I will certainly convey your desires to the Kalispell Chamber of Commerce, Senator.

Senator GRUENING. Thank you very much, Mr. Murphy.

(The statement of Mr. Sykes, submitted by Mr. Murphy, follows:)

STATEMENT OF ROBERT C. SYKES, PRESIDENT, DISTRICT NO. 1, MONTANA STATE WILDLIFE FEDERATION

My name is Robert C. Sykes and I am president of district No. 1 of the Montana State Wildlife Federation. District No. 1 consists of more than 35 conservation groups, with a membership in excess of 10,000. I appear at this time relative to S. 1228 solely from the standpoint of conservation, and any remarks made herein are to be considered as solely confined to the problems of good conservation.

All that we conservationists can expect or can reasonably ask for is that reasonable and necessary limitations on other uses be definitely established so that fish and wildlife recreations be one of the truly valuable uses of a multiple-purpose reservoir.

It has been said that wherever there has been good conservation practiced, you will find good fish and wildlife recreation, because they go hand in hand. In the past and for the last several years almost all money and attention has been expended and directed in downstream studies of reservoir construction. This has left little or nothing for upstream and headwater studies. Now the attention and need for reservoirs is concentrated in the upstream areas. Therefore, adequate studies must be made now, not after an upstream reservoir is built. Plans must be made now and during construction, not afterwards. Time to prevent or cure an ailment is prior to or during the period of illness, not at the time of an autopsy. The construction of reservoirs in the past have shown many errors and problems that are created by storage dams. Some of these are as follows:

1. Reservoirs are ideally suited for rough fish but not game fish unless considerably more attention is directed to the maintenance of a game-fish population.

2. Fluctuation of the water levels directly affects the habitat, including food supply, which in turn affects the types and amount of wildlife recreation.

3. The blockage of a drainage interferes with the spawning runs of that entire drainage and results in an entirely new fishery problem.

4. The fish and wildlife problems created by a storage reservoir is a continual one and exists prior to, at the time of and after construction of the project and with a considerable continuing expense.

5. Drawdowns from the storage reservoir must be limited in amount and during certain periods of the year in order to maintain a reasonable fish and wildlife use. If this is not done, the expense of maintaining minimal fishery and wildlife recreation is prohibitive.

In the submission of any bill for consideration by the U.S. Congress, it is respectfully requested that the following measures be made a part of any such bill:

1. That provisions be made for the creation and establishment of a definite low-water level below which no drawdown can be permitted, and that fluctuation periods be definitely established in order to give real recognition to fish and wildlife recreation as a part of the multiple use of the project.

2. That a full and complete study be made of fish and wildlife recreational problems prior to the actual construction of the project.

3. That an annual allocation of reasonable, sufficient, and necessary funds be provided for out of operating revenues for fish and wildlife recreation, including the propagation and establishment of such recreation.

4. That all studies of a reservoir, not only be concerned with the project itself, but also the reasonable impacts such project has on the drainage affected by that project.

It is respectfully submitted that S. 1226 be amended to include the above necessary measures in order that the proposed project be a multiple purpose project, giving reasonable and necessary attention to the fish and wildlife use which it so warrants.

We are pleased to notice the provisions for public access and acquiring of public lands for fish and wildlife recreation in S. 1226. We do not feel that the bill as written has the safeguards which are reasonable and necessary in order to give fish and wildlife recreation its proper concept and perspective in a multiple use reservoir.

Mr. LOMAN. I would like to call Senator Bertha E. Streeter, of Lake County.

STATEMENT OF SENATOR BERTHA E. STREETER, LAKE COUNTY, MONT.

Senator STREETER. Senator Gruening, Senator Martin, and staff and ladies and gentlemen, my name is Bertha Streeter, and I am presently county senator and for 14 years I was in the assessor's office. I was elected to that office three separate times for 4-year terms.

When I went into the office as assessor, we had a valuation in Lake County of \$15 million. When I resigned to go to the senate, our valuation was over \$35 million—about \$33½ million, rather, and that growth came from steady, sound basis of improvement and no particular advantages. It was just simply the natural growth of a county that was left to proceed in the growth without any outside interference.

The construction of the Knowles project by the Federal Government would have the same injurious effect upon the tax structure of Lake County as would the construction of Paradise Dam. It would transform a financially sound county and the school districts therein into governmental entities whose revenue would be badly depleted and whose continued existence would be jeopardized. For this reason I am compelled to oppose the Knowles plan just as vigorously as I opposed Paradise Dam at the hearing conducted in Missoula in the fall of 1957.

The present condition of Lake County is fine. The taxable wealth of Lake County has been growing steadily and the assessed valuation of property on the tax rolls reached an alltime high of \$33,529,000 in 1958. The average tax levy is high, however, because, as our commissioner stated this morning, we only assess half of the area of the county. The rest is Federal, State land, Indian tribal lands, but financially this county has gone ahead. We have constructed, built schools, built roads; we have fulfilled all of our obligations, and we are sound financially.

If either the Paradise or the Knowles Dam were to be built, we would lose so much of our taxable property, so much of our valuable property in the towns, that we would be perhaps—undoubtedly, I'll say, the yearly tax loss to Lake County would run right around \$120,000.

Now, the figure I gave you was the estimate in 1958, not in 1959. This \$125,000, to give you an illustration of just what that would mean, that means that every county officer, the budget for all the county offices could be run on what we are losing in taxes. Sixty-five percent of school district 28—and when I say school district 28, that is the largest district, it is a very important district, it contains Ronan, Saint Ignatius, Pablo, Charlo, Round Butte, Moise, Ravalli—65 percent of that budget would be lost because that is in this area affected.

This would be truly a financial loss to Lake County.

In conclusion, it is my firm conviction that the construction by the Federal Government of either the Knowles or the Paradise project would not be in the best interests of Lake County nor of the State of Montana. The loss of local tax revenue would be extremely serious and the lack of revenue from the flooded lands would mean a loss of both Federal and State income taxes. Any in-lieu payments which might be provided by legislation would be certain to be inadequate and could not restore the loss in bonding capacity of school districts which under Montana law is based upon the assessed valuation of taxable property.

This passage, the building of either Paradise or Knowles Dam, would seriously hamper what is now a very fine, prosperous, hard-working county, and proud of the progress that we have made. Thank you.

Senator GRUENING. Thank you very much, Senator Streeter; we appreciate your statement.

(A statement filed by the witness follows:)

STATEMENT BY BERTHA E. STREETER, LAKE COUNTY SENATOR AND FORMER COUNTY ASSESSOR

The construction of the Knowles project by the Federal Government would have the same injurious effect upon the tax structure of Lake County as would the construction of Paradise Dam. It would transform a financially sound county and the school districts therein into governmental entities whose revenue would be badly depleted and whose continued existence would be jeopardized.

For this reason I am compelled to oppose the Knowles plan just as vigorously as I opposed Paradise Dam at the hearing conducted in Missoula in the fall of 1957.

Present condition of Lake County

The taxable wealth of Lake County has been growing steadily and the assessed valuation of property on the tax rolls reached an alltime high of \$33,529,000 in 1958. Lake County has no bonded indebtedness, and the indebtedness of school districts in the county on June 30, 1958, \$585,679, represented less than 2 percent of the county's assessed valuation. The average tax levy, however, for county and school purposes is high, an indication that any appreciable loss in taxable property will seriously impair the financial condition of the county and the school districts.

Impairment of tax structure

The true extent of the loss of tax base which would result from the construction of either the Knowles or the Paradise projects by the Federal Government can be demonstrated by reference to the tax analysis of the Paradise project made in 1957. This analysis disclosed that locally assessed property which would be removed from the tax rolls as a result of such construction had a taxable value of \$500,000 consisting of \$325,000 in real estate and improvements and \$175,000 in personal property. The loss in tax base in Lake County would be the same under the Knowles project as under the Paradise project. Based on 1958 tax levies I now find that the removal of such property from the tax

rolls would mean a tax loss of \$74,250 to Lake County and its political subdivisions.

In addition, the construction of the Knowles project would imperil the continued existence of the Polson branch of the Northern Pacific Railway Co. According to the testimony of railway officials, this branch cannot be operated on the revenue which would be secured from the nonflooded section of Lake County. I estimate that the abandonment of the Polson branch would mean a further tax loss of \$40,144, running the total tax loss to more than \$114,000.

To convey some idea of the importance of this loss to Lake County it should be noted that \$114,000 exceeds the total 1957-58 budgets of the eight principal Lake County elective offices—commissioners, clerk and recorder, treasurer, assessor, district court, sheriff, county attorney, and county superintendent of schools. As another example, it is equivalent to more than 60 percent of the total 1957-58 operating budget of Lake County School District No. 28, one of the districts which would be adversely affected by the project to a serious degree.

Conclusion

It is my firm conviction that the construction by the Federal Government of either the Knowles or the Paradise project would not be in the best interests of Lake County nor of the State of Montana. The loss of local tax revenue would be extremely serious and the lack of revenue from the flooded lands would mean a loss of both Federal and State income taxes. Any in-lieu payments which might be provided by legislation would be certain to be inadequate and could not restore the loss in bonding capacity of school districts which under Montana law is based upon the assessed valuation of taxable property.

Mr. LOMAN. I would like to call Gene Turnage to complete for school district 28.

STATEMENT OF GENE TURNAGE, SCHOOL DISTRICT NO. 28

Mr. TURNAGE. Senators and gentlemen, my name is Gene Turnage. I reside at Polson, Mont., and I am engaged in the general law practice in that city. I hold the elective office of county attorney for Lake County, Mont., and by statute I am the legal representative of school district No. 28 for Lake County.

I have been requested by the trustees to present to you, and to read into the record, the letter which has been handed to the committee. The letter indicates some of the thinking on the part of the trustees of this district.

I might state that school district No. 28 is a large district. It has three major high schools and a number of elementary schools. The high schools are located at St. Ignatius, Ronan, and Charlo.

The board's letter reads:

RONAN PUBLIC SCHOOLS,
Ronan, Mont., December 14, 1959.

HON. JAMES E. MURRAY,
Chairman, Senate Committee on Internal and Insular Affairs,
Senate Office Building, Washington, D.C.

DEAR SENATOR MURRAY: The board of trustees of school district No. 28, Ronan, Lake County, Mont., wishes to call attention to the effects the passage of S. 1226 will have on this school district:

1. Due to inundation 12,873 acres of taxable land in the Moiese Valley will be lost as a source of revenue. Of these, 6,668 acres are irrigated land, 5,696 acres are grazing land, and 509 acres are dry land farming. In this same area are improvements with an assessed value of \$596,447. (The above figures are from Lake County officials.)

2. Currently, 25 percent of the students enrolled in Charlo High School reside in the Moiese Valley and adjacent areas which will be under water. The people of these areas will be forced to move. The resultant decrease in enrollment in Charlo High School could well make the cost of operation of the school so excessive as to be prohibitive. The closing of the Charlo High School

would throw an added student burden on the St. Ignatius and Ronan High Schools, both of which are presently faced with problems of insufficient space. The decrease in the value of property in the Charlo area as a result of closing the Charlo High School would be another significant effect of the passage of S. 1226 on district No. 28.

For the reasons given above, district No. 28 is opposed to the passage of Senate bill 1226.

Respectfully yours,

BOARD OF TRUSTEES, DISTRICT No. 28,
By A. L. COOPER, *Superintendent.*

Gentlemen, in closing I just want to add that the district has been forced to resort to maximum tax levies in order to meet what they feel are the minimum operating standards. Part of the building program of the district has not as yet been paid for. There are some outstanding bonds. Now this, too, undoubtedly would raise a problem if the district's tax base were adversely affected.

Senator GRUENING. Thank you very much.

Mr. LOMAN. Dwight Nicholson of Dixon.

STATEMENT OF DWIGHT NICHOLSON

Mr. NICHOLSON. I am a rancher, gentlemen; I am a rancher in the area that will be flooded, and I haven't heard too many people that are in that predicament as we are there.

My wife and I live on this ranch 4 miles west of Dixon, with a carrying capacity of 150 cows. We have considerable money invested in this operation and we have no desire to sell.

Now, some of the things in this statement have been already spoken of and hashed over, and there is one thing that I would like to especially bring out, and that is the fact that pretty near all of our ranches in our area—now, I'll start from a little ways east of Perma and go clean through as far as the waterline—the water backs up and we are all in about the same position. We have our hay ground on the bottom and our pastureland on the top. Now, if the Government builds the dam, will they purchase just the hay ground and what would we do with the pasturelands?

There are upward of 3,000 head of cattle that run in this particular area and there wouldn't be any place that the Government could relocate that many cattle satisfactorily.

I believe I speak for most of these ranchers in this area and they are against building this dam.

I have a resolution here from the Camas Prairie Grange against the dam, too.

Senator GRUENING. Thank you very much; it will be received and put in the record.

(The resolution referred to and the statement filed by the witness follow:)

RESOLUTION OF CAMAS PRAIRIE GRANGE No. 103

The Camas Prairie Grange No. 103 went on record as opposing the construction of the Knowles Dam project of bill S. 1226, on the Flathead and Clarks Fork Rivers.

Although the people will not be flooded, they think reclamation will propose an irrigation project for the prairie and make them sell their dry farmland to 160 acres, of which they are very much opposed. They also think it would isolate them from main highway and railroad.

STATEMENT OF DWIGHT M. NICHOLSON

My wife and I live on a ranch 4 miles west of Dixon. The carrying capacity is about 150 cows. We have considerable money invested in this operation. We have no desire to move at any price. So much for our personal interest.

Now I would like to say something about this bill, S. 1226, and why some of the sections are not feasible. In section 2(a) it says for the purpose of promoting irrigation and reclamation of arid land. Now I will defy anyone to show me land in western Montana of any amount that could be reclaimed as irrigated land that is not being used today.

Section 10, payment to local government to replace taxes. As far as I know the Government has never replaced taxes on any of their other projects to local governments. But if it is in the bill maybe they will. But will it be just on the land flooded or will they compensate for all personal property. I doubt it.

Section 13, relates to the acquisition of title and the land and payment thereof. I am going to speak for all the ranchers in our community of Dixon area. We are all about in the same predicament. The waterline of the proposed dam would split our ranches in two, leaving us with hill pastures but not a spear of winter feed. That leaves us with a couple of questions.

Bearing in mind the record the Government has up to date on purchasing inundated land which is very poor, would they purchase the entire unit? The only way a cattle ranch can be operated is in a unit. Or would they take just the flooded land? If so a rancher would end up with not enough from his ranch to relocate. This is the problem that the ranchers in the flooded area face.

Now I realize there are people in the area that are for the dam. But from my observation they have little to lose and are expecting a personal gain.

Mr. LOMAN. Mrs. Neild, of Townsend.

STATEMENT OF MRS. EDWIN D. NEILD, TOWNSEND, MONT.

Mrs. NEILD. Senators and members of the staff: I am Mrs. Edwin D. Neild, a resident of Broadwater County, Mont., where I own a ranch which I purchased after my previous property was taken over by the Bureau of Reclamation on account of Canyon Ferry Dam.

I appear here to tell you of the tragic experience which I have had in dealings with employees of the Federal Government who came here to acquire my land.

In our case the Government was neither fair nor honest and we expected fairness from a representative of the U.S. Government. I say this because we were told by Bureau of Reclamation employees at the outset of our dealings that all the landowners under Canyon Ferry Dam would be paid the same price for land of the same kind. This was not true. The Bureau practiced rank discrimination in dealing with the people of Broadwater County.

We were told that if we did not sell voluntarily, our property would be condemned, we would lose possession, and may not be able to recover our money for 20 years or more. Threats were made to us that if we did not agree to sell, our lands would be flooded anyway and we would be forced out physically by the rising water. The experience of some of our neighbors proves that these statements were made to pressure us into selling. These Government people did not tell us that in case of condemnation, 80 percent of the appraised amount would be placed in the bank and would be available to us during the court proceedings.

We were told that the Government appraisers would be thorough and that the appraisal would be carefully made by qualified people. This was not true, and some of the men who were listed as appraisers for our property did not even pay us a visit.

Through all of our dealings, these representatives of the Federal Government treated us in a dictatorial fashion and purposely withheld vital information from us.

After these persistent pressures were brought upon us, we signed a contract to sell our property for \$23,100. In doing so we took a financial beating. Our property consisted of 280 acres of good land with 160 acres under ditch with an almost unlimited water supply from the Missouri River which we could have at no expense, except the infrequent need to make ditch repairs. The balance of our acreage was good pastureland, suitable for early spring use with adequate natural shelter for our stock. We were not paid anything for this water right which was just the same as turning on the faucet when you wanted to irrigate.

We had good buildings, an eight-room house with bath, cement sidewalks, a lawn, trees, shrubbery, bunkhouse, granaries, cattle sheds, and corrals. We were on the mail route and the schoolbus line, an important advantage for our four children.

The price we received included nothing for our excellent water right, nor our forest permit which made our property a good operating unit. In yielding to the pressures and the unfair tactics exerted by Bureau of Reclamation employees, we suffered a serious financial loss, as indicated by the discrimination which was practiced by the Bureau. Other less valuable and less favorably situated properties were appraised by the Government and were purchased by them at much higher prices than were given to us.

To secure relief from the results of this unfair treatment, we joined with 19 other landowners in the valley in a suit against the Government. We lost our suit, and unless relief can be secured from Congress, we are at the end of our legal remedies. That suit was in the Court of Claims.

Out of the necessity of making a living, I have been compelled to use what money I retained from the Government purchase to buy and improve an 80-acre ranch containing only a 3-room house. The water for this ranch is taken from a Government controlled ditch, which costs me nearly \$400 per year. If I were compelled to sell this property today, I doubt if I could get my money out of it.

That is just a brief story of some of my dealings with agents of the Federal Government. It is a record of unfair treatment, discrimination, double dealing and duplicity on the part of Government employees. It may not be a lesson to anyone else, but it has been a tragic and costly experience for me and my family.

I have statements here from people of Townsend, which I would like to submit for the record. They were unable to come. From Mayor Hadley Rice of Townsend; chairman of the Board of County Commissioners of Broadwater County, Mike Massa; Walter Ragen, Townsend cattleman; Herb Gill and Paul Hahn, ranchers whose land was inundated by the backwaters of the dam; and State Senator Lester Goodwin of Broadwater County.

Senator GRUENING. The statements you submit will follow your own presentation.

Mrs. NEILD. And that wasn't all. The reclamation filled this Canyon Ferry Lake this fall to full capacity and flooded some of my land. I had 50 head of cattle trapped in the ice; I lost 8 head. The

rest have shrunk beyond marketing. I lost \$2,700 on that deal; that is, to the Bureau of Reclamation.

The population of Broadwater County is down and taxes are up and the people who tried to get along and trusted the Government men took the worst rooking.

And in concluding, I would like to say to anyone who is here who is going to be affected if this dam is built, watch your step, because the Government men lied to us and they are dishonest and you cannot trust them.

Senator GRUENING. Mrs. Neild, what was the date, approximate date, the year, in which you were first approached with a request to give up your land? Do you remember the year?

Mrs. NEILD. Well, I would say, let's see, this is 1959, possibly it was in 1949.

Senator GRUENING. 1949. Do you remember who was Secretary of the Interior at the time?

Mrs. NEILD. Well, no, I don't. I don't keep track of that sort of thing.

Senator GRUENING. Do you know who was Commissioner of Reclamation at the time?

Mrs. NEILD. No, I don't.

Senator GRUENING. Did you and your group protest in writing at these apparently highhanded actions on the part of the representatives of the Government?

Mrs. NEILD. We did. I wrote to our Congressmen, and that was how we got our case into the Court of Claims was through Congressman Metcalf and Senator Mansfield.

Senator GRUENING. But your case is still before the court, is it?

Mrs. NEILD. No. The Commissioner was right in sympathy with the other Government agency. And I would like to say also that this deal we got killed my husband. He worried about it and he just kept going downhill, and one day he was telling a party what a rooking we had got and he dropped over dead and left me with four small children to support.

Senator GRUENING. Well, we shall follow the progress of your claim with great interest, because apparently you were not treated fairly.

Mrs. NEILD. Indeed we weren't, and I would be glad to give you the names of the reclamation men who treated us unfairly. I can tell you a remark that one of them made if you would like to hear it.

Senator GRUENING. I would certainly like to hear it.

Mrs. NEILD. He came in—his name was Vernon George, and he made us an offer on our farm and my husband went out the door with him, and when my husband came back in he said that Mr. George had said, "Well, when the water gets about ass deep you'll be damned glad to sell."

Senator GRUENING. I think any further information you can give the committee on your experience would be very helpful.

Mrs. NEILD. Now?

Senator GRUENING. Now, or in writing.

Mrs. NEILD. I could talk the rest of the day. And another thing I'd like to tell, after we got this case into the Court of Claims, Mr. Vernon George appeared on the witness stand and told a lot of lies, and when he left he became hysterical from the lie he had told. There

was a Tom Virden there who was to appear. He didn't have the nerve to get up and face us, so he went to Billings, telephoned back his wife was dying of cancer. A plane was taken to Billings from Helena to hear his testimony, and took our attorney, the Government attorney, the Commissioner from the Court of Claims, and our appraiser, Mr. Henry Heibert, and he gave his testimony there, just in their presence. And I am a former nurse; I knew he lied when he said his wife was dying of cancer, and I took it upon myself to find out, and she did not have cancer. She had surgery and at no time was her condition such that he couldn't have left her. He simply lied because he didn't have the courage to get up and face us.

Senator GRUENING. What was his name?

Mrs. NEILD. Tom Virden. And also these men, and there were a number of them who appeared at the Court of Claims, they were drunk every time they walked down the aisle; they smelled just like a distillery.

Senator GRUENING. Well, those who have experienced some of the highhanded acts of the Federal bureaucracies are not entirely surprised. Thank you very much, Mrs. Neild.

Mrs. NEILD. Thank you.

(The statements submitted by Mrs. Neild follow:)

STATEMENT OF HADLEY RICE, MAYOR OF TOWNSEND, BROADWATER COUNTY, MONT.

I am mayor of Townsend, the county seat of Broadwater County, and I am also a businessman in that city. I have intimate knowledge of the effect of Canyon Ferry Dam on the economy of our region. I can say without qualification that this Federal project has done us no good whatever.

It has destroyed the Canton Valley below Townsend, which was one of the best cattle raising area in the State. This valley had good soil, ample water and enough tree and brush patches to provide excellent natural shelter for cattle in cold weather. Today the ranchers of Broadwater County have few places on which to winter their cattle and must furnish them with more feed, which means less profit for them and less business for Townsend merchants.

The population of our city and county is showing an alarming loss at a time when most counties of the State are growing. In 1958, according to the State board of health, the estimated population of the county was 2,600, a decline of 10 percent below the number in 1950. The balance of the State went up 17 percent in the same period according to these figures. Canyon Ferry Dam not only has reduced the land area of Broadwater County, but at the same time, we have lost population.

Although population is down, the cost of government in our county is still going up, just as it is in every other place. The difference here is that the loss in irrigated land has made taxes on the remaining people higher and by reducing business volume, the town tax picture is affected too.

My own business, a hotel and restaurant, has not been much affected by Canyon Ferry Dam, because by advertising the advantages of Highway No. 6 route through Montana, we have been able to keep our tourist business. This is not due to the dam, because any recreational advantages which Lake Townsend may have furnished, are now diminishing and are doing little for business in our city.

STATEMENT OF MIKE MASSA, MEMBER AND CHAIRMAN OF BOARD OF COUNTY COMMISSIONERS OF BROADWATER COUNTY

I am Mike Massa of Townsend, Broadwater County, Mont., where I serve as chairman of the board of county commissioners.

I believe the committee in your consideration of the proposed project here would be interested in the experience of Broadwater County following the construction of Canyon Ferry Dam by the Bureau of Reclamation. This experience is all bad. The construction of the dam and the filling of the lake has

removed valuable agricultural land, farm improvements and farm personal property from the tax rolls of Broadwater County, has adversely affected business here, has increased the costs of local government and has failed to attract any new industry into the county.

The more than 30,000 acres which had been inundated by Canyon Ferry Dam contain the most valuable irrigated crop and grazing land in our county. When the dam was first under consideration, it was estimated that the loss in the tax base would be about 7 percent of the total valuation of the county. Actually, the percentage of loss is nearly double this original estimate and land is still being removed from the tax rolls as a result of the dam.

For example, the Bureau of Reclamation has recently instituted condemnation proceedings against a number of ranchers whose land is being ruined by seepage from the lake. There is nothing to prove that this seepage will not continue and make valueless other lands which are now on the tax rolls.

The proposal of the Bureau of Reclamation to irrigate additional acreage in the Crow Creek Valley furnishes little recompense for the huge loss which has been suffered in the valley below Townsend. Only 3,800 on about 12 ranches are now involved in the Crow Creek irrigation acreage. Under the Canton Valley ditches, almost unlimited water was provided at little cost, for from 35 to 40 farms which have now been flooded. In contrast, the farmers in Crow Creek area are irrigating less suitable bench land at an annual cost of \$3 per acre.

The Crow Creek land, which previously was on the tax rolls as nonirrigated tillable land, is now assessed as irrigated land. However, the change has produced a minimum increase in the assessed value of the land and has provided little additional revenue for the county or for the affected school districts. Additionally, not one cent in revenue has ever been paid by the Bureau of Reclamation to Broadwater County or to the school districts on account of the Canyon Ferry project.

The dam has added no new industry to the county and the only visible increase in the tax rolls has been the assessment of one summer cabin.

Had it not been for the construction of the Yellowstone pipeline through our county, our finances would be in extremely serious shape and, of course, the construction of the pipeline is not related to the Canyon Ferry project. Additionally, county and school district expenses have recorded no reduction but, in fact, the construction of the dam has increased some county expenses. For example, the recent flood damaged the county rest home, which has a value of \$75,000, and increased our heating costs and other expenses.

We believe that the ice gorging which caused the Missouri River to flood the rest home, is directly attributable to the creation of the lake behind the dam and the constant slowing down of the water in its passage through the river channels. We have filed a flood damage report which shows that in addition to the damages to the county rest home, damage has been done to some 3,000 acres of farmlands, improvements, livestock and other property in the affected area.

We have received absolutely no assistance from the Bureau of Reclamation in connection with this flooding problem nor have we received any benefits in lieu of taxes on account of the Canyon Ferry project.

STATEMENT OF WALTER RAGEN

I am a rancher in the Townsend area of Broadwater County and while I did not have any property to sell to the Bureau of Reclamation for Canyon Ferry Dam, the flooding upstream on the Missouri caused by ice gorges on the river has seriously damaged my livestock and property. Canyon Ferry Dam is at fault.

My place is several miles upstream from the lake formed by the dam. I originally had some property about a mile from the lake but sold it because I anticipated trouble from seepage from the lake. I now find that my land several miles above the dam is being damaged because of the ice gorges and resulting floods.

This fall I put my cattle in the pasture along the river but when the November freezeup came and the slush ice piled up because the speed of the river was slowed down by backwater from the dam, my land was flooded. My cattle were marooned for days, many of them died and others were injured. I lost 14 head,

had others so severely affected from standing in icy water without food that they cannot be sold now but must be put on feed so that I can sell them in the spring. After standing in water for days or on little patches of land, their legs and tails were frozen and I'm sure some of my bred cows will lose their calves.

Once, in attempting to rescue the cattle, my horse was completely under water when the temperature was 20 degrees below zero.

I have filed an estimate of my flood loss with the Corps of Engineers totaling \$5,585. This includes loss from the death of cattle, shrinkage and loss of sale on 73 head, the value of hay that was fed to marooned cattle, and the extra expense I had.

The ice gorging and flooding on the Missouri is getting worse each time and never in my 62 years in Broadwater County have I seen anything like the November flood. I thought my land was far enough away from the lake to escape damage but now I know it isn't.

At the time of the November freezeup the water in the lake was within 6 inches of the top of the dam, the river was high and there just was no place for it to go. That was the cause of the flood.

I am convinced that if we have another cold spell for 2 or 3 days we would have the same thing all over again.

STATEMENT OF HERB GILL

I am one of the former owners of land which was flooded by Canyon Ferry Dam and I think you will be interested in the unjust way in which the Government treated me and other landowners.

My place consisted of 160 acres, all but 5 acres irrigated with unlimited water under the ditch. It was on a good road in the middle of the valley with mail delivery, school bus, telephone, and electricity. When Mr. George, the buyer for the Federal Government came, he offered us \$25,979, or if we wanted to keep the buildings for salvage, then \$24,771.

This man told us that if we were condemned we would not get more than this and the expense of lawyers and court costs would cut down our payment. He said we might not live long enough to see the case settled.

We were told that if the land were condemned we would be given 60 days to get off the ranch and we could not lease it back. He said if we sold voluntarily we could lease the place for 2 or 3 years during construction. We had cattle and farm machinery and we knew it would be hard to find a place to continue on so we agreed to sell. We paid \$525 a year to lease the place for the first 2 years and \$300 for the last year.

If we had not listened to Mr. George, the Bureau of Reclamation man, and had held on like our neighbors joining us until 1953 or 1954, we would have received double the amount just as they did and more like the amount the place was worth.

Like many others we were not treated fair so we went to court but we lost the case and our attorney fees, too.

STATEMENT OF PAUL HAHN

I am submitting this statement to let you know how difficult it is to deal with employees of the Bureau of Reclamation when they set out to acquire your land.

I had a 1,000-acre ranch in the Canton Valley right in the center of the area to be flooded by Canyon Ferry Dam. I was one of the owners who refused to sell at the original appraisal they placed on my property but instead went to condemnation. To do so I was compelled to pay attorney fees and the other expenses so even then I did not receive what my property was worth.

I refused to sell voluntarily because of the ridiculously low price they offered me. I had 300 acres of cropland with plenty of water under the ditch, and 700 acres of pastureland. This pastureland had open water all year and a good cover of brush with grass for winter grazing. I had Taylor Grazing and forest permits and could go to any place on the unit without being off my property. The Government appraisers allowed me nothing for my permits, nothing for my water rights and insufficient amounts for my land and buildings.

The Bureau people told me as they told others, that the price they first offered me was the highest I would get and that if I went to condemnation it would take 20 years before I would get my money. They did not tell me that in condemnation some of the money would be available so I had to borrow money and pay interest to buy my present place.

During the condemnation proceedings the Government people resorted to all kinds of shady practices. Without my permission they got copies of my income tax return from the Internal Revenue. Instead of using those showing the income from my operations when I was running 1,100 head of sheep in addition to cattle as a basis for value, they used the return after I had sold my sheep. I knew that I had to move and would be unable to run sheep in the future and so I discontinued sheep raising.

They introduced pictures of my old place, taken after it had been used by clearing crews and was in bad shape, and compared them with pictures of my present place after I had purchased it, painted and repaired the buildings, just as you would on any property which would be your future home. They did that to run down my old property in the minds of the jury.

I now have two places, 14 miles apart but can raise no more cattle than I did on the old place and only 120 sheep instead of 1,100. Winter feed now requires 2 tons per cow compared to only one-quarter to one-half a ton before. Now I have to pump water for stock and frequently have to chop ice to get water holes open in the winter in my pastureland. This was not necessary on the other place.

I find now that although my place is 2 miles up the river from Townsend the flooding from the ice gorges due to Canyon Ferry Dam affects me too. During the November flood I lost 9 steer calves when the lower end of my pasture was flooded. The best part of my pasture with the natural cover on it is now iced up and unusable. On the old place blizzard conditions never had any bad effect on my stock.

As a result of Canyon Ferry Dam I lost a good operating unit and in its place I have two pieces of land, 14 miles apart, which carry less stock and are more costly to operate.

STATEMENT OF LESTER GOODWIN, STATE SENATOR OF BROADWATER COUNTY, MONT.

My name is Lester Goodwin, and I am a resident of Townsend, Broadwater County, Mont. I am, and for the last 6 years have been the State senator from my county and prior to that time I served in the House of Representatives. I am also the owner of the River Inn Motel.

It is not my purpose to tell the committee or the people of Lake and Sanders Counties what decision should be made in connection with the proposed construction of the Paradise or Knowles projects by an agency of the Federal Government. However, as a citizen and taxpayer who has suffered and is continuing to suffer from the construction of Canyon Ferry Dam by the Bureau of Reclamation, my experience may be a warning of what you might expect here in western Montana.

The construction of Canyon Ferry Dam has ruined the potential of Broadwater County, one of the best counties in Montana. The water which has been impounded by the dam has flooded the rich Canton Valley and has destroyed thousands of acres of productive crop and grazing land. The income formerly earned in the valley, much of which was spent in Townsend, the county seat, has been lost forever. In place of these lands the Bureau of Reclamation is now attempting to provide pump irrigation in the Crow Creek Valley on less suitable land, where income will undoubtedly be less and costs will be higher. Much of the income produced there probably will go out of the county to nearby towns, rather than into the businesses in Broadwater County, where the property is situated.

We were told at the outset that Canyon Ferry Dam would bring industry to our county and would greatly expand our recreational facilities. It has done neither. It has not brought a single new industry to our county nor has it broadened the tax base of the county one penny.

To my knowledge, only one summer cabin has been established in Broadwater County as a result of the dam, nothing else.

My own business, the River Inn Motel, has suffered and is continuing to suffer extensive damage from seepage and flooding, which is directly attributed to the lake formed by the dam. My motel units are located about 1 mile above

the supposed highest elevation of water back of the dam. Seepage from the dam is spreading and as silt raises the level of the channels through which the Missouri River passes on its way to Canyon Ferry Lake, moisture is creeping into the foundations and floors of my buildings with consequent damage to them which requires frequent repairs.

Ice gorges in the river have occurred with increasing frequency since the dam was filled in 1955, and the recent flooding in November 1959 has caused much damage to my property as well as about \$60,000 in estimated damage to the property of other people in the Townsend area. I repeat that this flooding is attributable to the level of the lake and as silt builds up the speed of the river in the channels is slowed up so that the condition will progressively worsen. This slowing up of the river is a main factor in our ice gorging problem.

I suggest to the people of Lake and Sanders Counties that if the water impounded by the proposed project were to cover your rich valleys and valuable lands, your experience in the future may be as sorry as ours in Broadwater County.

I suggest, too, that the water which is under consideration here is Montana water and that it is one of our greatest assets. Our rights to it should be fully protected so that its benefits, whether they be power, irrigation, or industrial and domestic will accrue to us and not to downstream States.

Senator GRUENING. We have now given the opponents an hour and a half after lunch. We will now hear the proponents, and we will see how we come out.

Mr. MAHONEY. I would like to call Dr. Thomas Payne.

STATEMENT OF DR. THOMAS PAYNE, PROFESSOR OF POLITICAL SCIENCE, MONTANA STATE UNIVERSITY

Dr. PAYNE. Members of the special Senate committee, friends: I am Thomas Payne and am a professor of political science at Montana State University, where I have taught for the past 8 years.

The purpose of my statement before your committee is to urge the prompt construction of a multipurpose dam at the Paradise, Mont., site of the Clark Fork River.

Now, my support of this project grows out of my feeling that Montana and the Northwest generally will benefit in many ways from the construction of a multipurpose project. Of course, I am mindful of the fact that there are many disadvantages, as have been brought out by those who have spoken in opposition, but I think that overall, in weighing the considerations that the benefits will outweigh the liabilities.

Now, in my statement in support of this project, I would like to draw mainly upon my own personal observations and experience over the past 20 years as a student of the TVA, which I have had an opportunity to study and observe closely since 1939 through travel, study and living in the area where I was a member of the faculty of the University of Tennessee.

Now, I believe that the TVA approach can be used elsewhere to tremendous advantage, and I believe that Paradise would be a move in that direction in this part of the country. Let me just briefly list some of the outstanding benefits which have resulted from the TVA operation.

First of these benefits from the TVA experience has been its value to our military and defense needs in the past 20 years. Two of the major installations of the Atomic Energy Commission, the original Oak Ridge operation and the gaseous diffusion plant at Paducah, are located in the TVA area and served by huge quantities of TVA

power. Indeed—and this is not, I think, commonly realized—more than one-half of all the power generated by TVA is being used for purposes of national defense. TVA has demonstrated its capacity to meet the power requirements of the defense effort at much lower costs than those afforded by the private utility industry in that particular vicinity.

One would have to see the river traffic on the Tennessee today to believe it. As a result of the providing of a 9-foot channel from the mouth of the river upstream for some 650 miles to Knoxville, the ton-miles of freight carried on the Tennessee River has increased from 33 million in 1933, when the TVA began, to more than a billion last year. This has helped bring relief through lower freight rates to a section long plagued with high transportation costs. Incidentally, this is one of our problems in western Montana.

Flood control has been another major benefit resulting from the building of the TVA. A flood such as that which devastated Chattanooga in 1867 is no longer possible because of the storage capacity of TVA, and a flood of proportions of that of 1867 would cause \$100 million of damage in Chattanooga alone. The storage capacity of TVA can also do much to lessen flood damage on the Mississippi, reducing the crest on that stream by as much as 4 feet and sparing up to a million acres of fertile Mississippi Valley land from inundation.

Among those benefits which have resulted from TVA, few are more impressive than the ones in the field of conservation. The basic gain has come through holding the water back on the land through storage and through better methods of contouring and cropping introduced by TVA. The river which long ran muddy and sluggish now flows clear, no longer a villain carrying away the region's irreplaceable topsoil, but a friend working for all. The hillsides, once ravished by erosion and stripped of their fertility, are lush and green again. You have to have visited the TVA 20 or 25 years ago and again now to appreciate this. An unbelievable miracle has occurred before the eyes of all who would see in less than a generation.

I shall not dwell at length on the power benefits, because I believe that preoccupation with the public-power issue has detracted from the many other TVA benefits. Figures on file with the Federal Power Commission do show conclusively, however, that TVA operating costs, excluding entirely from consideration charges for taxation, are such that it can produce electric power for about one half as much as the cost to produce private power, a matchless achievement in efficient operation. Anyone who bothers to read the "Engineering News-Record" knows that TVA is building the most efficient steam plants in operation in the world today.

The greatest benefit from TVA has been in the economic growth and prosperity which it has produced in the region. The per capita income in the TVA area increased from 40 percent of the national average in 1933 to 60 percent in 1953, and is still growing. It seems to me that this is especially significant in light of recent figures which show that Montana is one of two States which have fallen behind the national growth in per capita income since 1953. The region which paid slightly in excess of 3 percent of all income taxes in the country in 1933 now pays more than 6 percent of the Nation's revenue. So that you might say that TVA has simply paid for itself through the

increase in taxes collected in the area alone, if we exclude all of the other revenues.

Senator MARTIN. I don't follow the analogy of TVA with the project here before us—the matter of navigation and flood control. I am a little bit familiar with the history of TVA. I was on the Military Affairs Committee 21 years ago, House of Representatives, and we had jurisdiction over TVA, and there was a very considerable portion of TVA based upon navigation need and a very considerable portion on the matter of flood control. While I am not questioning your report on TVA, I made a statement at the outset of this hearing that I wanted some further discussion, some very thorough discussion, of the matter of multiple purposes involved in these two dams we have under study here. I couldn't make the connection, knowing what I do about TVA, between these projects and experience we had in building TVA, based as it was on flood control engineering as the original prime cause for the creation of TVA, and on the matter of navigation, which is, of course, as you have described very well, a very great factor through that river system.

Dr. PAYNE. Well, Senator, I am not an expert on the Columbia proper, but it is my impression that the construction of the series of storage dams which already are under construction or will be constructed will result in stabilizing the flow of the Columbia to the extent necessary to insure a higher minimum depth channel for navigation and will also insure more adequate flood control on the main stem of the Columbia than is now possible.

As I understand the Columbia, the greatest percentage of the runoff comes in a very brief period, and to me the overriding principle of TVA has been the fact that the river has been held back and has been released throughout the year, and that this process, this unified, multiple-purpose, approach has brought values, many values, and it seems to me that we are moving slowly in this direction.

I am not saying, I am not advocating at this moment a CVA, but I am suggesting that the construction of further storage facilities on such tributaries of the Columbia as the Clark Fork will in time achieve in this area and the whole region, not, of course, necessarily in western Montana, the same benefits basically, although certainly our problems are different in that we have irrigation needs, whereas in Tennessee, with its rainfall, there is no problem of that sort.

I am simply suggesting that this overall principle of the multiple-purpose approach to the development of the region can be achieved in Montana and the Northwest through the Paradise project and that we can realize tremendous benefits for the whole region and, incidentally, of course, for western Montana through this process of development. I think it is very noteworthy that at this moment there are 15 projects going on around the world at least which are in part implementing the TVA principle, and it seems ironic that what most foreign observers who come to the country regard as one of our major achievements of the last 50 years is so ignored generally in this country. This is the reason, sir, why I felt that we should relate this experience in the broadest terms, at least, to what is proposed here, although I realize we are talking here about a single specific project.

Senator MARTIN. Yes. That is my point, as to this particular project before us, the part played by navigation problems and by flood control is completely different than we had in TVA.

Dr. PAYNE. I agree that our problems——

Senator MARTIN. We need to know as nearly as we can how great a bearing flood control and navigation and other multiple uses have upon this particular project. We are here trying to study a project. I am not trying to take a new course on TVA and not especially to carry it over to this when I know from my brief observation here there is a very considerable difference in the proportion of those multiple-purpose items involved. The Government, that is the Federal Government, had a very great percentage of responsibility in TVA based upon the navigation and the flood control, as well as other multiple purposes, and that made it possible there to divide up the allocation of costs in a way that probably couldn't be approximated in this.

Now, that involved tremendous proportion of cost there due to navigation and flood control, and those projects, those efforts were, of course, primarily the responsibility of the Federal Government. There is a difference of opinion in the matter of power potential, very definitely, all over the United States, but in matters of navigation and in matters of flood control, the Government has a very real responsibility that they must meet because it cannot be met equally by other agencies.

Dr. PAYNE. Well, I am sure, Senator, that the specific allocation of cost in the Northwest would differ from TVA but I am not in a position to know. I am sure that your engineering experts can give you a much better idea on that, but I do argue very strongly that in time the same basic unifying theme of river development in which the resources of the river are used for the benefit of the whole country as a national resource can be applied in the area; that is, the principle can be applied in the area, and I believe that Paradise is part of an integrated development of the river resources; and personally, I don't feel that the power issue is nearly as important as a great many of the people on both sides do here.

Certainly this is again a matter of personal opinion, but I feel that all of the other benefits in time will be greater, and this is why I wanted to make the statement I did.

Senator MARTIN. Well, I wasn't questioning your right to make your statement and present your views. I only wanted to let you know that I, for one, am going to try to avoid drawing a complete analogy of TVA to the project here before us, because they are so different. I had a very close relationship with TVA over the last 21 years and had the advantage of having a very close personal friend in the role of consulting engineer on the flood control end of the Tennessee River. He left the University of Iowa faculty while he was on the city council and while I was mayor to go down there in that role back in 1934; so I just didn't want to take TVA hook, line and sinker and apply it to this project before us.

Senator GRUENING. Dr. Payne, these 15 river development projects in foreign countries that you refer to, are those part of our foreign aid program?

Dr. PAYNE. Some of them are and some of them are being developed, I believe most of them are being developed primarily through the countries in question themselves. I am not familiar with, in detail, with all of those at all. I am just quoting some recent figures that I saw. I have the impression that we have given technical as-

sistance. For example, I know that Mr. Clapp, the Director of TVA, spent some time in Jordan in the Jordan River development, which is modeled or will be modeled I understand, in some respects, after the TVA development.

Senator GRUENING. We are also giving them financial assistance?

Dr. PAYNE. Yes.

Senator GRUENING. I wondered whether you saw any inconsistency in the financing by American taxpayers of these river projects in foreign countries and the great difficulty in securing any new starts in the same field at home.

Dr. PAYNE. Yes, I see your point, that we are willing to pay for projects abroad but we don't want to spend any money to build them in our own country.

Senator GRUENING. That seems to be correct at the present time.

Mr. MAHONEY. Mr. Gus Norwood.

STATEMENT OF GUS NORWOOD, EXECUTIVE SECRETARY, NORTHWEST PUBLIC POWER ASSOCIATION

Mr. NORWOOD. Mr. Chairman and members of the committee, my name is Gus Norwood; I serve as executive secretary of the Northwest Public Power Association, headquarters in Vancouver, Wash. I have been with this organization for the past 12 years. The association consists of 105 consumer-owned electric systems which serve approximately 2 million people in the States of Alaska, Washington, Idaho, Oregon, and Montana, and includes most of the cooperatives in Montana and most of the public power systems in Alaska. Our systems have a great stake in the Federal power programs because we purchase approximately \$25 million worth of electric power from the Government each year.

Together with the revenues which we pay into the U.S. Treasury, this \$25 million, the entire Bonneville system receives some \$66 million a year at the present time to repay the Federal investment and the operating costs. This is well over a million dollars a week, and even on the day of this hearing the Bonneville Power Administration is receiving \$150,000 worth of revenue from the power business. This is a big business, and in the 20 years that it has been in operation, the U.S. Treasury has received some \$600 million for power revenues in the Pacific Northwest.

This power, of course, is not subsidized. We are required to pay interest on the investment and the operating costs and repay the cost of the dams over a 50-year period, insofar as the power investment is concerned. In our region we get very little allocated to purposes other than power. Power is paying about 80 percent of the total project costs, and in some projects like the Chief Joseph Dam it is almost 100 percent.

When the chief engineers decided to review the 308 master plan for the Columbia River, there was set up in the Pacific Northwest a general advisory committee in 1955. It was my privilege to serve on the general advisory committee to the North Pacific engineer, which worked over the 308 review report, and at that time I became quite interested in the Paradise Dam issue. I think the statement was made here earlier that the Paradise Dam was rejected by the Corps

of Engineers in 1948. This is not exactly correct. The Corps of Engineers in 1948 did not recommend the Paradise Dam at that time, but they indicated that in the event that the storage proposed in the main control plan would be insufficient, then the Congress might consider four alternative projects as substitutes for such storage, and the Paradise Dam was one of those four proposed projects. So even in 1948 the Corps of Engineers did consider the Paradise projects as one of great merit.

The problem in the Columbia River Basin is one of a considerable amount of water and a great lack of storage places by means of which to control that water. We have as much water as eight Colorado Rivers or five Missouri Rivers. But when it comes to storage, we cannot see the possibility of doing more than perhaps controlling the maximum flood to the 50 percent mark. Our official goal for reducing the Columbia River floods today is to reduce it to two-thirds, reduce the flood from 1,240,000 cubic feet per second to 800,000, and this can be done with about 18 or 20 million acre-feet of storage. To reduce this flood to the further goal of 600,000 cubic feet per second requires an additional 15 million acre-feet of storage. And we are on record in favor of this additional amount of storage. We consider the old flood control goal as being insufficient.

The Corps of Engineers indicates in its report that eventually this additional amount of storage should be achieved, so I would like to correct the record again that 18 or 20 million acre-feet of storage is not sufficient in the region and that the Corps of Engineers itself is aiming at about 33 to 35 million acre-feet to reduced the flood level to 600,000 cubic feet per second.

But already evidence of further and improved thinking is showing up. Within the last 2 months the Columbia Basin Inter-Agency Committee issued a report looking at 52 million acre-feet of storage in this Columbia River Basin, and analyzed the power system in terms of that amount of storage. And it found that with that amount of storage we could proceed with the construction of a third and fourth powerhouse at Grand Coulee Dam. We could put in all the generators where there are holes now at the Chief Joseph and The Dalles Dams. So the outlook is for considerably more storage than has been mentioned here today. This includes approximately 20 million to 22 million acre-feet of storage in Canada to make up this list of 52 million.

It is entirely correct, as was stated earlier, that the Hungry Horse project operates only about one-third of the year. The other two-thirds of the year the power comes from Grand Coulee Dam to take care of power loads in Montana. It seems to me that this point is exactly what we are driving at, that the at-site power attributable to a project assures Montana of more power than one would obtain if the project were operated in isolation.

The first Hungry Horse project report of 1943, prepared by the Corps of Engineers, said Hungry Horse Dam was not feasible; it would only product 90,000 kilowatts of at-site power, prime power. That was correct, but 1 year later the project was authorized by the Congress because a new analysis was made by the Bonneville Power Administration which showed that by shifting the operation of Hungry Horse and saving the summer floodwater and releasing it in the

winter, that Hungry Horse would be able to add over 800,000 kilowatts to the prime power capabilities of the region. This figure was conservative. It is already at 860,000, and when all the downstream dams are in, the Hungry Horse prime power addition to the region will be about a million and a half.

The Montana reservation from Hungry Horse power is now about 220,000 kilowatts, and that can be increased in future years as more downstream projects are constructed. The same applies to Paradise Dam. The Paradise project roughly may be described as two Hungry Horse Dams. There is one slight disadvantage to Paradise as compared to Hungry Horse, and that is the attitude that the downstream benefits from Paradise are not quite as dramatic as at Hungry Horse. They are nonetheless considerable and will be actually greater than the power to be generated at the project itself.

I would like to pick up a few points that were made in the course of the day. The statement by Dr. Pearl that the region has a power surplus until 1970 was a misquotation. Dr. Pearl's statement is we have a power surplus until 1963. In a critical water year, therefore, we will have power shortages, so we are attempting right now to find new power resources to fit into the regional picture starting in 1963. It takes us an average of 5 to 6 years to build a small project. Bigger projects may take 7 or 8 years. So the Paradise project couldn't possibly be built before 1963 and would come in much later than the present surplus can last.

A number of points were made about lack of irrigation studies in the Pacific Northwest in the Clark Fork Basin. The record should show that there are studies in this basin. It is true, the irrigation would not stand on its own feet under the 1939 Reclamation Project Act. It must be subsidized, and it is true of practically any irrigation project in the future, but there are project reports on Cambridge Bench, the Flathead and the Bitterroot that I know I have on my own shelf. These projects, if assisted with power revenues from the Paradise project would provide opportunities for the 70,000 acres or so of new irrigation which the project should be able to bring in, and it might be more.

I must take exception to the Northern Pacific's statement that they support water resources projects in other areas. We have just listened to all their testimony against navigation development on the Columbia River. They bitterly opposed the 308 report for improving navigation in the Columbia River, particularly the Ben Franklin project. Incidentally, the Northern Pacific Railway has the presidency of the Seattle Chamber of Commerce and they use the Seattle Chamber of Commerce to take the position against navigation on the Columbia River in the State of Washington.

With respect to the charts which were shown here earlier today, that these projects would result in deficits to the Government, I think we must take exception. The assumption of 5 percent interest is particularly interesting in this regard. Because the Government at the present time charges 2½ percent interest to these projects. Let's just take 5 percent interest and apply it to Hungry Horse Dam and see what happens. Hungry Horse now costs us about \$3 million a year to operate. The interest is 60 percent of cost, about \$1,800,000.

If you jumped that interest from 2½ percent to 5 percent, you must get an additional \$1,800,000 of revenue. And that increased the cost of power from Hungry Horse Dam by 60 percent. This is obviously enough to make the project unfeasible.

The interest rate is one of the determining factors, not only in setting the price of power, but in determining whether the project is feasible at all from a comprehensive development standpoint. With low-cost money you can squeeze a river much better, you can get more comprehensive development.

We have also known, for example, in the Hells Canyon case, that conventional financing would not, could not result in comprehensive development of the middle Snake River. Either the Federal Government was going to build a Hells Canyon Dam or it would not be built. The same is true of Hungry Horse.

This is the kind of a project that very well illustrates the statement that Abraham Lincoln used as a test of good government. He made the statement that the legitimate object of government is to do those things for the people that would not get done at all or would no be done as well by the people in their individual capacities. Hungry Horse Dam is a project that would never have been built except through the leverage of 2½ percent money and that took Federal financing to obtain.

The second exception we take to the charts was on the asset side. The charts overstated the liabilities and understated the assets. It made the assertion that Bonneville power is now selling for 2.4 mills, which is approximately correct. But Bonneville power rates are going up. We expect Bonneville power rates to go up about 10 percent in 1964, and probably another 10 percent when the next rate review follows in 1969. So perhaps by 1970 when this project comes into the picture, the Bonneville rate will be around 3 mills, and probably by 1980 they will be much closer to 5 mills because all the future projects are higher cost, and the only effect of the older projects with their low rates is to delay the day as this cost curve goes up.

I think it should be indicated for the record that virtually all of the recent large private utility projects that have been constructed in the Pacific Northwest in the last decade have been built only as a result of the fast tax writeoff. The Federal Government has poured over a hundred million dollars of subsidy into this region to provide fast tax writeoff at Cabinet Gorge, the Noxon project, and then in the Lewis River area, the Yale and the Swift. These projects were greatly facilitated by Federal subsidy and they were not built on conventional private utility financing.

A point on the Canadian comparison between the request of the Canadian section of the International Joint Commission. We in our country should be perfectly willing to give to Canada half of the downstream benefits, less line losses, less wheeling costs, to get the power back into Canada, and less generating charges for generating the power downstream for Mica Creek Dam, because Canada is going to have to put up some \$200 million to \$250 million to build the project. Canada will pay the interest and the amortization costs for that project. This is an entirely different thing to Paradise Dam. The Government itself would put up the money and, of course, should therefore, and must have, the revenues to carry the interest and principal to insure that the Paradise project is on a self-liquidating basis.

A point on recreation. We have great similarity in these upstream storage projects and recreation. Lake Chelan is the most beautiful lake in the State of Washington. It is drawn down every winter some 20 or 30 feet to make use of two-thirds of a million acre-feet of storage for power purposes. Yet by early June it is right up there where it should be for the recreation season, and it is very good business in that area. Hungry Horse illustrates the same cycle where the water is back up before the tourist season begins.

Senator Martin, I think your questions with respect to the multiple-purpose aspect of this question have not yet been adequately answered; but I think the bill itself, the people that put this bill together, tried to answer your questions to a great extent. For example, we have gone through the Boulder Canyon Project Act and we have noticed how many times people came to the Congress for relief for one mistake or another that was made there. The school districts had to be subsidized; special arrangements had to be made for the town there. So that we tried to get all the lessons in the subsequent legislation that Congress had to pass in going over these projects and put those lessons into this bill.

The Boulder Canyon Act is one example with its many, many amendments. The Garrison Dam gave us a lot of trouble. Hungry Horse itself overlooked the forest road situation, for example, and it had to be worked on very hard by Senator Mansfield, particularly, to insure that adequate forest roads were placed in there. We have never been satisfied with the construction scars that were left around Bonneville Dam and Grand Coulee Dam. This is where TVA has done a much better job.

We have tried by this area planning development idea with its \$5 million fund to insure that the lessons of TVA, the lesson of Boulder Canyon, Garrison, Hungry Horse, and the very bad construction scars at Bonneville and Grand Coulee projects would not occur in the Paradise area.

So we think this bill, while it may appear to be a pioneering bill today, is much more likely to be the pattern of future legislation.

In my testimony I am presenting four amendments which are relatively minor in nature, except one. I would like to emphasize particularly that in connection with the at-site power, we feel that the cooperatives in eastern Montana have just as much right to Paradise power as systems in western Montana, as we know this is not being done at Hungry Horse Dam. Cooperatives of western Montana obtain power from Hungry Horse Dam at 3½ mills; our eastern Montana cooperatives must pay a much higher rate buying power from the Montana Power Co. or from the Bureau of Reclamation. We think that the at-site rate provision can be amended by insuring that power from Paradise will be made available throughout Montana for public irrigation districts, for rural electrical cooperatives and also for Air Force bases, without unconscionable profits being made off that power. I submit that additional amendment in my supplemental statement and will take no further time on it at this time. Thank you very much.

Senator GRUENING. Thank you very much, Mr. Norwood.

(The prepared statement and a supplemental statement of the witness follow:)

PREPARED STATEMENT OF GUS NORWOOD, EXECUTIVE SECRETARY, NORTHWEST
PUBLIC POWER ASSOCIATION

My name is Gus Norwood. For the past 12 years I have served as executive secretary of the Northwest Public Power Association which consists of 105 consumer-owned electric distribution systems serving almost 2 million people in Alaska, Washington, Oregon, Idaho, and Montana.

Our systems have a large stake in the Federal power program as a reliable and adequate supply of power at the lowest possible rates. Last year we paid into the U.S. Treasury over \$25 million for power. Our electric loads are doubling in from 5 to 10 years. We are good customers of the Government.

As recently as November 7, 1959, the board of trustees of the Northwest Public Power Association endorsed Paradise Dam and also adopted a broad "consumer power policy" (exhibit 1) favoring comprehensive development of water resources.

I have read the statement prepared for this hearing by Mr. Roy Bessey. I concur in and support his very good testimony.

WE ENDORSE S. 1226 WITH AMENDMENTS

We endorse S. 1226 with amendments. This bill is unusually well drafted. It is custom tailored to the problems and needs of the Paradise Reservoir area. It anticipates these problems and needs and makes provisions for their orderly handling.

We think our amendments will further improve the bill and might prevent or reduce future problems.

Amendment No. 1.—We recommend that section 2 be amended to make it clear that the Secretary of the Interior is directed to make a restudy and second that he is to follow a standard for the restudy. We propose insertion of a clause after the word "Provided" on page 2, line 13, so as to read: "Provided, That the Secretary is authorized and directed to investigate the alternative projects to determine upon the storage reservoir of the maximum usable and feasible capacity, and that should subsequent investigation * * *"

The phrase "storage reservoir of the maximum usable and feasible capacity" comes from the Hungry Horse Project Act of 1944.

We urge this amendment as a clarification. The bill should make it clear that the Secretary shall make a restudy.

Amendment No. 2.—Section 8 can be amended to advantage to make it clear that if power revenues are to be used for subsidizing irrigation, the amortization of irrigation investment should commence after power investment (interest bearing) has been amortized.

The policy of the Northwest Public Power Association calls for supporting irrigation and for urging for irrigation a coequal status with flood control and navigation. This means that the irrigation investment which is beyond the ability of water users to repay should be handled on a nonreimbursable basis either directly as is done for flood control and navigation or indirectly as by means of application of the interest component. (See exhibit 1.)

Pending the adoption of such a progressive irrigation policy, our second choice is to seek legislation which insures that the burden of the irrigation subsidy does not fall on top of the power rate during the power repayment period, but instead that the irrigation investment is amortized after the power investment is paid off. Otherwise the irrigation subsidy increases power rates during the power payout period.

Our amendments are as follows: At page 11, line 17, after the word "revenues" delete the comma and insert "after the power investment has been amortized."

At page 12 line 8 and at page 13 line 16 delete the phrase "net revenues" and the remainder of the sentence and insert in lieu thereof, "power revenues after the power investment has been amortized."

Amendment No. 3.—Section 9 can be made more explicit and at the same time should assert a longer range point of view as to the service life of such a project as the Paradise Dam and Reservoir.

As was first indicated by the U.S. Senate in the adoption of Senate Resolution 148, the use of a short-range 50-year project life is not entirely satisfactory when applied to vast water resources projects. Accordingly, the Senate ordered the Federal agencies to submit project reports to the Senate on both a 50-year and on a 100-year period.

The purposes of our three amendments to section 9 are, first, to use a 100-year economic service life for cost allocation purposes, second, to adopt a more flexible approach to the flood control allocation, and, third, to adopt a 60-year repayment period for power purposes.

First, at the beginning of section 9 we would insert a new sentence: "The economic service life of the project shall be one hundred years after placing in commercial operation the initial generator installation, and this period shall be used for the purpose of cost allocation."

Second, on page 14 line 24 after the word "shall" insert: "initially and on an interim basis".

This amendment leaves the door open for the flood control allocation to be increased or decreased when the final cost allocation is made.

Incidentally, we like very much the idea of starting out with an initial allocation to flood control which is precise and definite. The experience at Grand Coulee Dam has been sad in this respect because the Secretary of the Interior still has made no cost allocation to flood control. This means that the power user is saddled with an unjustifiable cost.

Third, at the end of section 9 we would insert a new sentence: "The Secretary shall schedule repayment of power investment over a fifty-year period commencing at the end of the tenth year after placing in commercial operation the initial generator installation, *Provided*, That interest on the unamortized power investment shall be at the rate of interest required for the Bonneville project."

AN UNUSUAL PROJECT

Paradise Dam is not a simple project. It is complex. There are problems. It needs and deserves special, custom-tailored treatment.

Our further amendments, we think, are desirable as further improvements in an already well-drafted bill. We are trying to take a long look down the road and insure that we can keep our commitment to repay the reimbursable investment to the Government. We think our amendments are realistic and businesslike.

THE CASE FOR PARADISE DAM DEPENDS ON UPSTREAM STORAGE

Paradise Dam is a critical project in the comprehensive development of the Columbia River because its 4,080,000 acre-feet of usable storage will be doubly useful and needed for flood control and for power.

The Columbia River has a tremendous volume of annual waterflow, second in the United States only to the Mississippi. The Columbia is equal to nine Colorado Rivers or five Missouri Rivers.

But the Columbia River is out of control. It is an erratic river with historical extreme flows at The Dalles of 1,240,000 cubic feet per second in June 1894 and 37,000 cubic feet per second in January 1937. The erratic ratio is 35 to 1. This river is out of control.

By comparison the St. Lawrence River is very steady. In 90 years of record it has never had a maximum flow twice as great as its daily average minimum flow. The key to the St. Lawrence is the regulating or leveling effect of the five Great Lakes.

The Columbia River needs upstream storage in the headwater tributaries near the snowfields to catch the melting snows and store the water for winter power use.

The perfect dam for the Columbia River is Hungry Horse with 3 million acre-feet of storage to catch floodwater in summer and release it as power water in winter. It makes good water out of bad water.

We need 16 Hungry Horse Dams to cut in half the Columbia's maximum flood and to triple the minimum winter flow. This total of 48 million acre-feet of upstream usable storage would reduce the Columbia's erratic ratio from 35 to 1 to 4 to 1.

From a power standpoint we would like even more upstream storage, possibly about 60 million acre-feet but it is highly improbable that we will be able to get that much. With only 20 percent of our more modest goal in sight, we may have difficulty reaching 48 million acre-feet of storage.

The storage picture is presented in our exhibits but may be summarized as follows: We need all the storage we can get. We have none to spare. The simple and direct way to measure the comprehensiveness or fullness of Columbia River development is in terms of the amount of usable storage achieved. We are aiming at 48 million acre-feet as a reasonable working goal.

The case for Paradise Dam, therefore, must be expressed in terms of and must be measured in terms of acre-feet of usable upstream storage.

Its 4,080,000 acre-feet represents almost 10 percent of the region's working goal for upstream storage. We cannot afford to waste or compromise this valuable reservoir site.

TWO DAMS FOR THE PRICE OF ONE

Rare indeed is the opportunity to build a dam below the fork of two rivers so as to achieve two reservoirs and to funnel the waters of both rivers through one powerhouse.

Paradise Dam would create two such reservoirs. It is a strategic location with unusual natural advantages which should be exploited in the interest of fullest development for the maximum public benefits.

Obviously Paradise Dam is cheaper than would be the construction of two dams, one on the Flathead and one on the Clark Fork, but even two dams would not achieve the full head and streamflow regulation which will be achieved by Paradise Dam.

HEARING OF OCTOBER 21, 1957

The Corps of Engineers, having initially omitted Paradise Dam from its 308 review, reconsidered the matter and issued a news release on December 20, 1956.

This led to a public hearing in Missoula on October 21, 1957, at which Paradise Dam received widespread support from the grassroots citizen organizations of Montana and the region. We respectfully request that this hearing record be made part of the present hearing by reference, as well as the following items: "Upper Columbia River Development," hearings by Senate Committee on Interior and Insular Affairs, 1956 and 1958.

"High Dams and Upstream Storage," 175 pages, Montana State University Press, being the proceedings of the second annual water resources conference, at Missoula June 28-29, 1957. We call attention especially to pages 148-164.

PREVIOUS HEARINGS

We find it necessary to take exception to the summary statements made by the Corps of Engineers relative to their public hearings on the Paradise project.

In House Document 531, issued in 1952, the corps stated at page 626 of volume II that opposition testimony at the May 26, 1948, hearing at Hot Springs outweighed the supporting testimony. The statement reads: "Opposition to the project outweighed the support in volume of testimony presented, although probably not in numbers of people represented."

This is a curious conclusion, because it indicates misinterpretation of the Farmers Union and labor groups which represent a great many citizens. Actually the large citizen groups supported the Paradise Dam. The opposing testimony came largely from corporations and their front or paper organizations.

Turning to the Columbia River review report of June 1958, we read at pages 189-191 of volume I a summary of the October 21, 1957, hearing conducted by the Corps of Engineers at Missoula. I attended the hearing.

Although the overwhelming preponderance of citizen representation was on record for Paradise Dam, the Corps of Engineers merely summarized the hearing as involving extreme divisions of opinion.

On record for Paradise Dam were the Montana State Rural Electric Cooperative Association, the Montana AFL-CIO, the Mine, Mill, and Smelter Workers, the Farmers Union, the Committee for Paradise Dam and other groups which, in the aggregate, after deducting duplications, represent from half to three-fourths of the population of Montana.

We challenge the summary statement of the Corps of Engineers.

We have found the people of Montana to be overwhelmingly in favor of Paradise Dam.

The Corps of Engineers has made large claims for their public hearings. I have taken part in a good many. My observation is that the corps does not distinguish between genuine grassroots public sentiment and the canned professional propaganda of an absentee corporation.

At the Missoula hearing the attorneys for the corporations, headed by the Northern Pacific Railroad group, made a most imposing appearance with their bulging briefcases and file cases.

Nevertheless, long before noon of the hearing, more than half the population of Montana was clearly, decisively, and unquestionably on record for Paradise Dam.

In failing to report to the Congress the true and honest import of the October 21, 1957, Missoula hearing relative to Paradise Dam, the Corps of Engineers is not playing fair with the Congress and is running roughshod over both the public interest and the genuine grassroots support for Paradise Dam.

Accordingly, we submit to the committee that the October 21, 1957, Corps of Engineers hearing demonstrated strong grassroots support for Paradise Dam.

COST ESTIMATES

The Corps of Engineers presented cost estimates of Knowles Dam and Paradise Dam in volume V of the Columbia River review report dated June 1958.

The respective cost estimates are \$235,021,000 for Knowles, including \$107,610,000 for relocations, and for Paradise the cost is \$492,262,000, including \$291,170,000 for relocations.

We do not accept these cost estimates, particularly as to relocations. We think the Corps of Engineers is exceedingly generous in providing new and expanded rail and highway facilities. The double railroad tunnel scheme at some \$50 million per tunnel is particularly questionable.

The highway costs also appear unreasonable especially since U.S. 10 must be rebuilt as part of the Interstate Highway System in any event.

An extensive and detailed cost analysis made in 1948, using 1948 prices, came to \$243,462,000 for Paradise Dam, of which relocations totaled only \$80,410,000. The 1948 study included only one tunnel.

One reason for our asking that the Secretary of the Interior restudy the entire project is to obtain a new and independent estimate of the costs.

RAILROAD RELOCATIONS

Western Montana provides a real opportunity for a multiproject approach to the railroad relocation problem.

In volume II of the President's Water Resources Policy Commission report at page 62 is a sketch showing how a comprehensive railroad relocation program in western Montana might save untold millions of dollars.

Some branch lines can economically be abandoned in favor of trucking as is being done at the Oroville Dam on the Feather River in California.

Some main lines can be merged and routed over higher quality, faster, and safer roadbed.

Merger of the Northern Pacific and the Great Northern has been rumored for years and is said to be under current discussion.

Even if the merger is limited to the use of joint facilities, many economies can be achieved. Three railroads operate a joint track between Seattle and Portland.

One of our exhibits consists of a letter to the Corps of Engineers on railroad relocation possibilities.

The Corps of Engineers apparently accepted the full demands of the railroads and used the railroad cost estimates. Here is another reason for a new and independent study by the Secretary of the Interior.

FALLACY IN BENEFIT-COST RATIO

The fallacy in the benefit-to-cost ratio is that it measures a project against the assumption of no development.

It does not measure the proposed project against the standard of full, comprehensive, balanced, multiple-purpose development. It does not measure the proposed project against the conservation test where conservation is defined as the wise use of natural resources for the greatest good of the largest number of people for the longest time.

The Army assigned the Knowles Dam a justification ratio of 2.31 and for Paradise Dam 1.51. Obviously both projects are highly feasible from every engineering and economic standpoint.

But how do they compare from the standpoint of the comprehensive development ratio?

COMPREHENSIVE DEVELOPMENT RATIO

The Army has reported that no site downstream from the Paradise damsite is feasible. Therefore, we can safely use Paradise Dam as the standard for 100 percent comprehensive development.

By this standard how does Knowles Dam compare assuming no further development on the Clark Fork River?

Power output in billion kilowatt-hours per average year is 2.523 versus 4.521, a loss of 2 billion kilowatt-hours per year. The ratio of Knowles to Paradise is 55.8 percent.

Prime power is 697,000 kilowatts versus 1,009,000 kilowatts, a ratio of 69.1 percent.

Power benefits are listed as \$19,692,000 versus \$27 million for a ratio of 73 percent.

Flood control storage is 3,080,000 acre-feet versus 4,080,000 acre-feet, a ratio of 75.5 percent.

Flood control value is \$2,991,000 versus \$3,941,000 per year, a ratio of 75.8 percent.

Total benefits are \$22,741,000 and \$31,129,000, a ratio of 73.1 percent.

The Knowles Dam is a 55- to 75-percent approach. It would sacrifice 2 billion kilowatt-hours of energy per year and the jobs and economic development which this power might bring. It would sacrifice a million acre-feet of storage.

By the test of comprehensive development the Knowles Dam would have a score of only 55 to 75 percent and, therefore, it would never be built. Paradise Dam would and should be built.

We cannot endorse the Knowles Dam because it fails to meet the test of full development. Accordingly, we urge enactment of section 2 of S. 1228 to insure that the Secretary of the Interior make a complete restudy.

SPECIAL INTERAGENCY STUDY

In January 1955 there was issued the "Special Inter-Agency Study on United States and Canadian Storage Projects, Columbia River and Tributaries," 59 pages, 26 tables, 25 charts, and 6 plates. It was put together by the Army, FPC, BPA, USGS, and Bureau of Reclamation.

The apparent purpose was to show "In other words, at the D-level stage, storage projects in Canada will no longer afford a large advantage to the United States" (see p. 6 of summary of above report). This is an anti-Mica Creek Dam report.

In an effort to prove this conclusion the report assumed the existence in the C-level phase of development the completion of both Glacier View Dam and Paradise Dam.

Summary reports containing these conclusions and assumptions were issued as recently at April 15, 1955, and May 10, 1955.

The Paradise Dam assumption served the convenience of the Corps of Engineers in opposing upstream storage in Canada.

However, only a few months later, on September 20, 1955, the Corps of Engineers presented to the general advisory committee on the 308 review report on the Columbia River a list of projects known as group A for early construction which omitted Paradise Dam.

The Army's omission of Paradise Dam from the 308 review report was strongly objected to by the Northwest Public Power Association. Finally, on December 20, 1956, the corps issued a news release that it would consider Paradise in the 308 review report.

Two years later the report came out for Knowles Dam instead.

The entire record on Paradise Dam is one of special interest pressure by the NP Railroad and Montana Power Co. in the face of the engineering and economic facts. It is very difficult for any Federal agency to stand up against such pressure. We appreciate the difficulties faced by the Army and, therefore, we think the Congress must step in and ask for a forthright restudy.

HUNGRY HORSE PRECEDENT

On a previous occasion, in 1943, the Corps of Engineers announced that Hungry Horse Dam was not feasible.

Yet, in barely 1 year's time, the Bonneville Power Administration, Congressman Mansfield and Senator Murray were able to get construction of Hungry Horse Dam authorized for the Bureau of Reclamation.

The Montana Power Co. was opposed all the way.

On another occasion, in August 1949, the Bonneville Power Administration convinced Congress of the wisdom of building the Hungry Horse-Anaconda 230,000-volt line.

These are examples of courage on the part of a militant Federal agency.

Today there is no courageous Federal agency appearing before the committee. The Congress itself will have to carry the ball.

CONCLUSION

We very respectfully urge the committee to report favorably and to urge enactment of S. 1226, preferably with the amendments we have submitted.

Thank you.

EXHIBIT 1

CONSUMER POWER POLICY

PREAMBLE

The local consumer power system has been created by the citizens of the community for the express purpose of supplying adequate electric power, when and where it is needed, at the lowest rates consistent with sound business principles.

Being consumer owned, its customers and its stockholders are one and the same, with the result that it has one master and one loyalty—the community and its citizens. With direct control of operating policy by the people it serves, the local consumer-owned system is in an unequaled position to serve the community.

The rivers of the Nation belong to the people and comprehensive development of these natural resources should bring the American public undiminished benefit of such development. This requires a positive program of public generation, transmission, and distribution reaching all the way to the ultimate consumer whenever and wherever necessary. The gifts of nature are for the people.

POLICY

I. Motto

To provide the best possible electric service at the lowest possible cost, consistent with sound business principles.

II. Purposes of the association

A. For their operations to be outstanding and successful in promoting the public interest, the consumer-owned electric utilities must stand and work together, exchanging ideas and experiences for mutual benefit.

B. When the Northwest Public Power Association was established in 1941, its founders set down these purposes:

1. To form a nonstock, nonprofit corporation for the purpose of rendering to such consumer-owned and operated electric light and power utilities in the States of Idaho, Montana, Oregon, Washington, and Alaska, as may subscribe, technical, legal, accounting, financial, purchasing, and other services and counsel peculiar to the operation of electric utilities.

2. To advocate and promote the highest possible efficiency in organization and operative methods of local consumer owned electric utilities.

3. To render assistance and service to the defense of, or the promotion of, any interest common to its members.

4. To educate its members and the public in the principles and policies of consumer ownership and operation of electric light and power utilities; and to safeguard the principle of home rule. This does not contemplate pecuniary gain or profit to the members.

III. Conservation of natural resources

A. Conservation is the wise use of natural resources to achieve the greatest good for the largest number of people for the longest time. Second only to the development and protection of its human resources, the Nation's foremost task is the conservation of its natural resources.

B. As applied to water resources, the test of conservation requires that each river should be developed on a unified basis under a comprehensive plan. Com-

prehensive plan means the best of alternate plans for projects for improving a waterway to achieve by integrated operation the maximum amount of net public benefits for all public uses during the economic service life of such public works.

C. In order to achieve optimum public uses, river basins should be developed on a balanced, multiple-purpose basis for soil and forest conservation, flood control, reclamation and irrigation of land, improvement of navigation, municipal and industrial water supply, hydroelectric power, abatement of pollution, protection of fish and wildlife, expansion of recreation, maximum aesthetic values, and other benefits.

D. Congress should provide for long-range planning to insure the control and utilization of water resources, as rapidly as they can be soundly undertaken.

E. Congress should provide for more effective administration for financing, constructing, and operating these river projects in the most efficient manner.

IV. Federal power policy

A. Hydroelectric power is one of the foremost and coequal purposes of water resources development.

B. We endorse the Federal power policy as set forth by Congress in the Flood Control Act of 1944 in the following four principles:

1. To encourage the most widespread use of electric energy
2. At the lowest possible rate to consumers
3. Consistent with sound business principles
4. With preference to public bodies and cooperatives.

C. We recognize that the antimonopoly or preference clause is a "home-rule clause" which preserves the right of home rule for cooperatives and local units of government. Since the rivers of the Nation belong to the people, it is fitting that the people should have first call on publicly generated electricity. As owners of the waterpower, the general public has the right to the undiminished benefits of the resultant energy at cost and without the imposition of toll charges and monopoly control.

D. In order to encourage the widest possible use of electric energy and to prevent the monopolization thereof, the Congress should direct the construction of transmission facilities to intertie Federal projects and to transmit or otherwise provide for transmitting such power at our distribution voltages to our local load centers.

V. Public utility responsibility

A. The furnishing of electric energy is the second most important public utility function of government, second only to the furnishing of a safe domestic water supply. An electric utility is a public trust.

B. The local consumer-owned electric system, whether publicly or cooperatively owned, is peculiarly adapted to carry out this public trust. It is democratically controlled and regulated by a local board or council which is responsive to the will of the people. It is oriented to its local community and all earnings of the enterprise remain in the home community and are not dissipated to absentee groups. It is conducted for the longrun future, aiming at complete debt retirement so that the system may ultimately be owned debt free by the consumers.

C. As electric utilities, we must measure up to the four tests of public utility responsibility, which are:

1. To serve all consumers
2. With adequate facilities
3. At reasonable rates
4. Without discrimination.

D. In its fullest sense, the meeting of our public utility responsibility includes the provision of an adequate supply of low-cost power for the promotion of industrial development and opening of new job opportunities for a growing population. To this end we endorse the policies of the Employment Act of 1946.

E. We recognize that the conservation of resources and providing of an adequate supply of low-cost power is essential for the healthy growth of our peace-time economy.

F. We likewise consider an adequate supply of electric power as a critical element in the national defense. Any shortage of power in any area of the Nation is an indication of military weakness and unpreparedness.

VI. Power business is public business

A. Power business is public business because it involves the conservation of the Nation's resources, including the hydroelectric, atomic, and fossil fuel energy resources.

B. Power business is public business because it provides an essential public utility service.

C. Power business is public business because a greater supply of low-cost power can do so much to increase the Nation's productivity and standard of living of the people.

D. Consumer-owned power utilities have a responsibility to establish high standards of performance and yardsticks to insure that the benefits of the Nation's public resources flow undiminished to the ultimate citizen owners.

CONSUMER POWER PROGRAM

The test of good legislative policy is that it be in the public interest and be workable in practice. Our long-range programs should be able to stand this same test. The following statement of the association's program is intended as a practical implementation of the above policies.

1. Program to increase power supply

A. We favor sound planning and orderly scheduling of new power facilities consistent with progressive load forecasting, good engineering, and the test of comprehensive development. Any project proposed for construction should meet these tests.

B. We favor a positive program for the conservation and development of fisheries, wildlife, and recreational resources of the Pacific Northwest and Alaska, and for adequate research as these relate to the water resources development.

C. Under the principle of comprehensive development of water resources, we have supported Federal construction of the following dams:

Completed:

Hungry Horse
 Detroit
 Big Cliff
 Lookout Point
 McNary
 Chief Joseph
 Palisades
 Dexter
 Chandler
 Albeni Falls
 Canyon Ferry
 Eklutna
 Anderson Ranch
 Roza

Proposed projects:

Hells Canyon
 Glacier View
 Little Goose
 Lower Granite
 Devils Canyon
 Bruces Eddy
 Penny Cliffs
 Upper Scriver
 Lower Monumental
 American Falls powerhouse
 Libby
 Paradise
 Nez Perce
 Eagle Rock
 Blue Lake
 Lower Scriver
 Green Peter
 Burns Creek
 Swan Lake (in Alaska)

Under construction:

Ice Harbor
 Yellowtail
 The Dalles
 Hills Creek
 John Jay
 Cougar
 Fort Peck No. 2

D. We recognize and support the important role of the Federal Government in building the larger facilities and those which involve complex multiple-purpose and other national considerations. Concurrently we likewise support the efforts of our consumer-owned electric systems to build projects which do not involve paramount national considerations. Hundreds of such projects are available for development in our five States.

E. We favor construction of Federal steamplants as required for most economically meeting the load requirements of an area.

F. Federal atomic generating plants: We believe in the continued public control by the Government of the United States over atomic energy and we also urge Congress to authorize the construction of Federal atomic electric generating plants.

II. Federal transmission lines

A. Greatest economy and most effective use of power supply require interconnection of the various electric powerplants within a region and their connection with the various load centers. These transmission lines are the essential generator-to-market roads without which limited groups can bottle up a Federal dam and by such monopoly render it a captive dam whose power must be sold at sacrifice prices.

B. We urge Congress to construct transmission and substation facilities to integrate Federal power projects to achieve maximum firm power and to transmit such power to the load centers of public bodies and cooperatives at their required voltage.

C. We favor the policy of Congress in limiting the marketing authority of Federal agencies to wholesale accounts. Furthermore, we believe that a Federal marketing agency should sell power to private industries within the distribution area of any public body or cooperative only when requested by such public or cooperative body.

D. We urge Congress to enact legislation and we urge the Federal administrative agencies to permit no power sales or exchange contract nor grant any easement, license, or right-of-way over public lands to any private electric company unless the company agrees to make available the excess capacity of its transmission system for wheeling federally generated power to preference customers.

III. Interregional interties

A. We favor legislation including an amendment of the Bonneville Act to limit the use of any intertie to exportable surplus power: that is, power for which there is no market in the region of origin at the time of export. No power should be sold outside the region without the right of first refusal at the same rate within the region. We favor studies by the Bonneville Power Administration for interconnection of the Columbia River power system and the Central Valley project of California, the Missouri River Basin and Canada.

B. We favor studies by the Bonneville Power Administration for the integration of the Columbia River power system and the Upper Snake River system.

C. We endorse and urge Congress to direct the making of a study of a railbelt transmission grid system for Alaska including provisions for power pooling in the Anchorage and Fairbanks areas by interconnecting Federal and non-Federal powerplants and loads.

IV. Upstream storage

A. The Pacific Northwest urgently needs upstream storage projects to catch wasteful summer floodwaters and store them for release in winter when Columbia River flow is lowest and when power need is greatest. Upstream storage can serve the double purpose of flood control and power. Upstream storage can convert useless floodwater into useful power production.

B. We advocate a positive program for constructing upstream storage projects. We recognize that upstream storage is the key to the comprehensive development of the Columbia River for optimum public uses. Consistent with the requirements for irrigation, flood control, navigation, and other provisions of law and of FPC licenses, comprehensive development requires and includes both hydraulic and electrical coordination of Federal and non-Federal projects on an assured and predictable basis in the operation of hydroelectric and other power facilities of this region and adjacent regions.

C. We oppose the diversion of the Columbia River into the Fraser River. Instead we urge Congress to expedite negotiations between Canada and the United States looking toward the full development of the Columbia River as a unit for the highest benefit of the people of both nations.

V. Capital budget

A. We urge Congress to amend the Employment Act of 1946 by adoption of a Federal capital budget to distinguish between operating expenditures and capital investments and further to distinguish self-liquidating productive capital investments such as REA loans and Federal power investments.

VI. Irrigation

A. Irrigation is one of the foremost and coequal purposes of water resources development.

B. We support a positive irrigation program in the Pacific Northwest as required by the demand for agricultural produce. To this end we urge investigations and study to determine the long range, economically feasible irrigation potentials as limited by the availability of water and land.

C. We recognize that that portion of irrigation investment which results in direct local benefits should be self-supporting as to operating and maintenance expense and repayment of investment which is within the capacity of water users to repay as determined by the Secretary of the Interior.

D. We recognize likewise that the indirect benefits and some of the direct benefits of irrigation accrue primarily to the national economy similarly to flood control and navigation. These benefits should be treated similarly to flood control and navigation on a nonreimbursable basis. We recommend that Congress do this either directly as for flood control and navigation or indirectly as by application of the interest component.

VII. Rural electrification

A. We urge Congress to make available adequate appropriations for use as capital loan funds to REA borrowers including loans for generation and transmission cooperatives, and adequate funds for administration and for research in power use.

B. We recommend amendment of the REA Act to permit a 50-year repayment period when funds are used for longer life projects. We believe REA will function in the best public interest as an independent agency with budget and appropriations review by the congressional agricultural appropriations committees. We oppose any attempt to increase the REA interest rate above the present 2 percent level.

VIII. Program to insure electric power at cost

A. We favor financing of Federal power facilities on a self-liquidating basis providing for repayment of power investment together with interest over a 100-year period.

B. We oppose any unjustified increases in power rates over those necessary to meet actual costs.

C. We urge Congress to establish uniform criteria for evaluating multiple-purpose power projects based on actual anticipated service life of each category of investment.

D. Our consumer-owned electric systems pay many millions of dollars in taxes for the support of schools and local units of government. We also reduce the operating costs of tax-supported agencies by providing them with lower cost power and other services. We also stimulate expansion of tax base by encouraging industrial development. We oppose any punitive tax proposals such as one on capital credits of our cooperatives, or a tax on interest on electric revenue bonds.

E. We favor a rate of interest at Federal projects equal to the average cost of money to the Government. When national considerations delay a Federal project, the excessive interest during construction shall not be included as a cost.

F. We endorse the Kerr-Trimble bill in principle as regards the various factors in Federal power rates.

G. We urge Congress and the State legislatures to provide for reimbursement of consumer-owned electric systems when they must move poles incident to highway construction.

IX. Regional power agency

A. To open new avenues of agricultural and industrial opportunity and to provide increased employment for an expanding population by accelerating the rate of power development, we urge that Congress create a regional public organization to carry forward the northwest power program.

B. We oppose the present draft of the proposed interstate compact involving the control or allocation of electric power in the Pacific Northwest.

C. We endorse the Hoover Commission recommendation to transfer navigation and flood-control functions of the Corps of Engineers to the Department of the Interior. We further urge that the Department of the Interior be reorganized as the Department of Natural Resources.

X. Program for sound regulation of private utilities

A. We recognize that private electric companies in performing public utility functions are operating as monopolies under special privileges granted by the

various units of government. They are given governmental power to condemn private property; they are granted franchises and certificates of convenience and necessity and are given the use of highway right-of-way.

B. We recommend that Congress order an investigation of the electric utility industry in the following respects:

1. To determine the effectiveness of Government regulation.
2. To determine the extent of propaganda, political and lobbying activity of the private electric companies.
3. To determine the efforts being made by the companies to thwart and discredit consumer-owned electric systems.
4. To determine the extent to which the Public Utility Holding Company Act has been carried out by SEC.
5. To determine the extent to which the industry is meeting its public utility responsibility.

C. We oppose the merger of private utility corporations in the Pacific Northwest as being contrary to the public interest and as encouraging monopoly. We oppose any amendment to the Public Utility Holding Company Act of 1935 which would exempt from regulation such proposed supergenerating corporations as the Pacific Northwest Power Co.

D. We urge Congress to direct the Federal Power Commission to require accounting adjustments removing from the utility rate base all net plant investment which has been written off under accelerated amortization and liberalized depreciation. We also urge Congress to investigate SEC, FPC, and the Bureau of Internal Revenue in regard to lax accounting and tax administration involving private utilities.

E. We urge the improvement of corrupt practices laws so as to prohibit the use of ratepayer funds for lobbying, propaganda, political activity, and to influence elections on the part of private electric corporations.

XI. National defense

A. We believe that this Nation, strictly from concern for national defense, should always have a reserve of at least 15 percent above peakloads. We deplore the lack of a national military policy providing for adequate power supply. To correct this deficiency we urge that Congress by law require the Secretary of Defense to conduct continuing surveys of our energy requirements for war production and to make annual reports to the President and Congress with recommendations for meeting such electrical requirements. Reserve power capacity is as necessary for national defense as any stockpile of a commodity which would be in short supply in event of war.

XII. Program for benefit of member systems

A. Consumer-owned electric system must stand and work together, exchanging ideas and experiences for mutual benefit. To assist in the achievement of this goal, the association offers the following:

1. The association conducts an annual 3-day convention for policymaking and management officials, an annual 1 week meter school cosponsored with Oregon State College, and three workshops of 2 days each by the power use section, accounting and finance section, and engineering and operations section. Bound copies of the workshop proceedings are provided for the entire membership. The association has general committees, chief of which are the wholesale rates and the legislative committees.

2. The chief vehicle of communication is "The Pacific Northwest Public Power Bulletin" which reaches 3,000 leaders in the field monthly. We also publish an annual "Electric Power Directory" and mail considerable miscellaneous literature. The annual wage survey is a major project which is quite popular.

3. The NWPPA office has a staff of four. It is primarily a research center with extensive library and files on electric power matters. The member systems set the association policies. The board of 25 trustees determines the budget and association program.

XIII. Achievement awards

A. To encourage the most efficient operating practices and excellence of engineering in electric generation, transmission, and distribution, and in order to honor the foresight and abilities of Mr. McGuire for his contributions to the ideals of consumer-owned power systems, we hereby establish the "Milton Hunt McGuire Engineering Achievement Award."

B. The membership has authorized a utility award for those Pacific Northwest consumer-owned utilities whose average residential rate for any calendar year

is 1 cent or less per kilowatt-hour. As of May 25, 1959, there were 23 qualifying utilities:

Canby	Tacoma
Cascade locks	Lakeview Light & Power Co.
Cheney	Salem Electric
Drain	Vera Irrigation District
Eugene	Benton County PUD
Forest Grove	Clark County PUD
Grand Coulee	Clatskanie PUD
McMinnville	Cowlitz County PUD
Milton-Freewater	Grant County PUD
Monmouth	Grays Harbor County PUD
Richland	Northern Wasco PUD
Seattle	

XIV. The test of public interest

A. Consumer-owned power systems have had a profound effect upon the industry, acting as a bridge between the people and their natural resources. These systems have served as a yardstick of performance in low rates, good service, rural electrification, and responsiveness to the public will as well as advocates of sound conservation and comprehensive development of natural resources.

(Revised and adopted Nov. 7, 1959, by the Northwest Public Power Association.)

EXHIBIT 2

SPECIAL REPORT ON MULTIPLE-PURPOSE STORAGE POSSIBILITIES, CLARK FORK RIVER BASIN

Boise, Idaho, February 1953

DEPARTMENT OF THE INTERIOR,
BUREAU OF RECLAMATION,
REGIONAL OFFICE, REGION 1,
Boise, Idaho, February 1953.

To: Commissioner, Bureau of Reclamation.

From: Regional director, region 1.

Subject: Special report—multiple-purpose storage possibilities—Clark Fork River Basin.

SUMMARY

The principal purpose of this report is to pin down those multiple-purpose storage possibilities in the Clark Fork River Basin which merit further consideration in meeting near-future storage needs. The report also contributes to an investigational responsibility assumed by the Department of the Interior in connection with the coordinated plan for development of the Columbia River Basin.

The report presents a summary analysis of storage possibilities in the Clark Fork Basin drawn largely from previous investigations, but supplemented by some additional reconnaissance studies. Prior investigations have been made by the Bureau of Reclamation, the Corps of Engineers, Geological Survey, States, power companies, and others. These studies are summarized in reports by the Bureau and the Corps.¹ In the coordinated, comprehensive plan for development of the Columbia River Basin, developed by the latter agencies and embodied in the agreement signed by the Secretaries of the Interior and the Army in April 1949, the superior storage sites singled out in the Clark Fork Basin were those known as Paradise on the Clark Fork River and Glacier View on the North Fork of Flathead River, a principal tributary of the Clark Fork.

It was recognized in the plan that storage in at least the amount available at the smaller of these two sites (Glacier View) was requisite to achieve minimum, short-term objectives for flood control and power production in the Columbia River Basin. Nevertheless, the construction of a storage dam at neither site was recommended because of strong objections to such use, in part raised by the Department of the Interior. A need was also recognized for steps leading to early development of additional storage at some point in the Columbia River Basin

¹"The Columbia River," U.S. Department of the Interior, H. Doc. 473, 81st Cong., 2d sess., February 1950. "Columbia River and Tributaries," Corps of Engineers, U.S. Army, H. Doc. 531, 81st Cong., 2d sess., Washington, March 1950.

which will have an effect upon floodflows in the lower Columbia equivalent to that of storage at the Glacier View site. The interdepartmental agreement gave responsibility in the search for such possibilities within the Clark Fork Basin to the Department of the Interior by assigning to it investigational responsibility for all multiple-purpose storage potentialities in that drainage area, and in other, specified parts of the Columbia River Basin.

The reexamination of storage needs and storage possibilities made below, involving consideration of more than 20 sites in the Clark Fork River Basin, tends to confirm earlier conclusions. The Paradise site presents the best opportunity, all things considered, for obtaining in the Clark Fork River Basin multiple-purpose storage required for power and flood control purposes in the Columbia Basin. The Glacier View site also presents excellent possibilities. Its storage contribution to near-future needs, however, could be equaled, costs permitting, by development of a number of alternative, smaller sites, whereas, duplication of the contribution of storage development at the Paradise site is not in prospect within the basin. Although sites offering physical possibilities for storage comparable in magnitude to Paradise do exist, their development would cause more serious dislocation of the existing economy.

Inasmuch as continuing economic improvements in potential reservoir sites can be expected to diminish the possibilities of storage development still further, the early resolution of problems involved in use of the Paradise site is of first importance. The program proposed involves reconsideration of the Paradise site to that end. Similar reconsideration of the Glacier View site also is proposed. Combined with the reconsideration of the latter, the proposed program entails further investigation of smaller storage possibilities of comparable effectiveness with a view to determining the feasibility of developing such sites prior to Glacier View. Storage on the Middle Fork of Flathead River with possible diversion to the South Fork is one promising possibility which will be considered.

GENERAL DESCRIPTION OF BASIN

The Clark Fork River discharges into Pend Oreille Lake, in northern Idaho. Below the lake the stream is known as the Pend Oreille River.

The drainage basin of the Clark Fork River is a mountainous, upland area of some 22,100 square miles. It lies mostly in western Montana, but includes a small area in Idaho and about 450 square miles in southeastern British Columbia, where the Flathead River rises. The Flathead is the largest tributary of the Clark Fork, contributing about half of the average annual runoff of that stream. Other large tributaries are the Bitterroot and Blackfoot Rivers.

The Clark Fork River and its tributaries drain the western slope of the Continental Divide. All or parts of several Rocky Mountain ranges—including the Mission, Swan, Cabinet, and Bitterroot Mountains—are in the drainage area. Some of the higher peaks exceed 10,000 feet above sea level in elevation, and all of the mountain ranges receive heavy winter precipitation. Thus, snowmelt provides a large proportion of the annual runoff, most of which occurs during the months of May, June, and July as discharges in excess of amounts which can be effectively utilized unless regulated by storage.

Much of the drainage basin is forested, but there also are large tracts of grazing land and some important cropland areas. These agricultural lands are located in part on high plains, but in large measure are confined to a number of broad, extensive valleys. The larger of these include the Flathead, Mission, and Bitterroot Valleys, occupying parts of the Rocky Mountain Trench, and the Missoula, Blackfoot, and Deer Lodge Valleys. Irrigated lands total about 300,000 acres, but except in the Bitterroot Valley and in the Flathead (Indian) project, they lie in small, scattered tracts.

In addition to the agricultural lands, important natural resources of the area include forests, extensive mineral deposits, vast recreational areas, and a large hydroelectric power potential.

The comparatively restricted agricultural lands, transportation facilities, towns, and other economic developments are largely concentrated in the valleys of the basin. Consequently, the development of sizable storage reservoirs is confronted at many potential sites with very serious problems of economic displacement.

NEEDS AND PROBLEMS OF COLUMBIA BASIN

Two facts of utmost importance to development of the water resources of the Columbia River as a whole must be kept in mind when thinking about multiple-purpose storage on the Clark Fork River, which is one of the Columbia's larger

tributaries. These facts are (1) the need for large amounts of storage in order to get full value from the Columbia's water resources; and (2) the diminishing prospect for obtaining the needed storage because of the increasing value of developments which have been, or are being, made in the prospective storage basins.

The need springs from the fact that the natural pattern of runoff from the Columbia River Basin permits the effective use of only a small portion of the flow. The runoff is in large part the result of snowmelt and occurs as concentrated floods each spring during a period of 2 or 3 months. The floods are followed by a long season of low water during the dry autumn and continuing throughout the winter months of general freezeup in the mountain areas. The peak flows of the flood season are commonly 10 times greater than those of the low-water season.

Protection from these floods cannot economically be provided solely by dikes, levees, and other protective measures. Storage is required to catch the floodwaters and hold them for release after the flood peak has passed.

Effective use of the power potential of the river likewise requires a large amount of storage. There is wide divergence between the demand for power and the amount of hydropower which can be produced from natural streamflows. The demand for power remains fairly constant throughout the year, but is normally highest in winter, at which time power-producing stream flow is at its low point. Thus, storage is required to hold the summer flood peaks for release for power production in the winter.

The average annual runoff of the Columbia River is in excess of 150 million acre-feet, and its power potential, due to the relative steepness of its streams, is tremendous. The full regulation of flows needed for full power development, however, would require about 500 million acre-feet of storage.

The Columbia River Basin is not lacking in sites physically suited for such storage development. The problem lies in the fact that the storage basins offering the physically most attractive possibilities have acquired, through economic development of various kinds, such high value for uses other than storage that their large-scale use for that purpose cannot now be seriously considered. It is to be expected, moreover, that continuing developments in potential storage basins will further narrow the possibilities.

Complete regulation of the Columbia even through the critically low-flow years of 1929, 1930, and 1931 when the average runoff was 93 million acre-feet would require roughly 30 million acre-feet of the total required for full control of the average runoff. Development of this smaller amount of storage would require the use of a large percentage of all prospective storage sites in the United States, even on the assumption that an equal extent of storage control would be exercised in Canada, where almost half of the total flow of the Columbia originates.

A lower, initial objective for flood control and power purposes was established in connection with the "main control plan" for the Columbia River. The overall, immediate objective of that plan, formulated in 1948, was to provide storage capable of controlling floods like that which occurred in 1894, the greatest flood of record, to discharges of 800,000 cubic feet per second at The Dalles, Oreg. For this purpose, approximately 27 million acre-feet of storage were found necessary, distributed within the Columbia Basin as shown in the following tabulation:

Storage projects—Main control plan

Site	Stream	Usable storage (acre-feet)
Hungry Horse.....	South Fork Flathead.....	2,980,000
Glacier View or alternate.....	North Fork Flathead.....	3,160,000
Libby.....	Kootenai River.....	4,250,000
Grand Coulee.....	Columbia River.....	5,120,000
Priest Rapids.....do.....	2,100,000
John Day.....do.....	2,000,000
Hells Canyon.....	Snake River.....	3,880,000
Palisades.....do.....	1,200,000
Boise River projects.....	Boise River.....	1,000,000
Payette River projects.....	Payette River.....	1,900,000
Total.....		27,580,000

STORAGE OBJECTIVES FOR THE CLARK FORK BASIN

Two of the main control plan storage projects listed are in the Clark Fork Basin: Hungry Horse and Glacier View or alternate. It was recognized in the case of the latter, however, that alternative storage equivalent in effect might be substituted in another drainage basin for the immediate purposes of the plan. The full, usable capacity of Hungry Horse Reservoir, now nearing completion, will be available in 1953. Hence, additional storage involving the Clark Fork needed for the main control plan is represented by Glacier View or alternate.

The indicated usable capacity of Glacier View (3,160,000 acre-feet), being designed to develop a relatively large amount of long-term, holdover storage, is more than enough to meet minimum needs of the main control plan. From the standpoint of flood control, about 1,800,000 acre-feet of usable capacity would meet those requirements. A reservoir of that capacity would impound all storable flows at the site during the 3 years of low flow in the Columbia River, 1929-31, and yield roughly an average of 1 million acre-feet annually throughout that critical period for power production. Thus, additional usable capacity equivalent in effectiveness to about 1,800,000 acre-feet at the Glacier View site is needed in the Clark Fork Basin, if that basin is to play its part in the main control plan.

More complete control is urgently needed, however, particularly for power purposes, and should be sought wherever practicable. For this purpose, capacity adequate to control flows during the 3-year critical period in the Columbia River would represent a desirable minimum. For the Clark Fork Basin as a whole, the average storable flow during that period amounts to about 7,500,000 acre-feet, of which Hungry Horse Reservoir will provide control for about one-sixth of this amount. The remaining storable flow is about six times that at the Glacier View site. Development of a site need not, and in most instances should not, be limited to storage required for control during the critical period. Recognition of the desirability and need for at least that degree of control in the basin as a whole, however, provides a basis for appraising the aggregate contribution of storage possibilities in the Clark Fork drainage area.

The average annual storable flow during the 3-year period of low flow in the Columbia River also is useful in appraising the relative importance of individual storage sites. It represents the approximate annual yield from storage adequate to control the runoff at a site during that critical period. Higher yields are obtainable, and should be sought wherever practicable, by additional holdover storage to control flows over a longer period. The fact that such increases in average annual yields over a longer period tend to be relatively small in relation to the additional storage space required, however, gives the average storable flow during the critical 3-year period particular significance for comparison of storage sites.

POTENTIAL SITES

Long search for storage sites in the Clark Fork River Basin has involved at least reconnaissance consideration of more than 100 prospective possibilities, located not only on the main stem and on major tributaries, but also on lesser tributaries, a number of which have an average runoff of less than 100,000 acre-feet annually. These numerous possibilities are located and indexed by reaches of the Clark Fork on the accompanying map (fig. 1). Discussion of the possibilities is presented below under three categories: (1) Sites of greater promise selected as proposals for development or for further study in the coordinated plan for the Columbia River; (2) additional potentialities on tributaries for which reconnaissance studies have been made for purposes of this report; and (3) possibilities discarded as a result of preliminary studies or actions.

Coordinated plan storage site selection

In the coordinated plan for development of the Columbia River, there were recognized 17 additional possibilities for multiple-purpose storage developments in the Clark Fork River Basin. These are shown in the accompanying tabulation.

The list is made up of those sites which it was thought might be considered as potentially available for storage use and which offered relatively greater promise from an economic standpoint. The list does not include all sites at which physical conditions favor storage; a number of superior sites were omitted for reasons indicated subsequently.

Potential additional multiple-purpose storage projects—Clark Fork Basin included in coordinated comprehensive plan of development for Columbia River Basin (1949)

Name	Stream	Purpose	Active capacity, thousand acre-feet
Paradise.....	Clark Fork.....	F, P.....	4,080.0
Glacier View.....	Flathead.....	F, P.....	3,180.0
Nine Mile Prairie.....	Blackfoot.....	F, P.....	960.0
Upper Joy.....	East Fork Rock Creek.....	F, P.....	144.9
Sapphire.....	West Fork Rock Creek.....	F, P.....	101.4
Joy.....	East Fork Rock Creek.....	F, P.....	251.6
Atkins.....	Rock Creek.....	F, P.....	248.8
Quigley.....	do.....	P.....	78.1
Finlen.....	do.....	F, P.....	123.6
Lincoln Canyon.....	Blackfoot River.....	F, I, P.....	211.8
Terrill.....	do.....	F, I, P.....	950.0
Helnze.....	North Fork Blackfoot River.....	I, P, F.....	82.8
Myrick.....	Clearwater River.....	F, P.....	131.5
Belton.....	Main Fork Flathead River.....	F, P.....	1,190.0
Swan Lake.....	Swan River.....	F, P.....	234.0
Brauer.....	Vermillion River.....	I, P.....	11.0
Weare.....	Bull River.....	P, F.....	149.0

Of the sites listed, Paradise is outstandingly the most desirable from physical and cost standpoints. The average storable flow at the site during the critical period will be approximately 4 million acre-feet with Hungry Horse in operation. The indicated usable capacity of 4,080,000 acre-feet would provide control through this period and yield about 4 million acre-feet annually. Thus, its development would more than meet the minimum additional needs indicated for the Clark Fork Basin in connection with the main control plan, and would provide control for a major part of the total storable flow of the river during the critical period. The costs at Paradise, excluding costs of strictly power features, would be approximately \$47 per acre-foot of yield during the critical period, at price levels as of 1948.

Despite these favorable considerations, the authorization of Paradise has not been sought because of objections raised to its construction. A public hearing to determine attitudes on development of the project was held by the Corps of Engineers at Hot Springs, Mont., on May 26, 1948, in connection with studies for the review report on Columbia River and tributaries of 1952. Opposition to construction of Paradise substantially outweighed support for it, the reasons most frequently stated being: displacement of residents of flooded areas; excessive flowage damage and reduction of taxable area; lack of comprehensive and integrated plan; dislocation of economy, particularly through inundation of agricultural land; violation of treaty rights with Indian tribes, some of whose lands and potential powersites would be inundated; and belief that the benefits would accrue in disproportionate share to downriver interests as opposed to the area directly affected. Investigations have been started to determine the location and extent of potentially irrigable lands in the basin. These irrigable lands will not only compensate for agricultural lands which may be inundated by storage reservoirs but will provide opportunities for additional settlement.

Next most desirable of the listed sites from physical and costs standpoints is Glacier View. The average storable flow at the site during the critical period is approximately 1 million acre-feet, about one-quarter that at Paradise. Storage development there would meet the objective of the main control plan insofar as the Clark Fork Basin is concerned, but would contribute far less than Paradise to attainment of the larger storage objective. A development of the indicated capacity at the Glacier View site would yield about 600,000 acre-feet of holdover storage annually during the critical period, in addition to the average of 1 million acre-feet available during those years, or an annual total of roughly 1,600,000 acre-feet. The cost per acre-foot for this annual yield during the critical period would be of about the same order as at Paradise, based on project cost estimates as of 1948, exclusive of strictly power features.

As in the case of Paradise, no recommendation for development of the Glacier View site has been made because of objections raised. In this instance, the flooding of lands along the western boundary of Glacier National Park, the attendant displacement of winter-forage resources for wildlife, and related prob-

lems affecting wildlife populations in the park were the bases for strenuous objection by the National Park Service and several organizations interested in preserving existing conditions there.

The Nine Mile Prairie site on Blackfoot River was considered to offer possibilities next in order below Paradise and Glacier View, among the sites listed. The 960,000 acre-feet of usable capacity contemplated at the Nine Mile Prairie site would provide for virtually full regulation of the Blackfoot River. The effective storage, gaged by the storable flow during the 1929-32 period, would, however, amount to only about one-third of the usable capacity, or roughly 350,000 acre-feet. This storage flow during the critical period is less than one-tenth that at Paradise and little more than one-third that at Glacier View. The yield from holdover storage would add about 150,000 acre-feet annually to the 350,000 acre-feet during the critical period, making a total annual yield of roughly 500,000 acre-feet during those years. Costs estimated in 1948, exclusive of strictly power features, would be about \$82 per acre-foot for this critical period yield.

Storage at Nine Mile Prairie would provide less than half that required in the Clark Fork Basin for immediate purposes of the main control plan and would make relatively insignificant contributions to the larger storage objectives. Coupled with the comparatively high costs, these prospects have served in earlier plans to eliminate Nine Mile Prairie from projects considered for earlier development, but to place it high among those deserving consideration as future additions to the more promising storage possibilities represented in Paradise and Glacier View.

The 14 remaining projects on the list of potential multiple-purpose storage developments were considered in the coordinated plan to be less promising than Nine Mile Prairie. They were presented in that plan as a selection of possibilities for further study in meeting the larger, longer run storage objectives in the Clark Fork Basin.

Inasmuch as many of the 14 sites represent alternative possibilities, their total potential storage contribution is much less than the indicated active capacities would suggest. The four sites at Lincoln Canyon, Terrill, Heinze, and Myrick on the Blackfoot River and its tributary, the Clearwater, are essentially alternatives to Nine Mile Prairie, and, with the exception of Heinze, required for irrigation supply, their development would not be justified in the event Nine Mile Prairie were constructed. These four sites thus may be eliminated from consideration in taking stock of storage possibilities additional to that at Nine Mile Prairie. The Brauer site on Vermillion River may likewise be eliminated from consideration in taking stock of storage possibilities additional to that at Nine Mile Prairie; the small capacity indicated being primarily designed for irrigation purposes. With respect to the remaining sites, however, development of all six of those indicated on Rock Creek and tributaries would not be justifiable, inasmuch as several represent alternative possibilities for storing flows from that subbasin of the Clark Fork River.

Taking into account these duplicating aspects of the 14 sites, the average storable flow during the critical period at them may be considered to be about 1,200,000 acre-feet. Of this, approximately 110,000 acre-feet might be stored by development of one or another combination of the six indicated sites on Rock Creek and tributaries; about 800,000 acre-feet at the Belton (upper) site on the Middle Fork of Flathead River; 234,000 acre-feet in Swan Lake²; and 50,000 acre-feet on Bull River at the Weare site.

The total storable flows during the critical period at these sites thus exceed somewhat estimated (1 million acre-feet) storable flows at the Glacier View site. Further study may permit the selection of a combination of acceptable sites, in conjunction with Nine Mile Prairie or its alternatives, equal in degree of control to that possible at Glacier View, although development of many of the sites would unquestionably encounter strong opposition for reasons noted subsequently. Even if development could be obtained to control the critical period storable flow at all of the sites, plus that at Nine Mile Prairie, the total involved (1,544,000 acre-feet) would be less than 40 percent of the storable flow during this period at Paradise (4 million acre-feet).

Although some combination of sites discussed above and Nine Mile Prairie might be developed which would have the same physical effect as storage at Glacier View—but far below the results possible at Paradise—the cost of de-

² Limited to proposed active capacity. Critical period storable flows average 885,000 acre-feet.

veloping a number of such lesser sites unquestionably would be much greater than the cost of developing the Glacier View. Studies of the sites discussed above have not been carried to the point of cost estimates; however, as in the case of Nine Mile Prairie, where costs per acre-foot of storage yield during the critical period would be nearly double those at Glacier View, it is to be expected that the other, relatively small reservoirs would involve storage costs significantly greater than at Glacier View.

Serious problems would be involved in development of the most important of these sites, namely, Belton and Swan Lake, at which the critical period storable flows amount, jointly to 86 percent of the total. Use of the Belton site on Middle Fork of Flathead River would involve flooding of areas within Glacier National Park of greater significance than those which would be affected by use of Glacier View, and in addition, would necessitate costly relocation of a major highway and the main line of the Great Northern Railway. In the case of Swan Lake, the adverse effect of storage development on extensive summer home and recreational use of lakeshore lands could be expected to create formidable opposition of the kind which, as noted subsequently, has precluded further development of storage in Flathead Lake.

Additional tributary storage possibilities

For purposes of this report, reconnaissance studies have been made of three additional possibilities not previously investigated. They involve the following, relatively small basins tributary to the Clark Fork River: (1) the upper basin of the Middle Fork of Flathead River; (2) Thompson River; and (3) Lolo Creek. The studies have been carried only to the point of establishing the physical availability of storage sites and the order of the storage possibilities. Foundation exploration and cost estimates have yet to be undertaken. As in the case of the other relatively small storage possibilities, it is to be expected that, even if further exploration shows the sites to be physically satisfactory, the costs per acre-foot of storage will be high in comparison with those at the Paradise and Glacier View sites.

The Spruce Park Dam and Reservoir site on Middle Fork of Flathead River is not subject to objections raised against the development of the Belton and other sites noted later in the lower part of the basin of that stream. The Spruce Park site, the best of several considered in the upper part of the basin, lies above the mouth of Bear Creek, up which the Great Northern Railway and trans-continental highway lead from the Middle Fork in crossing the Continental Divide. Use of the Spruce Park site, therefore, would not involve relocation of these facilities, and would not inundate any land in Glacier National Park. The reservoir area lies entirely within the Flathead National Forest where no manmade development would be affected.

The drainage area of approximately 365 square miles above the site has an average annual runoff of approximately 500,000 acre-feet. A dam 370 to 380 feet high would be required to impound 400,000 acre-feet. From the reservoir, a pressure tunnel 35,000 feet long could be constructed through the Flathead Range to Hungry Horse Reservoir, permitting power production in a plant at reservoir shoreline by use of Spruce Park releases through 650 feet of head, re-regulation in Hungry Horse Reservoir, and additional power production at Hungry Horse and downstream plants. For comparison with other sites, the critical period storable flow at Spruce Park would be about 300,000 acre-feet.

On the Thompson River, two possible damsites about one-half mile apart in a narrow gorge were reconnoitered. The drainage area tributary to the sites is approximately 585 square miles. From intermittent stream gagings taken during 1911-16 and from consideration of the Clark Fork runoff through the reach from Plains to Heron, it is estimated that the average annual runoff at the sites might be about 500,000 acre-feet. Storage of possibly 250,000 acre-feet of water could be obtained by a dam raising the water level 300 feet, at either site, and backing the river up some 12 miles. The lower 3½ miles of the reservoir area is in Cabinet National Forest and the remainder is in private ownership. Development now consists of a well-graded graveled road paralleling the river, which serves primarily for logging purposes and for access to private cabins in the area. The critical period storable flow at either site is roughly estimated to be about 200,000 acre-feet per annum.

Lolo Creek presents limited storage potentialities at either of two possible sites located about 4 and 5½ miles, respectively, above its mouth. The drainage basin controlled in either case would be limited to about 250 square miles, but

the average precipitation in the portion of the Bitterroot Mountains drained by Lolo Creek is considerably above the average for larger subbasins of the Clark Fork. A dam raising the water surface elevation 300 feet at the lower site would create about 450,000 acre-feet of storage and provide substantially full control of this small stream. The critical period storable flow is roughly estimated at 140,000 acre-feet per annum.

Even if development of all three sites should prove economically feasible, it will be evident that they would fill a very small part of the storage needs in the Clark Fork Basin. Collectively, the storable flows at the sites on the three tributaries amount only to about 600,000 acre-feet per year during the critical period. Development of all three, in addition to the maximum practicable development of the smaller sites previously discussed, including Nine Mile Prairie, which appears highly improbable in view of costs and other considerations noted, would provide control of critical period storable flows (2,200,000 acre-feet) equivalent to little more than half of those controllable at the Paradise site (4 million acre-feet).

Sites eliminated

The storage possibilities presented above comprise only a small part of the damsites given consideration. The greater number of sites investigated proved less satisfactory for storage than those previously discussed; were found to hold possibilities only for run-of-river power development; or were eliminated because of adverse physical conditions. The reasons for eliminating many of the sites from current consideration as storage possibilities lie in damages which would be suffered to existing developments, rather than unsatisfactory physical conditions.

Pend Oreille Lake.—Storage in the basin partially occupied by Pend Oreille Lake, just below the Clark Fork River Basin, has been the subject of numerous proposals in the past. Public hearings held by the Corps of Engineers in 1943 in connection with the last proposal for large-scale storage developments there led to legislative action by the State of Idaho establishing elevation 2,062.5 feet as the maximum water surface elevation for the lake. The development of 1,140,000 acre-feet of active capacity in the lake below this elevation has been made by the Corps of Engineers through construction of the Albeni Falls Dam. Additional storage in the lake is not in prospect.

Main stem below Flathead River.—Storage on the main stem of Clark Fork River below the mouth of its principal tributary, the Flathead, is highly desirable because of the large volume of flow in this reach. Extensive investigations have revealed no site as satisfactory as that at Paradise. Fourteen sites have been studied, additional to that used by the existing Montana Power Co. development at Thompson Falls. These studies included an investigation by the Corps of Engineers of the possibility of joint Clark Fork-Kootenai River storage by means of dams on both streams sufficiently high to permit an interchange of floodwaters between the two streams through the relatively low, Bull River-Lake Creek saddle.

Unsatisfactory foundation conditions and extensive damage from flooding ruled out of consideration all sites below the general vicinity of Paradise for purposes of a high storage dam. The only practicable development of this reach below Paradise will involve relatively low dams, essentially for run-of-river power production with small amounts of storage regulation. The sites selected as offering greatest promise for this type of development are Cabinet Gorge, recently developed by the Washington Water Power Co., Noxon Rapids, and Trout Creek, which are now being studied by the Washington Water Power Co. and the Montana Water Power Co.

Main stem above Flathead River.—Consideration of 13 sites on the Clark Fork River above the mouth of Flathead River has failed to reveal any attractive storage possibilities. Above the elevation which would be reached by the pool behind Paradise Dam, the Clark Fork is followed by two transcontinental railroads, the Milwaukee and the Northern Pacific, and a transcontinental highway. Storage could be developed by a dam of moderate height at the lower end of the Missoula Valley. This would flood out thousands of acres of irrigated lands, the two railroads, highways, and towns and create so much damage to the economy of the Missoula Valley that, even if the fully anticipated and violent opposition to use of the site were not to develop, the cost of storage could be expected to be very high. Use of a potential site in the Hells Gate area, above Missoula, but below the mouth of Blackfoot River, would be subject to similar objection and high cost by reason of the flooding of three railroads, a power

dam, a transcontinental highway, and several small towns. Use of sites on the Clark Fork above the mouth of Blackfoot River involves similar problems and, in addition, a diminishing volume of storable flow. For these reasons, the only development on the main stem of the Clark Fork above the Flathead River believed to warrant further consideration in the near future are low, run-of-river power undertakings at the Quartz Creek and Alberton sites.

Tributaries below the Flathead River.—The tributaries of the Clark Fork below the Flathead River are of small extent and runoff, with exception of the Thompson River. Investigation of 13 sites on these tributaries has led to the selection of 3 as possibilities meriting further study. These previously noted, small storage possibilities are Bull River (Weare), Vermillion River (Brauer), and on Thompson River (either of two closely spaced sites). The other 10 sites investigated were eliminated from further consideration because they represent less satisfactory alternates than those selected, or are physically or economically unsatisfactory.

Flathead River below Flathead Lake.—Between the mouth of Flathead River and the existing Kerr Dam of the Montana Power Co. which regulates the elevation of Flathead Lake, seven sites have been considered. Because of poorer foundation conditions, greater cost in relation to benefits, and problems similar to those on which the objections to use of the Paradise were based, the seven sites were eliminated in favor of the greatly superior Paradise development, which would back water to the Kerr Dam and inundate the sites on the lower Flathead River. The development of sites near Kerr Dam which would provide additional storage in Flathead Lake was discarded because of objections to such use of the lake noted below.

Flathead Lake.—As in the case of Pend Oreille Lake, the possibility of obtaining a large volume of storage at comparatively low cost by use of Flathead Lake has attracted interest over a relatively long time. Storage there was recommended in a report of 1920 by the Columbia Basin Survey Commission, State of Washington, for gravity irrigation of the Columbia Basin project. Local interests around Flathead Lake and Kalispell, Mont., opposed the plan. In 1921, a review of the above report by Goethals & Co. led to concurrence with the Flathead Lake storage recommendation. A board of engineers, hired by the Bureau of Reclamation, reviewed the above reports and concurred with previous findings in February 1925.

Other proposals included that of the Cavanaugh Report to the Federal Power Commission in 1925, "Uses of the Upper Columbia River," which recommended the granting of storage rights in Flathead Lake to power interests, with impartial supervision of storage control. In the early 1930's, a report on a comprehensive plan for development of Columbia River and tributaries for power, irrigation, and navigation was prepared by the Corps of Engineers, published as House Document 103, 73d Congress, 1st session, proposed storage development in Flathead Lake. In 1942, a Federal Power Commission report discussed development of storage in Flathead Lake by lowering of the outlet through dredging.

In 1943, the Corps of Engineers proposed, as an emergency war measure, the raising of Flathead Lake to secure needed storage for power. This proposal included a temporary raising of 3 feet and a lowering of the outlet by 6 feet to provide 1 million acre-feet of additional storage. An ultimate raising of 37 feet was also considered. This proposal met with overwhelming and violent local, State, and national opposition in a 3-day hearing in Kalispell in June 1943.

Flathead River above Flathead Lake.—The three sites on the Flathead River between the lake and the mouth of Middle Fork were eliminated from consideration for storage because of poor foundation conditions and because their storage use would entail even greater damage of the kind noted earlier in connection with the Belton site on the Middle Fork. One of the three, Coram, was selected, however, as a desirable site for a run-of-river power project.

Above the mouth of the Middle Fork, Glacier View, previously discussed, proved to be the only satisfactory storage site out of four investigated. One of the three below Glacier View, however—Canyon Creek—should be considered further as a desirable site for a run-of-river development.

Middle Fork of Flathead River.—Of four sites investigated on the Middle Fork, Belton, and Spruce Park are considered to offer the better possibilities, although the previous discussion of these sites has suggested the doubtful prospects for development at Belton. The lower Belton site on the Middle Fork, below the outlet from Lake McDonald, is superior physically to the

Belton site indicated as a future possibility. The lower site was eliminated as a storage potentiality because of the even greater damage which it would create. The Dryad Creek site, in the upper part of the Middle Fork Basin, was eliminated because of excessive cost.

South Fork of Flathead River.—The high degree of control overflows of the South Fork which will be exercised by the operation of Hungry Horse Reservoir has served to eliminate consideration of additional storage in the basin of that stream.

Other Flathead River Tributaries.—On the Swan River, poor foundation and reservoir conditions have served to eliminate the consideration of storage at sites below Swan Lake. The somewhat dubious prospect for storage in that lake has previously been discussed. Other tributaries of the Flathead, the principal ones being the Whitefish, Stillwater, Jocko, and Little Bitterroot Rivers, have such small storable flows, in conjunction, with problems making for very high cost, that they are known to present no significant possibilities. Reconnaissance search even for small amounts of irrigation storage on these streams has not been fruitful.

Tributaries above Flathead River.—Because of the long, narrow shape of the Bitterroot River Basin and the heavy contribution to flows made by the numerous, short, parallel streams dropping from the high Bitterroot Range on the west, the only possibilities for obtaining large amounts of storage in the basin are near the mouth of the river. Development of a prospective site there would flood thousands of acres of irrigated land in the Bitterroot Valley bottom and create such heavy damage to the economy of the valley that it has been eliminated from consideration. The numerous possibilities investigated in the upper part of the basin hold some promise for small amounts of storage. Because of the great needs for water to supplement the supplies available for lands now irrigated in the valley, however, and to irrigate new lands, the yield of such reservoirs would be predominantly used for those purposes and contribute little to storage requirements for power purposes. The previously noted Lolo Creek site may provide possibility for a small-scale development beneficial to power production.

On Blackfoot River, the investigation of 18 sites led to the elimination of 13 as offering inferior storage possibilities, first to Nine Mile Prairie, and second to the other four sites discussed in that basin, where storage roughly equivalent to that at Nine Mile Prairie could be obtained. One site below Nine Mile Prairie (the Bonner site) was found to merit further investigation for a run-of-river power development. Similarly, on Rock Creek, 5 of 11 sites investigated were eliminated as being inferior for storage to the 6 discussed earlier, several of which, in turn, represent alternative possibilities for further study. Flint Creek presents no significant storage possibilities additional to the existing development at Bimetallic Dam by the Montana Power Co. As in the upper Bitterroot Valley, the small-scale storage possibilities on tributaries above Flint Creek, such as the Little Blackfoot River and Racetrack Creek, will be required primarily for irrigation purposes and have insignificant power benefits.

CONCLUSIONS

1. Storage to control flows during the 3-year critical period in the Columbia River (1929-31) represents a desirable minimum objective to meet power and flood-control needs.
2. The average storable flow of the Clark Fork River during that critical period will be approximately 6,250,000 acre-feet when Hungry Horse Reservoir is in full operation. Storage capacity considerably in excess of this amount will be required for control across the critical period. No projects to provide control for any part of the 6,250,000 acre-feet are now authorized.
3. Paradise and Glacier View Dams, the two projects selected as most promising from more than 100 investigated, would not, in themselves alone, provide control over the average storable flow of 6,250,000 acre-feet during the critical period. That storable flow amounts roughly to 4 million acre-feet at Paradise and 1 million at Glacier View. Full control would require a large amount of additional storage, particularly in tributaries below the Paradise site.
4. No substitute for a large-scale storage development at or near the Paradise site is available. The total storable flow during the critical period at the

Glacier View and Nine Mile Prairie sites and at all other nonduplicating sites recognized as storage possibilities is little more than 3 million acre-feet, or roughly only three-quarters of that at the Paradise site alone. Moreover, the average unit cost of storage at sites other than Paradise would be far greater, and proposals for its development would be attended, in many instances, with equal or greater economic displacement and objection.

5. It might be possible to develop storage at sites in the upper portion of the basin which would have an effect equal to that of Glacier View. At the sites considered, the critical period storable flows are slightly more than twice that at Glacier View. Prospective objections and prospectively high construction costs, if borne out by further investigation, could be expected, however, to eliminate development of many of the sites involved.

RECOMMENDATIONS

In view of these conclusions, it is recommended that:

1. The Paradise site be reconsidered with a view to early resolution of problems involved in use of the site and its development at the earliest practicable time.

2. The Glacier View site also be reconsidered, and that there be combined with that reconsideration the further investigation of the smaller storage possibilities with a view to determining the feasibility of their development prior to Glacier View.

H. T. NELSON.

EXHIBIT 3

POWER AND COLUMBIA RIVER STORAGE: PROJECTS IN THE REGION'S POTENTIAL

(By B. E. Torpen, Department of the Army, Dec. 12, 1951)

At your Boise meeting last month the current status of the comprehensive plan for development of the resources of the Pacific Northwest was outlined to you. Today I am going to give you additional background material concerning that plan and discuss briefly some of the projects considered in formulating the plan, which were not included but remain a part of the region's potential. I hope that the discussions here today will give you a better understanding and a greater appreciation of the programs outlined at the October meeting.

Adequate planning.—Basic physical data required for adequate planning are:

1. Complete topography.
2. Complete hydrological data.
3. Competent geological information.
4. Competent economic data.

Besides this basic data, the planning agency needs sufficient time and money to analyze the many variants necessarily considered to arrive at the best solution. Editorial—*Engineer News Record*, November 29, 1951: "Congress Should Provide More Money and Time for These Studies."

The Columbia Basin is an enormous region and topography is still lacking in many critical areas.

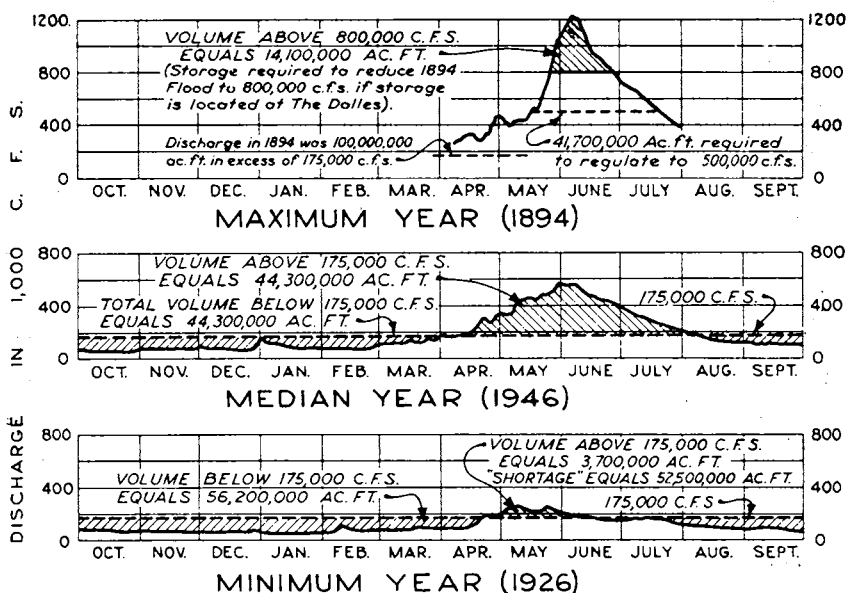
The Columbia River.—The Columbia River has a definite annual pattern of runoff with a great outpouring of melting snows causing spring floods and a long low-water season during the dry autumn continuing during the winter months of general freezeup throughout its mountain areas.

The earliest use made of the waters in the Columbia River Basin was for irrigation. Some storage was required on tributaries to supply irrigation water in the latter part of the growing season and over 200 dams have been built for that purpose. At some of these dams the byproduct of hydroelectric power has been developed.

The basin has developed industrially to the point where large additional blocks of power are required annually.

There is a wide divergence between the demand for power, which is fairly constant throughout the year (although usually highest during the winter), and the availability of hydropower, which follows the pattern of runoff and is usually at a minimum in the winter (chart 1).

CHART 1



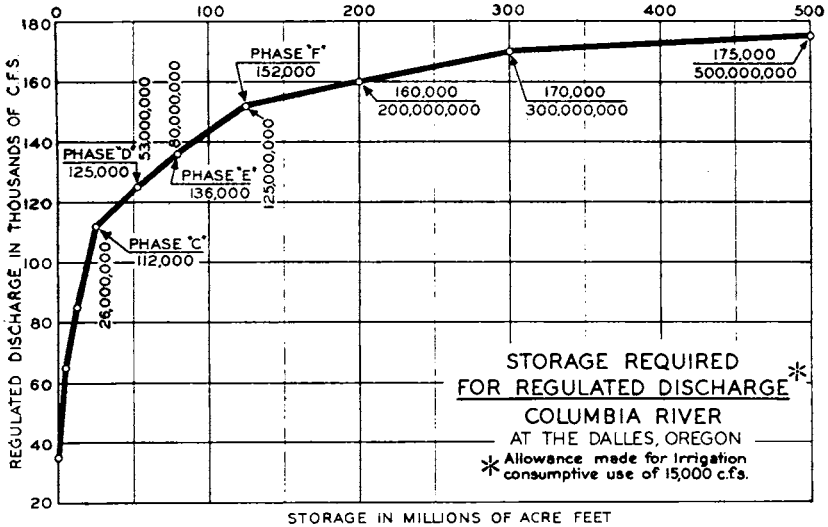
RELATION OF STORAGE TO
FLOOD CONTROL AND REGULATED FLOW
COLUMBIA RIVER AT THE DALLES

As electric power cannot be readily stored, it has been found desirable to achieve the same result by storing the excess water of the spring floods and release them for power during the winter months when needed.

In its original state, as explored by Lewis and Clark, the Columbia River was susceptible of complete regulation by storage. Many very favorable damsites and reservoir sites were available throughout the basin.

The average annual runoff of the Columbia River is in excess of 150 million acre-feet, which is exceeded in the United States only by the Ohio and Lower Mississippi, and for its complete regulation a total storage of about 500 million acre-feet would be required. Nearly all this enormous storage could have been provided at one time by one large dam at The Dalles, creating an inland lake larger than Puget Sound and several hundred feet deep (chart 2).

CHART 2



Other enormous storages could have been developed at Saddle Mountain, Grand Coulee, Arrow Lakes, and Big Bend on the Columbia River; at the Boundary, Paradise, and Plateau sites on the Clark Fork; Bad Rock Canyon on the Flathead; the Nez Perce and Sturgill Rapids sites on the Snake, and the Kooskia on the Clearwater. These various sites were good for 5 million acre-feet to 50 million acre-feet each. There were also innumerable other sites capable of producing from 1 million to 5 million acre-feet each of storage.

Storage sites.—Storage sites such as the Dalles or Wallula gap high dams are now eliminated by development in the reservoir area, the Hanford Works, Pasco, etc., and the fishing industry. Saddle Mount storage is impossible because of Weenatchee and its orchards. Boundary was eliminated by Sand Point and the lead-zinc mines. Sturgill Rapids site is eliminated by Weiser and surrounding irrigated areas. Nez Perce is held in abeyance awaiting solution of the salmon fishery problem. That brings us to the practical consideration of site selection to meet the conditions of today.

The most natural place to seek large storage at low cost would be on the large natural lakes in the basin, of which there are many which could readily have been developed. Today, however, such excellent natural storage sites as Pend Oreille Lake, Flathead Lake, Priest Lakes, Coeur d'Alene Lake, Okanogan Lake, Chelan Lake and others have been developed to a very limited extent and eliminated from further consideration by the strongly expressed will of the people, in some cases by State legislative action.

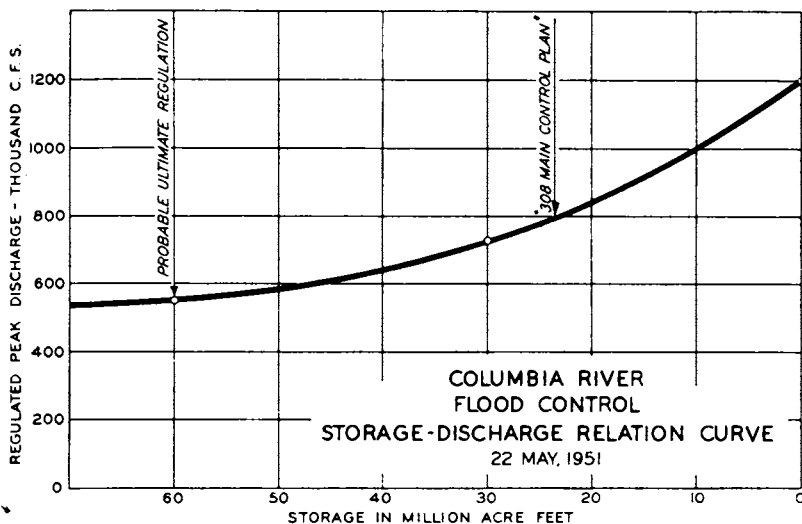
Salmon.—The salmon packing industry has long been one of our leading industries and salmon sport fishing is very popular. Many believe the dams on our rivers spell the doom of this industry and therefore oppose dams on salmon streams. For this reason dams on the lower Snake River and the Salmon River watershed are opposed. Pending solution of the fish problem, projects on these streams are postponed.

Irrigation.—The waters of the upper Snake River and its tributaries are required for irrigation. Therefore, the upper Snake River is eliminated from consideration for large storage for flood control and power.

Canada.—There are storage sites available in Canada but there is little reason to believe that our good neighbors are less reluctant to have their farms and valleys converted to storage reservoirs than our own people. Canadians are now drilling the Big Bend damsite and a 600-foot dam is proposed there. Perhaps 5 million acre-feet of storage would result. No time has been set for construction. We are at present negotiating through the International Joint Commission for approval of storage on the Kootenai River at Libby Dam which would inundate 6,000 acres in Canada. Other streams with an international complex are the Kettle, Similkameen, and the Pend Oreille. Because international deliberations are very time consuming, it is not rational to consider any of these projects as immediately available, although we hope for quick action on Libby.

Storage required.—The Corps of Engineers main flood control plan indicated the need of 27 million acre-feet of storage at critical locations to reduce a "1894 Flood" of 1,200,000 cubic feet per second at The Dalles to 800,000 cubic feet per second (chart 3). Such storage would produce the 12 million kilowatts of firm electrical energy indicated by the phase C development of the Columbia Basin. Further flood control storage and much more storage for power are very desirable.

CHART 3



Storage projects—Main control plan

Site	Stream	Storage acre-feet
Hungry Horse.....	South Fork Flathead.....	2,980,000
Glacier View or alternate.....	North Fork Flathead.....	3,160,000
Libby.....	Kootenai River.....	4,250,000
Grand Coulee.....	Columbia River.....	5,120,000
Priest Rapids.....	do.....	2,100,000
John Day.....	do.....	2,000,000
Hells Canyon.....	Snake River.....	3,280,000
Palisades.....	do.....	1,200,000
Boise River projects.....	Boise River.....	1,000,000
Payette River projects.....	Payette River.....	1,900,000
Total.....		26,980,000

Grand Coulee Dam is completed but only about 1 million acre-feet are available for flood control until the outlet valves are revised. Hungry Horse Dam is under construction. Other major sites considered are :

Site	Stream	Storage acre-feet
Nez Perce.....	Snake River.....	4,800,000
Kooskia.....	Clearwater.....	3,100,000
Elkberry.....	N. Fork Clearwater.....	1,500,000
Plateau.....	Clark Fork.....	1,000,000
Paradise.....	do.....	4,000,000
Springston.....	Coeur d'Alene.....	2,280,000
Total.....		16,680,000

NOTE.—See table 1.

Long range plans.—Long range plans for optimum practical development of the Columbia River considered four phases of development as follows (chart 4) :

	Million acre-feet power and flood control storage	Firm kilowatts at 75 percent load factor
Phase C.....	26	12,600,000
Phase D.....	44	21,900,000
Phase E.....	68	28,200,000
Phase F.....	125	33,500,000

From this table it is obvious that large blocks of increased power from the Columbia depends largely on storage.

Let us next consider individual sites and the reasons for withholding development.

Boundary.—The Boundary storage site is objected to by the zinc-lead mine operators in the Metaline Falls area on the grounds that it would flood their operations below pool elevations. These objections are considered reasonable and as zinc and lead are strategic materials the project is to be postponed until the region has been mined out. Other plans to develop the 400,000 kilowatts of cheap power in the Z-Canyon have been studied. One plan utilized a two-step tunnel plan (two mile-long tunnels at each step) and another plan considered a 9-mile tunnel to develop the full head. The latter plan is twice as expensive as a dam at Boundary.

Paradise.—The Paradise site was considered for the 308 report over others in the area for three reasons :

1. It had the best foundation conditions.
2. It submerged the least cultivated areas.
3. In conjunction with the other recommended projects it supplied the required amount of storage.

The Paradise project met with stern opposition from local residents and business people in Montana and was not recommended for immediate construction.

It may be well to reconsider this project and compare it with an alternate some 10 miles downstream near Eddy. Because storage is now known to be very elusive it may be necessary to develop any available site to its maximum potential. At Eddy the foundations are believed to be susceptible to successful treatment. There would be an additional 60 feet of head available as compared to Paradise. By raising the pool elevation an additional 25 feet and making necessary changes at the Polson powerplant it would be possible to increase the useful storage at Eddy from the 4 million available at Paradise to 7,500,000 acre-

feet, which, with the additional head, would result in 150,000 kilowatts added at the site and 250,000 kilowatts added downstream, a total of 1,525,000 kilowatts for the project if all downstream projects are developed, an increase of 400,000 kilowatts over Paradise.

Glacier View.—Glacier View project contemplated storage of 3,100,000 acre-feet on the North Fork of the Flathead near its headwaters. One-half of the proposed reservoir is on Glacier National Park lands and was opposed by the Park Bureau of the Department of the Interior, and others. For this reason it was omitted from request for immediate authorization and alternate storage is sought elsewhere, although Glacier View has a benefit-cost ratio of 1.84 to 1—among the best in the Columbia Basin.

Springston.—The Springston storage site on Coeur d'Alene River would store over 2 million acre-feet with a dam only 150 feet high. Its reservoir would extend over the Osborn Fault in the Kingston-Wallace mining district and interfere to some extent with mine operations and tailings disposal at the smelters there. For these reasons it was opposed by the mining interests and is deferred until the area is mined out.

An alternate which may store 1 million acre-feet may be provided at Enaville by a dam 300 feet high. The reservoir will not interfere with the operations at Wallace. These storages would be useful throughout the Spokane and Columbia River powerplants, besides supplying flood control.

Kooskia.—The Kooskia Dam site was selected before the Trans-Idaho Highway was constructed above Orofino. The storage site is an excellent one combining—

1. An excellent damsite.
2. Large reservoir above.
3. Heavy stream runoff.
4. Need for flood control of the heavy spring flood.

It also has several disadvantages:

1. Would submerge four communities.
2. Would submerge Indian lands.
3. Would submerge 4,000 acres of farmlands.
4. Would require relocation of the Trans-Idaho Highway.

Considerations similar to those in regard to Paradise would now dictate a dam at least 100 feet higher at this excellent site to store 2 million more acre-feet of water, a total of over 5 million acre-feet of useful storage.

An alternate to Kooskia would be a 400-foot dam at Penny Cliffs on the Middle Clearwater to store 1,300,000 acre-feet. A 500-foot dam at Moose Creek to store 830,000 acre-feet. A 500-foot dam at Elkberry or Bruces Eddy on the North Fork of the Clearwater to store 1,400,000 acre-feet. It is obvious that these three dams would cost much more than Kooskia alone (table 1).

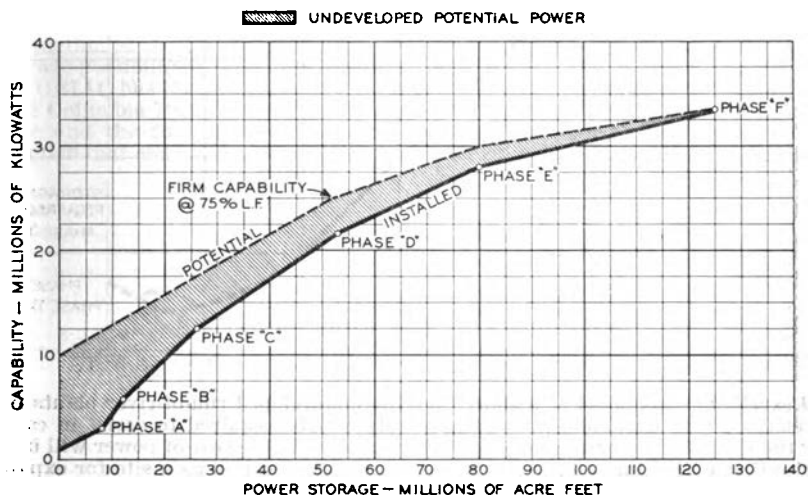
Sites now available.—The following sites are believed to be available with few dissenting votes:

Site	Storage, acre-feet	Stream
Schafer Meadows.....	500,000	Middle Fork Flathead.
Yaak River.....	500,000	Kootenai (tributary).
Moyle River.....	500,000	Do.
Nine Mile.....	1,000,000	Blackfoot.
Chiwawa.....	500,000	Wenatchee (tributary).
Miscellaneous small.....	1,000,000	
Total.....	4,000,000	

This amount of storage must be greatly exceeded for both flood control and power. Methods and procedures must be devised to secure additional storage and united efforts must be put forth to achieve the goal.

Run-of-river plants (chart 4).—There are a number of run-of-river power sites throughout the basin which may be developed as desired to meet the regions

CHART 4
COLUMBIA BASIN POWER



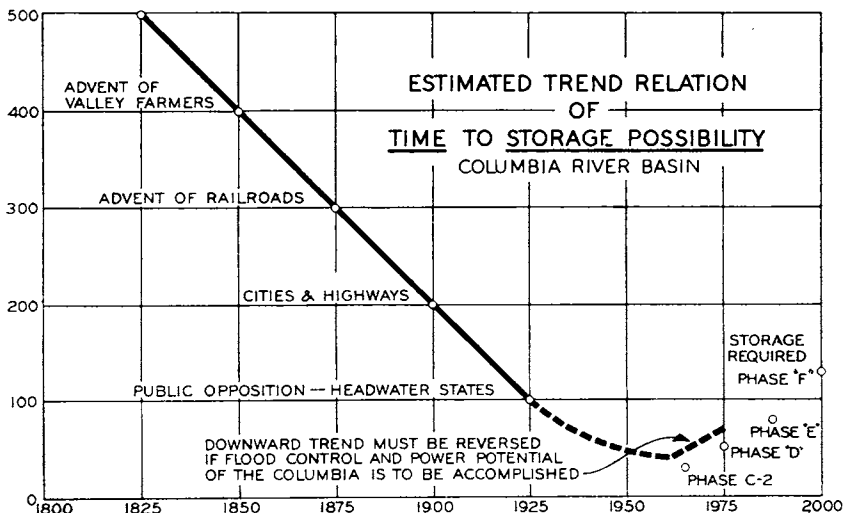
growing load and act as a stopgap pending other developments. These projects include the undeveloped portions of the main stem of the Columbia River, viz. John Day, Priest Rapids, Rocky Reach, and Wells. Under present storage conditions, they would produce 2,750,000 kilowatts of firm power. The layout of these projects is contingent upon upstream storage to the same degree as McNary and other main-stem dams.

On the tributaries there are also a number of potential run-of-river plants, the principal ones being Spruce Park tunnel on the Middle Fork of the Flathead; Quartz Creek, Trout Creek, and Noxon Rapids on the Clark Ford; Z-Canyon tunnel project on the Pend Oreille River; Kootenai Falls and Katka on the Kootenai; Drury site on the Wenatchee.

With storage now operative and under construction, these projects have a potential firm capability of 1 million kilowatts.

Without large storage.—Without large storage, floods will continue. Damages will increase in proportion to our cultural development. Without large storage, the 30-odd-million-kilowatt potential of the Columbia Basin will be cut in half (chart 5).

CHART 5



Resulting economy.—For a short time the undeveloped run-of-river plants will meet the power demand. Soon steamplants will be required to assist in carrying the load—either on the base or on the peaks—and the cost of power will begin a rise that will eliminate the Northwest from consideration as a site for expanding industry.

Sharing benefits.—Construction of projects such as those discussed today and those included in the comprehensive plans to date necessarily result, at least, in certain localities, in some displacement of population, business, and utilities in those areas which must be acquired by the Government. This, of course, all requires adjustment in the lives of those directly affected and in the economy of the region. While those whose property is taken incident to the project receive just compensation for that property under the fifth amendment of our Constitution, there are those who cannot be, or feel that they cannot be, made whole through the payment of money alone or who suffer damages which are without the scope of just compensation and who accordingly resist the project with whatever means are available to them. Although under our concept of government we resolve such conflicts on the basis of the greatest good for the greatest number, there are ways and means of ameliorating the impact of displacement upon those whose homes and businesses lie within the project area. Generally the advantages of the projects' construction to the area are much greater than the disadvantages. Nonetheless, great deference is given the views, opinions, and desires of the local residents in an area in which a project is proposed. The projects included in the existing comprehensive program were selected after the most careful consideration of all these viewpoints as expressed by the people and represent an optimum of compromise consistent with the attainment of the objectives sought. However, I believe that many of the objections to some of the projects could be readily removed and resource development furthered by a more direct sharing of the benefits which flow from these great projects with those more immediately affected thereby. A step in this direction may be a sharing of the benefits through:

1. Allocation of power to a State.
2. Preferential rates.
3. Payments in lieu of taxes.
4. Liberal severance damages.
5. Generous reconstruction of public utilities.

Law—Recent act.—A recent law in regard to acquisition of lands and property for military purposes provides for reimbursement to landowners for expenses and other losses and damages incurred—in an amount not to exceed 25 percent of the value of the land.

Summary.—Flood control of the Columbia River requires large additional storage. As of today, there is practically no flood-control storage operative. At least 27 million acre-feet is required and much more is desirable.

Increased power on the Columbia depends upon storage. Without vastly increased storage, the power output of the Columbia Basin will be cut in half.

Procurable storage sites are increasingly difficult to find. Adverse factors are:

1. Cultural development.
2. The fish problem.
3. Mining areas.

Spreading of benefits may provide a key to some sites. Early solution of the fish problem is necessary to open the Snake and its tributaries to development.

Completion of the topographical mapping of the basin is a necessity to reveal all storage possibilities, especially in headwater areas.

The CBIAC has the responsibility through its constituent agencies of developing the Columbia Basin. This requires a facing up to the problem of increased storage and the full cooperation of all agencies, both State and Federal, to accomplish that end.

TABLE I.—Project data, phase C-2 system

	Libby ¹	Glacier View ¹	Paradise ¹	Boundary ¹	Nez Percé ¹	Kooskia ¹	3-dam alt. ²	70-dam alt. ²
Storage, acre-feet.....	4,100,000	3,160,000	4,000,000	-----	4,800,000	3,100,000	3,530,000	2,675,000
At site prime kilowatts.....	244,000	96,000	312,000	482,000	850,000	243,000	365,000	-----
Downstream prime kilowatts.....	577,000	228,000	471,000	-----	402,000	257,000	354,000	266,000
Total prime.....	821,000	324,000	783,000	482,000	1,252,000	500,000	720,000	266,000
Annual power benefit at \$26 per kilowatt—D.S. Inst. costs.....	19,830,000	7,773,000	18,712,000	12,500,000	26,228,000	10,995,000	15,830,000	5,850,000
Other annual benefits.....	\$1,483,000	\$715,000	\$1,329,300	-----	\$1,806,000	\$561,000	\$640,000	\$485,000
Total annual benefits.....	21,713,000	8,488,000	20,041,300	12,500,000	28,034,000	11,556,000	16,440,000	6,335,000
Capital cost at site.....	258,659,000	102,084,000	265,569,000	168,740,000	449,232,000	185,317,000	500,000,000	750,000,000
Annual cost.....	11,139,000	4,609,000	11,726,000	7,864,000	20,789,000	8,301,000	22,490,000	33,600,000
Benefit-cost ratio.....	1.95:1	1.84:1	1.7:1	1.6:1	1.34:1	1.4:1	0.7:1	0.2:1

² Very preliminary estimate.

¹ From 308 report.

[From the Pacific Northwest Public Power Bulletin]

EXHIBIT 4

MAJOR BENEFITS OF PARADISE DAM

(From testimony of the Committee For Paradise Dam submitted to the Corps of Engineers at Missoula, October 21)

1. We believe Paradise Dam is consistent with and meets the requirement of overall, comprehensive, unified and integrated development of the water resources of the Clark Fork and the Columbia River of which it is a part.

2. As a multiple purpose dam it makes full and balanced use of these water resources.

3. Thus Paradise Dam meets the highest test of conservation—the wise use of natural resources for the greatest good of the largest number of people for the longest time.

4. As a major flood control project, Paradise Dam with its 4,080,000 acre-feet usable storage capacity will do much to prevent the tragic devastation and the threat of devastation caused by floods along the length of the Columbia River.

5. By removing the threat of flooding and through irrigation development, Paradise Dam will provide increased agricultural acreage to supply the expanding population whose needs will be critical by the time the dam can be built.

6. Paradise Dam's contribution to the steady flow of the Columbia River will stabilize river levels which are essential to river boat and barge traffic thus improving the navigation use of the river as an artery of commerce.

7. The lake impounded by Paradise Dam will be a welcome addition to our scenic and recreational riches for use by the people of the region and the entire United States. Surveys show that the public in search for enjoyment and spiritual values have made natural and artificial lakes a major factor in American living.

8. Studies by responsible Federal agencies show that Paradise Dam by contributing to the stable flow of water through dams and generators along the Columbia River will add over a million kilowatts of firm power which will importantly benefit the economy of the entire Northwest and thereby the Nation.

9. This power, the industrial, agricultural, minerals, timber and other resources development which it will energize—as demonstrated by Bonneville and Grand Coulee Dams—will contribute vitally to the emergency requirements of national defense.

10. The authorization and construction of Paradise Dam by settling the issue of resource development will set up a sound pattern of planning for the establishment of private businesses, public utilities, community services and the building of homes with a view to assuring a more stable future.

11. For Montana the proposed Paradise Dam bill provides that the at-site generated power, which is equal to about three times the power output of Hungry Horse Dam, will be reserved for use in the Treasure State.

12. As at Hungry Horse Dam the availability of this huge block of low-cost power will both attract new and diversified industry, which will provide steady employment and contribute to the improvement and stability of industry that exists in Montana now. The need for this type of development is especially important in Montana which right now is suffering a depression—with mines closing down, sawmills operating on a part-time basis, and many others who struggle along in seasonal jobs.

13. The Paradise Dam bill also directs the construction of transmission lines in Montana by the Bonneville Power Administration which will insure the carrying out of the yardstick principles of the Bonneville Act, to encourage the widespread use of electricity at the lowest possible cost.

14. The Paradise project will provide an invaluable aid in the added worth and intensive development and use of natural resources of western Montana—including western Montana phosphates, forest products, and others. The reliable large-volume, low-cost power output of Paradise, supported by the Federal system, is a most important factor in the unlocking of natural resources.

15. The Paradise project, and the larger comprehensive plan will result in improved water supplies for general purposes—industrial, agricultural, domestic, municipal—to meet one of the Nation's fast growing needs. Water supplies—in large quantity, high-quality, favorable temperature—represent one of the crucial needs of industry; especially chemical and metallurgical types. In-

creasing the availability of such industrial water supplies will be an attraction for industry.

16. Low cost power from Paradise Dam will be a boon to Montana farmers and ranchers by providing financial assistance for the further development of irrigation in the Clark Fork Basin, by providing a reservoir which, together with the low cost electricity, will extend the economical reach of sprinkler-type irrigation. This makes possible a steadier, more diversified and more profitable type of agriculture.

17. The construction of Paradise Dam involves relocating, shortening, and otherwise improving roads and railroads in the impoundment area, the overall results of which will be an improvement in the entire transportation facilities of the area.

18. Paradise Reservoir will serve as a low cost inland waterway for the collection, barging, and pondage of logs, for commercial excursion and freight boats, and for all types of pleasure craft.

19. As a result of building Paradise Dam, western Montana will profit from an increasing share of the rapidly growing tourist and recreation industry. Recently, pleasure boating alone has become a billion-dollar-per-year business in our Nation.

20. The Paradise Reservoir and area can be developed as a superb habitat for fish, waterfowl, and wildlife. Already goose nesting islands have been proposed to improve the conditions for migratory waterfowl. Good planning and management on the large body of water formed should insure large populations of desirable resident species in a fishery with both sports and commercial benefits.

21. As a result of Paradise Dam there will be a general nonmonetary enrichment of the life of the area through recreation, swimming, fishing, boating, water skiing, picnicking, and camping on the public sites along the lakeshore.

22. Community life will improve, too—the increase in the tax base which comes with increased population and industry makes possible better streets, schools, and other community facilities.

23. Opportunity is opened for development of planned modern communities, with efficient and attractive areas for business; commerce, residence, education, and recreation, including planned, organized industrial districts with efficient and economical locations, energy services, utilities, and transportation.

24. The Paradise bill provides that just compensation be paid for any Indian lands and rights. However, the greater benefits of the project for Indians will be in the construction employment and then the industrial, agricultural, and recreation business employment resulting from completion of the dam.

25. The building of Paradise Dam will reduce the pressure for the construction of such conservation-sensitive dams as Glacier View, Spruce Park, and Nine Mile Prairie.

26. In recent months dozens of people have participated in drafting the Paradise Dam bill. Thus, many people have had a voice in determining that the bill reflects the hopes and aspirations of the responsible leaders and citizens of western Montana. This bill itself is legislative pioneering.

27. The Paradise Dam bill provides for a more formal and containing participation and voice by Montana people in the unprecedented Paradise Project Area Development Board to insure the most advantageous and desirable transition during the construction period.

28. In conclusion and without listing the innumerable additional minor benefits, both direct and indirect, we respectfully submit that on balance the Paradise Dam will in the highest sense advance the general public welfare, will advance the economic prosperity, and improve the standard of living.

EXHIBIT 5

[From the Pacific Northwest Public Power Bulletin]

PRESIDENT RECEIVES NORTHWEST POWER PROGRAM

COLUMBIA RIVER GOAL

"This administration is basically in agreement with the views expressed in the resolution accompanying your letter regarding the need for the development of our water resources and power in the Pacific Northwest and Alaska."

This hopeful answer was sent to the Northwest Public Power Association, January 12, by Mr. Sherman Adams, assistant to the President, in answer to the NWPPA letter of December 28.

A similarly friendly and wait-and-see attitude regarding the Army's 308 review report, which is due November 1957, was expressed by Assistant Director Robert Merriam of the Bureau of the Budget and Secretary of the Interior Fred Seaton when your executive secretary called on them in Washington, D.C., January 9 and 11.

THE WHITE HOUSE,
THE ASSISTANT TO THE PRESIDENT,
Washington, January 12, 1957.

Mr. Gus NORWOOD,

Executive Secretary, Northwest Public Power Association, Inc., Vancouver, Wash.

MY DEAR MR. NORWOOD: I wish to thank you on behalf of the President for your letter of December 28, 1956, with accompanying resolution, outlining the views of the Northwest Public Power Association relative to the development of water resources and power in the Pacific Northwest.

This administration is basically in agreement with the views expressed in the resolution accompanying your letter regarding the need for the development of our water resources and power in the Pacific Northwest and Alaska. The accomplishment of this development will require, as in the past, the joint efforts of the Federal Government, the States, and local interests, both private and public.

I am sure you realize that the tremendous investment of funds which will be needed, if this work is to be accomplished in an orderly and expeditious manner, goes beyond the capability of any single interest. The President, however, is confident that the Federal Government working with the States and local interests will be able to provide its share of the funds needed for this development.

In order to determine more accurately the current need for and the priority of the individual projects which make up this total development, the administration has directed the Corps of Engineers to undertake a full review of the Columbia River Basin, which is scheduled for completion during fiscal year 1958, and funds have been appropriated for this purpose in 1957.

The President appreciates receiving the views of your association on this matter, and it is hoped that this will reassure you of his continued interest in this problem. Copies of your letter and the accompanying resolution have been sent to the Secretaries of the Interior and the Army for their use.

Sincerely,

SHERMAN ADAMS.

DECEMBER 28, 1956.

President DWIGHT D. EISENHOWER,
*The White House,
Washington, D.C.*

DEAR MR. PRESIDENT: This petition, in the form of the attached printed resolution, is respectfully submitted on behalf of the 1,750,000 people served by the 102 consumer-owned electric systems of Washington, Oregon, Montana, Idaho, and Alaska comprising the Northwest Public Power Association.

It presents for your consideration specific recommendations for inclusion in your long-range water resources program, including a new method for financing the program.

This association has recently completed considerable research looking toward the definition and establishment of a practical working goal for the comprehensive development of water resources of the Columbia River Basin within the United States for the next 20 or so years. Our recommendations, as set forth in the enclosed resolution, are the result of this research, and provide in summary:

(1) A minimum 10-dam construction program for the next 20 years to produce 9 million kilowatts of power, 22 million acre-feet of upstream storage, cost \$2.5 billion and produce \$200 million of additional power revenue per year.

(2) Authorization by Congress of a regional power agency to finance these and other projects through issuance of electric revenue bonds.

(3) By means of upstream storage cut in half the record 1894 flood at The Dalles, Oreg., to 600,000 cubic feet per second as the practical working goal for comprehensive development of the Columbia River.

The recommendations will insure completion of the navigation locks to Lewiston, Idaho, substantially control floods, and meet about half the power require-

ments of the region. The construction of Libby, Paradise, and Glacier View will make feasible a third powerhouse at Grand Coulee Dam and this is included in the investment program.

HUNGRY HORSE DAM PROVIDES PATTERN

The central problem of the Columbia River arises from the fact that 73 percent of the average annual flow occurs in the 6 summer months, with resultant flooding, and then during the 6 winter months, when power needs are greatest, the flow is only 27 percent of the average annual runoff.

The pattern of action to remedy this unbalance is provided by the experience in operating the one outstanding combination flood control and power storage project, the Hungry Horse Dam located high in the mountains of western Montana.

Hungry Horse Dam provides 3 million acre-feet of usable storage space for capturing summer floodwater, holding it until winter, and then, when generators stand idle at numerous downstream dams because of the low winter flow, the Hungry Horse Dam releases its valuable water to produce power both at site and at all downstream dams to carry the critically high winter electric utility loads. In fact, of its 840,000-kilowatt contribution to the prime power output of the system, 212,000 kilowatts is at site and 628,000 kilowatts, or three times as much, is created at downstream dams. Yet, only half the downstream head below Hungry Horse Dam is being utilized. As more dams are built, the downstream benefits will increase.

In some river basins a dam may be used for either power or flood control. The two uses are in conflict. But in the Columbia River Basin, as illustrated by Hungry Horse Dam, the same storage space may be used with the regularity of the seasons for both flood control and generation of power. Upstream storage thus makes good water out of bad water.

The Hungry Horse 3 million acre-foot reservoir may be considered as a "dipper" capable of catching one-sixtieth of the Columbia River's annual runoff of 180 million acre-feet.

To cut in half the record 1894 flood of 1,240,000 cubic feet per second at The Dalles to about 600,000 cubic feet per second would require 16 Hungry Horse projects or about 48 million acre-feet of usable storage, strategically located on the headwaters of the Columbia. Of these 16 the region now has the equivalent of 3¼, or about 20 percent of the needed total, and this existing storage can reduce the record 1,240,000 cubic feet per second to 1,110,000 cubic feet per second. Thus, 80 percent of the flood control challenge still lies ahead.

LACK OF GOOD STORAGE DAMSITES

A major conclusion of our study is that the Columbia River Basin, in contrast to many other river basins, suffers from a scarcity of upstream storage reservoirs to control the devastating floods of the Columbia River. The study also shows that these floodwaters can be put to good use for the creation of considerable electric power. The storage reservoirs proposed would be dual in purpose, serving both to control floods and generate electricity.

Unlike the Missouri River and the Colorado River, which have little water but much storage, the Columbia River has much water but little storage potential.

Hoover Dam Reservoir with its 31 million acre-feet of total capacity (of which 27,872,000 acre-feet is active storage) is almost twice as great as the entire annual flow of the Colorado River. The Glen Canyon Dam now under construction will take years to fill its 26 million acre-foot total capacity.

Similarly the Missouri has huge reservoirs such as Fort Peck Dam with 19 million acre-feet, Oahe Dam with 23 million acre-feet and Garrison Dam with 23 million acre-feet. Yet the entire average annual flow of the Missouri at St. Louis is only about 33 million acre-feet. When all dams are completed in the Missouri Basin, they will suffice to hold at least 5 years' precipitation for that entire basin covering much of 10 States.

Consider by contrast that the average flow of the Columbia River into the Pacific Ocean is 180 million acre-feet a year or the equivalent of five Missouri Rivers or nine Colorado Rivers. In further contrast, the largest potential storage reservoir which can be developed in the Columbia River Basin within the United States is Nez Perce Dam with only 4,800,000 acre-feet. This amount is less than one-fifth the usable storage of Hoover Dam.

In its comprehensive 308 plan published in 1948, the Corps of Engineers established as the maximum ultimate goal that possibly as much of 125 million acre-feet of usable storage might be attainable in the Columbia River Basin. However, even this amount of storage represents a ratio of usable storage to average annual runoff for the Columbia River of only 0:69 whereas the comparable ratio for the Colorado and Missouri will ultimately exceed 4:00 and possibly 5:00.

THE MAIN CONTROL PLAN OF 1948

The Army plan of 1948 also contained a short-range working plan for construction by 1960-65 which included Libby Dam, Hells Canyon Dam, and other projects which have not yet been built. The total amount of storage added by this main control plan was a modest 27 million acre-feet. Yet even this modest interim goal has not been achieved.

THE FUTURE MAIN CONTROL PLAN

We are now looking beyond the Army's 1948 study in our effort to define and establish a practical working goal for the comprehensive development of the Columbia River. At one extreme we feel it is improbable that the Army's theoretical 125 million acre-feet of storage will ever be achieved even in a hundred years. That amount of storage would require the uprooting of hundreds of millions of dollars in railroad investment, highways, and entire cities.

For power purposes our region ultimately could use the entire 125 million acre-feet of upstream storage if that could somehow be achieved.

For flood control purposes probably 60 million acre-feet could be used but we are advised by the Corps of Engineers that to cut in half the Columbia River record 1894 flood of 1,240,000 cubic feet per second at The Dalles, Oreg., to 600,000 cubic feet per second would require about 47 million acre-feet of usable storage.

In terms of economic feasibility, on a benefit-to-cost ratio basis, we can see about 50 million acre-feet of upstream storage reservoirs as reasonably possible within the United States and possibly an additional 10 million acre-feet in Canada.

In view of all these factors we have concluded that the practical working goal for the comprehensive plan for developing the Columbia River and its tributaries is to cut in half the record 1894 flood to 600,000 cubic feet per second at The Dalles. This calls for about 47 million acre-feet of usable storage.

The attainment of this amount of storage would make possible the production of about 21,500,000 kilowatts of hydroelectric power on the Columbia. Let me relate and summarize for you the relationships of the three components of (1) upstream storage, (2) flood control, and (3) power in table form:

	Phase C, main control plan as recommended by Corps of Engineers 308 report of 1948	Phase D, practical working goal herewith submitted for attainment by 1975-80
Amount of gross usable upstream storage.....acre-feet.....	27,000,000	470,000,000
Columbia River flow at The Dalles under conditions of the 1894 flood of 1,240,000 cubic feet per second.....cubic feet per second.....	800,000	600,000
Columbia River flood flow stage at Vancouver. The 1,240,000 cubic feet per second at The Dalles corresponding to 34.3 feet.....feet.....	26.6	21.7
Firm power production made possible by use of stored floodwater.....kilowatts.....	1 12,500,000	1 21,500,000

1 Approximate.

The achievement of 47 million acre-feet of upstream storage will be very difficult. This is shown by the status of the Army's 1948 short-range main control plan, which is phase C of its long-range comprehensive plan. Even of that modest goal of 27,590,000 acre-feet only 8,070,000 acre-feet is in sight.

Total storage usable for flood control

[Acre-feet]

	Usable storage contemplated from main control plan (1948 outlook)	Present outlook 1956
Libby.....	4,250,000	-----
Hungry Horse.....	2,980,000	2,980,000
Glacier View.....	3,160,000	-----
Grand Coulee.....	5,120,000	1,500,000
Hells Canyon.....	3,880,000	1,000,000
Palisades.....	1,200,000	1,200,000
Boise Valley projects.....	1,000,000	-----
Payette Valley project.....	1,900,000	390,000
Priest Rapids.....	2,100,000	500,000
John Day.....	2,000,000	500,000
Total.....	27,590,000	8,070,000

The difference between 8,070,000 acre-feet which is now realized or in sight and the 47 million acre-foot working goal leaves a deficiency of almost 39 million acre-feet. How can this deficit be met?

The next table shows the most desirable and more feasible remaining storage sites within the United States suitable for flood control and power. Some of these may be marginal as to economic feasibility. Detailed studies are not always available.

	<i>Acre-feet</i>
Nez Perce.....	4,800,000
Libby.....	4,250,000
Paradise.....	4,080,000
Grand Coulee, added.....	3,730,000
Glacier View.....	3,160,000
Hells Canyon's 3.88 in place of Brownlee's 1.0 million acre-feet, adds.....	2,880,000
Penny Cliffs.....	2,300,000
Springston.....	2,000,000
Similkameen.....	1,600,000
Bruces Eddy.....	1,433,000
Crevice.....	1,480,000
Payette Valley.....	1,510,000
Boise Valley.....	1,000,000
Kettle River.....	900,000
Rays Ferry.....	970,000
Marsing.....	830,000
Ninemile Prairie.....	960,000
Flathead Lake.....	500,000
Spruce Park.....	300,000
Long Meadows.....	450,000
Total acre-feet.....	39,133,000

Mr. President, from this study we find that the critical element, the crux, in achieving the modest phase D flood control target is upstream storage.

We find that about 47 million acre-feet is the point of balance between the need and the economically feasible supply of upstream storage.

We have no storage space to spare and absolutely none to waste.

We need some 39 million acre-feet additional usable upstream storage as the practical working goal for the comprehensive development of the Columbia River and its tributaries.

HIGH PLEASANT VALLEY DAM

These studies put in proper perspective some of the random proposals being made from time to time. A recent instance is the suggestion to build the so-called High Pleasant Valley Dam as one of the five projects to take the place of the original Army and Bureau of Reclamation plan for Nez Perce Dam and High Hells Canyon.

The High Pleasant Valley Dam with 1,300,000 acre-feet and Brownlee Dam with 1 million acre-feet would total only 2,300,000 acre-feet of storage as contrasted to Nez Perce Dam with 4,800,000 and Hells Canyon 3,880,000 or a total of 8,680,000 acre-feet of usable storage. The High Pleasant Valley and Brownlee projects would provide only about a fourth as much storage. They would needlessly and wastefully sacrifice 6,380,000 acre-feet of usable storage.

Moreover, in terms of power, and under conditions obtaining when all downstream dams are built, the Nez Perce and High Hells Canyon combination will provide the region with about 2,500,000 kilowatts of firm power over and above the full output of the proposed substitutes. Thus to sacrifice the two high dams in favor of Brownlee Dam, Oxbow Dam, Little Hells Canyon Dam, Mountain Sheep Dam, and the so-called High Pleasant Valley Dam would destroy more than the equivalent of a Grand Coulee Dam out of the region's power potential.

From the standpoint of your administration and in conformance with the policies you have announced on comprehensive development of water resources, we respectfully recommend that the so-called High Pleasant Valley Dam be held in abeyance pending a high level review of this situation.

We very much prefer, and we respectfully recommend in the enclosed resolution, that Congress be requested to enact legislation to authorize the High Hells Canyon Dam and also to reserve for ultimate construction the Nez Perce Dam. This is the only known and feasible method of achieving full development of this portion of the Columbia River Basin for maximum flood control and power benefits.

CANADIAN NEGOTIATIONS

In establishing this goal of 47 million acre-feet of storage, and in listing all available and economically feasible projects which barely enable us to meet this goal, we omitted storage dams which might be built at some future date in Canada. There is good reason for this omission.

Since we will be expected to pay Canada for downstream benefits created by its future upstream dams, three factors should be taken into account in our best national interest:

Firstly, upstream storage is dual storage for both flood control and power at least to our recommended phase "D" level of development. If that is the limit for flood control credit or benefit, then the storage achieved beyond that level is single purpose storage for power purposes only. Hence we should strive to furnish within the United States the requisite 47 million acre-feet of dual storage and then be happy to pay whatever is fair to Canada for the additional but single purpose power storage. We are in this bargaining position only so long as we can ourselves provide 47 million acre-feet of dual storage.

Secondly, the nature of the river regulation problem is such that a million acre-feet of storage provided in the initial stages of river basin development is two, three, or more times as efficient as the same identical storage project would be if added to the system 50 years later when the river is more fully developed.

This is illustrated at pages 399 and 400 of the Army's 308 report, House Document 531, by a comparison of two upstream storage dams in terms of effectiveness in regulating the Columbia River flow at McNary Dam. For that problem it was assumed that the region already had 26,500,000 acre-feet of upstream storage or just over half of the phase "D" goal of 47 million.

If Nez Perce Dam with 4,800,000 acre-feet of storage is added first, the dependable flow at McNary Dam of 108,900 c.f.s. is increased by 6,500 c.f.s.

If next a dam is built in Canada, say Mica Creek Dam with 10 million acre-feet of storage, the dependable flow would be increased a further 6,700 c.f.s. Note that it took twice as much Mica Creek storage to create about the same amount of added regulated stream flow.

Now, reversing, if Mica Creek were added first, the dependable flow at McNary would increase by 11,300 c.f.s. and the subsequent adding of Nez Perce would increase this only a further 1,900 c.f.s. for the same total effect of 13,200 c.f.s. (6,500 plus 6,700 or 11,300 plus 1,900).

This analysis from the Army's 308 report demonstrates the importance of Nez Perce Dam in our negotiations with Canada.

As long as we build, or retain the opportunity ultimately to build, the Nez Perce Dam, we have a trump card in the negotiations which is the equal of Mica Creek Dam as the trump card on the part of the negotiators for Canada.

Thus in terms of our national interest our Nez Perce Dam with 4,800,000 acre-feet of storage equates with the Mica Creek Dam with an assumed 10 million acre-feet of storage. This argument obtains for the power negotiations.

The combination of the flood control and the power storage argument makes the Nez Perce Dam actually superior, under these premises than Mica Creek.

This line of reasoning is already in part suggested by Mr. Len Jordan in the Upper Columbia hearings and in the April 15, 1955, special interagency study on United States and Canadian storage projects, Columbia River and tributaries.

Thirdly, the Nez Perce and similar projects within the United States offer the advantage that they would be completely under U.S. control.

CONCLUSION

From the standpoint of the best public interest, from the standpoint of best conservation and comprehensive development of resources, and from the standpoint of your administration it is respectfully submitted that your administration consider and adopt the following policies and program :

(1) By means of upstream storage to cut in half the record 1894 flood of 1,240,000 c.f.s. to 600,000 c.f.s. as the practical working goal in the comprehensive plan for the Columbia River.

(2) Ultimate construction of Nez Perce Dam and as a corollary that the Federal Power Commission be requested to refer to Congress the matter of determining both how and when to build Nez Perce Dam.

(3) Authorization and earliest feasible construction of Hells Canyon Dam and as a corollary the rescission by Congress of the present FPC licenses for small alternative projects.

(4) Start of construction of John Day Dam during 1957 and Lower Monumental during 1957 or 1958.

(5) Legislation to create the Columbia River Development Corporation patterned after the St. Lawrence Seaway Development Corporation with authority to issue electric revenue bonds on a self-liquidating basis. Our draft of legislation will be available in January.

(6) Authorization of Paradise Dam, Glacier View Dam, and Bruce Eddy Dam when feasible.

(7) Construction of Libby Dam after agreement has been reached with Canada.

(8) Continuance of the policies which insure adequate transmission lines for delivery of power from Federal projects with first priority to nonprofit agencies.

(9) Construction of Yellowtail Dam in Montana and authorization and construction of waterpower projects in Alaska.

This program is wealth creating and self-liquidating.

The Pacific Northwest is a young, struggling economy but our growth since 1950 has been slowing. Had Oregon maintained the national average rate of growth since 1950, the average income of Oregon families would be \$400 higher today, a scant 5 years later. This decline hurts Oregon and also the U.S. Treasury.

In our view the best, prompt antidote for this economic slippage is a constructive waterpower development program.

Respectfully submitted.

NORTHWEST PUBLIC POWER ASSOCIATION,
GUS NORWOOD, *Executive Secretary.*

(By direction.)

RESOLUTION NO 1—WATER RESOURCES AND POWER

Be it resolved, That we herewith respectfully present to the President of the United States the following recommendations for inclusion in the program of the President relating to water resources and power development needs of the people of the Territory of Alaska and the States of Montana, Idaho, Washington, and Oregon :

(1) Water resources should be developed in accordance with a comprehensive plan for each river basin for each of the multiple uses of water so as to achieve the optimum benefits for the greatest number of people forever.

2. Energy resources of the public domain, including water power and atomic power, should be developed so as to encourage the most widespread use of electricity at the lowest possible cost consistent with comprehensive development and with preference to consumer owned agencies and so as to insure that power investment will be on a self-liquidating basis.

3. The critical factor in the comprehensive 308 plan for development of the Columbia River Basin is the necessity to cut in half the record flood of the Columbia River. The flood control objective of the 308 report now under review by the Corps of Engineers should be set to reduce the record 1894 flood of 1,240,000 cubic feet per second as measured at The Dalles to 600,000 cubic feet per second.

4. This flood control objective should be achieved by upstream storage such as has been approved for the Upper Colorado and Missouri basins to capture and hold the flood waters so they can be put to good use. For example, in the Columbia River Basin the Hungry Horse Dam illustrates how to catch the summer flood waters and then release them for winter peaking power needs.

5. To control and regulate the Columbia River floods the following upstream storage dams should be authorized, and meanwhile no conflicting project licenses should be granted: (1) Nez Perce Dam, (2) Hells Canyon Dam, (3) Paradise Dam, (4) Glacier View Dam, and (5) Bruces Eddy Dam. These critical dams should be authorized and other sites studied to meet the flood control goal. Congress should rescind the license for the three conflicting small dams in the Hells Canyon reach of the Snake River and should authorize the multiple purpose flood control and power project by means of the High Hells Canyon Dam. Canadian negotiations should be expedited to permit early construction of the authorized Libby Dam.

6. The Columbia River program of navigation to Lewiston, Idaho, should be prosecuted as presently authorized by Congress and appropriations should be made by the Congress to initiate construction of these projects, namely John Day Dam, Lower Monumental Dam, Little Goose Dam, and Lower Granite Dam.

7. These key flood control and navigation projects should be constructed by the Federal Government. In addition when other projects are proposed for licensing for non-Federal construction, the proposed project should be thoroughly studied and no license should be issued unless the project meets the tests of best adaptability to the comprehensive plan.

8. In order to provide for improved administration and means of financing electric generating and transmission facilities in the four Pacific Northwest States it is recommended that the Bonneville Power Administration be changed into a public corporation and that its service area include all of the States of Montana, Idaho, Oregon, and Washington and that this proposed Columbia River Development Corporation be permitted to be on a self-financing basis through the issuance of electric revenue bonds.

9. The Yellowtail Dam in Montana and the Trinity Dam in California should be built with Federal generating plants and Federal transmission lines to insure integration with other Federal dams and to insure that the power output is made available to preference agencies.

10. The Upper Colorado project, Canyon Ferry Dam, Anderson Ranch Dam, Palisades Dam, and Yellowtail Dam will result in maximum public benefits as Federal transmission lines are built or satisfactory long-term wheeling arrangements are made to insure integration of Federal power resources and to insure compliance with the preference clause.

11. The development of Alaska requires early investigation of the Susitna River project and Cariboo Creek project of the Bureau of Reclamation and the Wood Canyon project and Bradley Lake project of the Corps of Engineers to insure early completion of project reports.

12. In summary, it is the purpose of this policy to insure optimum, multiple purpose development of water and energy resources of the public domain so as to achieve the greatest good for the largest number of people in the long run.

EXHIBIT 6

[From the Pacific Northwest Public Power Bulletin]

MONTANA'S PARADISE DAM THREATENED

Montana's best power site will never be developed if the Montana Power Co. has its way. In that case not only Montana but the Pacific Northwest and indeed the entire Nation will be the loser.

BUFFALO RAPIDS DAM

On July 20, 1953, the Montana Power Co. applied to the Federal Power Commission for a preliminary permit to construct a 60-foot 80,000-kilowatt dam at Buffalo Rapids on the Flathead River 4 miles below Kerr Dam.

Unfortunately Buffalo Rapids is located 60 feet under the reservoir surface of the Army's proposed Paradise Dam. The Buffalo Rapids Dam would skim off the upper 60 feet of the Paradise Dam reservoir, reduce its usable storage from 4,800,000 acre-feet to 860,000, and render Paradise Dam unfeasible.

So here is another case of a private power corporation wanting to build a small dam in the bottom of a large reservoir project. The issue in the Buffalo Rapids Dam versus Paradise Dam is the same as in the battle of the Kettle Falls Dam versus Grand Coulee Dam. It is the same issue involved in the Oxbow Dam versus Hells Canyon Dam.

THE PARADISE DAM

The Corps of Engineers has made extensive studies of the Paradise Dam site. The foundations have been core drilled, the alternate sites have been studied and discarded, and considerable work has been done on preparation of plans and cost estimates.

The Army's proposed Paradise Dam would be located 2 miles downstream from Paradise, Mont., 1½ miles above Plains, Mont., and 74 miles west of Missoula. The dam would be located on the Clark Fork 4 miles below the point at which the Flathead River flows into the Clark Fork. The reservoir would be 2,700 feet above sea level which is identical with the tailwater elevation of Kerr Dam. The huge reservoir would extend up the Clark Fork 49 miles and up the Flathead River 72 miles.

The project would be in four parts with the main earthfill dam 270 feet high, 3,750 feet long and with a crest height of 2,715 feet above sea level. Just downstream on the right bank will be the powerhouse with eight 72,000 kilowatt units for an initial installation of 576,000 kilowatts but with provision for six additional units for an ultimate installation of 1,008,000 kilowatts. The project is rated at 312,000 kilowatts of nominal prime power. Downstream from the powerhouse will be the concrete spillway and an earthfill saddle dam. Estimated cost of the project at January 1948 prices was \$265,569,000 of which some \$80 million would go for railroad relocation.

The ratio of benefits to costs is 1.71 to 1 which is quite favorable when compared with Libby 1.95, Glacier View, 1.84, Koskia 1.39, Nez Perce 1.35, Springston 1.32, Hells Canyon 1.31, The Dalles 1.25, Priest Rapids 1.22 and John Day 1.21.

The drainage basin above the dam comprises 19,900 square miles. It had a maximum record discharge of 21,300,000 acre-feet of water in 1928, a minimum of 6,400,000 in 1941 and a mean of 12,240,000. This amounts to 18,410 cubic feet per second. The maximum flood of record is 360,000 cubic feet per second, however the project is designed to reduce this to 80,000 cubic feet per second. Maximum head would be 243 feet with a full reservoir level at 2,700 feet above sea level and tailwater at 2,457 but with a 29-foot loss of head during maximum flood conditions.

CRITICAL STORAGE

The chief value of upstream dams is for the storage of summer floodwater at a high elevation for release in winter months. Paradise would have a total storage capacity of 6,520,000 acre-feet of which 2,440,000 would be dead storage and 4,080,000 live or usable storage. However the skimming off of the upper 60 feet of this storage would cut the reservoir in half leaving only 3,220,000 total storage with 2,444,000 dead and only 860,000 usable storage. Thus the effective storage would be reduced by almost 80 percent if Buffalo Rapids Dam were built.

The value of upstream storage in the Pacific Northwest depends chiefly on two factors: (1) the amount of usable storage to catch spring floodwaters for release in winter and (2) the elevation of that storage above sea level because this is a measure of the power head through which the stored water can be put to work in the downstream generators. In this case the top of the Paradise Dam reservoir would be 2,700 feet above sea level and have 4,080,000 acre-feet of storage. Obviously an acre-foot of water at this level is worth more than twice as much from a power standpoint as an acre-foot in the Grand Coulee reservoir at an elevation of only 1,290.

By comparison Libby Dam would have an active storage of 4,250,000 acre-feet at a full reservoir level of 2,440 feet above sea level. Hells Canyon would have 3,880,000 acre-feet at 2,077 feet. Hungry Horse Dam has 2,980,000 at 3,560 feet.

Another factor to consider in evaluating an upstream reservoir is the mean annual runoff. Thus at Hungry Horse Dam the streamflow varies from 206 cubic feet per second to 46,000 cubic feet per second, or a mean of 3,323 cubic feet per second. The mean annual runoff is 2,136,000 acre-feet, or less than enough each year to refill the active storage capacity of 2,980,000. Thus Hungry Horse has a ratio of mean annual runoff to active storage of less than 1. Yet it is a good project. Hells Canyon, with a mean annual runoff of 12,059,000 acre-feet, has a ratio of better than 3. Libby, with a mean annual runoff of 7,910,000, has a ratio of about 2. And Paradise Dam, with a mean annual runoff of 12,240,000 acre-feet, has a ratio of better than 3.

MONTANA'S BEST DAM

Montana has remaining 88 potential hydroelectric sites with a projected name plate capacity of 5,372,980 kilowatts. The dry eastern portion of the State has 61 sites capable of 1,337,200 kilowatts, while the steep western slopes offer 27 sites capable of 4,035,780 kilowatts. However, of this total the Paradise Dam alone accounts for 1,008,000 kilowatts. It is 18.7 percent of the total for the State.

DRY SPILLWAY

Not only does Montana have a great stake in the Paradise Dam, the entire Pacific Northwest should be just as concerned as it is over Hells Canyon. The principles and issues are the same. Half the power potential of this region hangs on upstream storage. Without the Paradise Dam, Glacier View, Hells Canyon, Nez Perce, and other upstream storage reservoirs, the 34 million kilowatt potential of the Northwest is cut in half.

The dream of the hydroelectric engineer is to build a series of dams where all the water runs through the generators and none over the spillway. This is the dream of controlling the river. This is one of the aims of comprehensive planning. Upstream storage dams are the means for leveling the riverflows so that an ever greater portion of the water can be put through the generators to work for man.

THE 308 REPORT

The Paradise Dam is an essential part of the Corps of Engineers 308 review report for comprehensive development of the Columbia River and its tributaries, also known as House Document 531. In volume I, see pages 154-156, artist's sketch of Paradise Dam on page 136 and plates 25, 31, 32, and 33. In volume II, see pages 615-626, pages 708-729 and plates 2, 11, 12, 46 to 58.

EXHIBIT 7

[From the Pacific Northwest Public Power Bulletin]

THE SEARCH FOR UPSTREAM STORAGE

Without large upstream storage the 30-odd-million kilowatts potential of the Columbia Basin will be cut in half.

Half of the hydroelectric potential of the Columbia River and its tributaries depends on the building of upstream storage dams. This is the conclusion of the paper delivered by Mr. Ben E. Torpen of the Corps of Engineers on December 12, 1952, before the Columbia Basin Interagency Committee. This conclusion is well documented in the recently printed 8 volumes of the 308 review report.

Upstream storage is needed, of course, to catch and skim off the peak of the waste summer floodflow and to hold it for release until winter when it can be used to generate much needed power.

Some storage is much more valuable, depending on location and elevation above sea level. For example, the proposed flood-control storage in the John Day Dam and the Priest Rapids Dam would be virtually useless from a power standpoint because they are located too far downstream. In contrast the 2,980,000 acre-feet of usable storage behind Hungry Horse Dam at an elevation of 3,560 feet not only provides valuable flood control all along the river in summer, but stores

water for ultimate use in 20 downstream power dams. The value of upstream storage is measured by two factors, the volume of usable storage in millions of acre-feet and by the elevation of the reservoir in feet above sea level.

HOW MUCH WATER?

Only the Mississippi, of all rivers in the United States, delivers more water to the ocean than does the mighty Columbia. For the 50-year period 1897-1946, the average annual flow at the mouth of the Columbia has been 180,100,000 acre-feet.

Unfortunately the heaviest rainfall is near the mouth of the river. Of the 180.1 million acre-feet, 42.4 comes from the tributaries flowing in below Bonneville Dam, leaving a flow at Bonneville of 137.7, or 76.4 percent as much as at the mouth.

The Geologic Survey stream gage at Trinidad, just below Rock Island Dam, is a convenient reference point, because the average flow there has been 90.4 million acre-feet a year, or just 50 percent of the total flow of the Columbia at its mouth.

Mean Annual Flow¹

Sources of the Columbia River:		Columbia River:	
Snake -----	36.82	At mouth-----	180.1
Upper Columbia-----	24.60	At Bonneville-----	137.7
Willamette -----	23.83	At The Dalles-----	133.7
Kootenai -----	20.60	At McNary -----	127.6
Pend Oreille-Clark Fork----	18.70	At Trinidad -----	90.4
Cowlitz -----	6.95	At Grand Coulee -----	82.5
Spokane -----	5.78	At Revelstoke, British	
Lewis -----	4.27	Columbia -----	24.6
Deschutes -----	4.24		
Yakima -----	4.09		
Others -----	30.22		
Total -----	180.10		

¹ In millions of acre-feet based on 50-year record, 1897-1946.

Continuing above Trinidad the average flow at Grand Coulee is 82.5 which may be divided among the Kootenai, 20.6; Pend Oreille—Clark Fork, 18.7; Spokane, 5.78; the Upper Columbia above Revelstoke, 24.6; and others, 12.82. The 82.5 above Grand Coulee and the 36.82 on the Snake totals 119.32 or the two-thirds of the Columbia River flow which is susceptible to up-stream storage.

WHEN?

The job of leveling the flow of the river by means of up-stream storage may best be visualized by examining the hydrograph of the daily mean flow at The Dalles, Oreg. At this point the mean annual flow is 133,700,000 acre-feet. If the flow were constant this rate would be 184,600 cubic feet per second as a straight line on the graph. The actual daily mean flow is a fairly straight line just under 100,000 cubic feet per second for January, February, October, November, and December. For June the flow averages 500,000 cubic feet per second with a peak in mid-June, slightly over 500,000. The curve rises gradually from March 1 to June 15 and levels off at 100,000 again by October 1. It will be noted that 100,000 cubic feet per second amounts to about 6 million acre-feet in a month. The average June flow of 30 million acre-feet is thus 22.4 percent of the annual flow and is equal to the flow of the 5 low months. In half of the year the Columbia discharges 27 percent of its flow and in the other half 73 percent. But these have been mean daily figures. The curve for minimum flow is roughly half this amount while the maximum curve is about double this amount. The extreme flows of record at The Dalles have been 36,000 cubic feet per second and 1,240,000 cubic feet per second.

HOW MANY RESERVOIRS?

The usable storage of the recently completed Hungry Horse Dam is 2,980,000 acre-feet or about 3 million. It would require 60 such reservoirs to catch and hold the entire 180.1 million acre-feet of the Columbia's mean annual flow. It

would require 40 such reservoirs to hold the flow above Grand Coulee and of the Snake. But, of course, there is no need to catch the entire runoff. The need for upstream storage is only to skim off the peak summer flow.

The normal flow past The Dalles for the 6 winter months is 6 million acre-feet per month or two Hungry Horse reservoirs. The minimum daily flow curve is just half this much. That sets up the main problem: how to increase the minimum daily flow in the 6 winter months to the daily mean curve. Answer: build 6 Hungry Horse reservoirs or a total of 18 million acre-feet of usable storage.

Actually the main control plan of the 308 review report calls for 27 million acre-feet of storage to reduce an 1894 flood of 1,240,000 cubic feet per second to 800,000 cubic feet per second at The Dalles. This plan called for eight main control projects with usable storage as follows: Grand Coulee, 5.12 million acre-feet; Hells Canyon, 3.28; Glacier View, 3.16; Hungry Horse, 2.98; Albeni, Falls 1.14; Libby, 4.25; Priest Rapids, 2.1; and John Day, 2; total 24.03. In addition the report listed alternative storage sites at Kooskia, 3.1; Paradise, 4.08; Springston, 2.595; and Nez Perce, 4.8, or an added 14.575 million acre-feet.

Potential storage in Canada is 22.51 million acre-feet. Most spectacular of the Canadian projects is the Big Bend Dam with 6,900,000 acre-feet of usable storage at a pool elevation of 2,540 and a tailwater elevation of 1,920 or a dam of well over 600 feet.

All these storage sites total 61.1 million acre-feet. From a flood control standpoint 24 million acre-feet will reduce the 1894 flood of 1,240,000 cubic feet per second to 800,000 cubic feet per second at The Dalles while 47 million acre-feet will reduce that flood to 600,000 cubic feet per second or low enough to eliminate the need for levees along the lower Columbia.

Mr. Torpen states that the development of 33 million kilowatts in the Columbia Basin will require 125 million acre-feet of storage but from a practical standpoint only about 60 million acre-feet appears attainable. This would raise the minimum flow at The Dalles from 36,000 cubic feet per second to about 130,000 cubic feet per second and provide about 25 million kilowatts of power at 75 percent load factor.

We need all the upstream storage we can get. Every project should be built.

EXHIBIT 8

[From the Pacific Northwest Public Power Bulletin]

FOR INDUSTRY AND JOBS, FOR IRRIGATION, FOR RECREATION, FOR HYDROELECTRIC POWER, FOR FLOOD CONTROL, FOR NAVIGATION—LET'S BUILD PARADISE DAM

Rare indeed is the opportunity to control two rivers with one dam.

A GOOD LOCATION

Such an opportunity exists in western Montana at the Paradise Dam site 4 miles below the confluence of the Flathead and Clark Fork Rivers.

Shasta Dam backs water up the McCloud, the Pit, and the Sacramento Rivers. TVA's Norris Dam stores water on both the Clinch and the Powell Rivers.

The huge Paradise Dam will create a 72-mile lake up the Flathead River to the foot of Kerr Dam and a 49-mile lake up the Clark Fork past Superior, Mont.

Smaller arms of Paradise Lake will reach up the Little Bitterroot, Joeko, and St. Regis Rivers for summer boating and recreation.

A GOOD DAM

The Corps of Engineers has made extensive studies of Paradise Dam site. Foundations have been core drilled, alternate sites have been studied and discarded, and considerable work has been done on preparation of plans and cost estimates.

The project will consist of an earthfill dam 270 feet high, 3,750 feet long, and with a crest height of 2,715 feet above sea level. Just downstream on the right bank will be the powerhouse with eight 72,000-kilowatt units for an initial installation of 576,000 kilowatts but with provision for six additional units

for an ultimate installation of 1,008,000 kilowatts. Additionally the project will create 425,000 kilowatts of downstream benefits. Cost is \$450 million.

Maximum head would be 243 feet with a full reservoir level at 2,700 feet above sea level and tail water at 2,457 but with a 29-foot loss of head during maximum flood conditions.

CRITICAL FLOOD STORAGE

The chief value of upstream dams is for the storage of summer floodwater at a high elevation for release in winter months, thus making good water out of bad water. Paradise would have a total storage capacity of 6,520,000 acre-feet, of which 2,440,000 would be dead storage and 4,080,000 live or usable storage.

The drainage basin above the dam comprises 19,900 square miles. It had a maximum record discharge of 21,300,000 acre-feet of water in 1928, a minimum of 6,400,000 in 1941, and a mean of 12,240,000. This amounts to 18,410 cubic feet per second. The maximum flood of record is 360,000 cubic feet per second; however, the project is designed to reduce this to 80,000 cubic feet per second.

MONTANA'S BEST DAM

Montana has 88 potential hydro sites with capacity of 5,372,980 kilowatts. The dry eastern portion of the State has 61 sites capable of 1,337,200 kilowatts while the steep western slopes offer 27 sites capable of 4,035,780 kilowatts. However, Paradise Dam alone accounts for 1,008,000 kilowatts. It is 18.7 per cent of the State's total.

DRY SPILLWAY

Not only does Montana have a great stake in the Paradise Dam, the entire Pacific Northwest should be just as concerned as it is over Hells Canyon. The principles and issues are the same. Half the power potential of this region hangs on upstream storage. Without Paradise Dam, Hells Canyon, Nez Perce, and other upstream storage reservoirs, the 34-million-kilowatt potential of the Northwest is cut in half.

The dream of the hydroelectric engineer is to build dams so water runs through the generators and none over the spillway. This is the dream of controlling the river. This is one of the aims of comprehensive planning. Upstream storage dams are the means for leveling the riverflows so an ever greater portion of the water can be put through the generators to work for man.

CONSERVATIONISTS SUPPORT PARADISE DAM¹

(America's fine conservation groups which urged the Senate to adopt the Hells Canyon bill now show keen interest in favor of Paradise Dam. In the forefront as a leader favoring comprehensive multiple purpose river development is David R. Brower, executive director of the Sierra Club, and author of this article.)

A CASE FOR A DAM

A decision is imminent that will result in a very serious threat to Glacier National Park. The threat is all but unknown. The Sierra Club just happened to stumble upon it last year in the long course of urging the National Park Service and the Secretary of the Interior to protect Glacier National Park from the proposed Smoky Ranger Dam, the obscure name for a dam put forth as a substitute for the proposed Glacier View Dam. Both dams would have severely impaired Glacier Park. Former Secretary of the Interior Douglas McKay firmly opposed Glacier View, but the Department's Smoky Range position wasn't clear. One of Secretary of the Interior Fred Seaton's first moves when succeeding Mr. McKay was to oppose Smoky Range firmly and clearly.

But this isn't to be about Glacier View or Smoky Range Dams, or any of the long list of dams in the Pacific Northwest that the Sierra Club is alert to

¹The Army Corps of Engineers, which announced last July that it did not plan to re-study the Paradise flood control and power project on the Clark Fork River in western Montana, has decided to take another look. The division engineer reported in December: "Our studies now show that the requirements for flood control and also for hydroelectric power in the region will be deficient unless some additional storage is included in the tentative system now being studied."

in their relation to our scenic resources review. Let's focus instead on two mutually exclusive dams—Buffalo Rapids No. 4 and Paradise. One of them promises to be history making: there seems to be a firm basis for conservation support for Paradise.

What is the park threat?

Montana Power & Light Co., a subsidiary of Anaconda Copper, is contemplating a moderate-sized dam at a site known as Buffalo Rapids No. 4 on the lower Flathead River, a tributary to the Columbia and well downstream from the sites within Glacier National Park. This site lies within the impoundment area of the proposed Paradise site which the Bureau of Reclamation's studies have determined to be the best of the 109 sites studied in the Clark Fork Basin. Paradise Dam was locally opposed early in the decade owing to its effect on Indian lands, on settlements, and on a transcontinental railroad and highway. It would inundate pretty country, but nothing scenically outstanding. The reclamation aspects of the project would bring in more agricultural land than would be inundated. Rail and highway relocation costs would not hamper the financial feasibility of the project.

But local opposition and Montana Power Co.'s interest in Buffalo Rapids No. 4 have combined to remove Paradise from active consideration by the Bureau of Reclamation. Montana Power Co.'s license to study Buffalo Rapids No. 4 has been renewed. If the company asks the Federal Power Commission for permission to build and if the Bureau of Reclamation is prevented from arguing the superiority of the Paradise development, then Paradise Dam can never be built. This will lose the finest water-storage opportunity in the Clark Fork Basin. It will eliminate one of the major opportunities for flood-control storage (Paradise has seven times the capacity of Buffalo Rapids No. 4) in the Columbia main control plan. In contemplation of this eventuality, the Corps of Engineers and the Bureau of Reclamation are jointly studying other sites where this flood-control opportunity, as fragmented, can be compensated for. Best of these, but not under active consideration at present, is the Glacier View Dam site within Glacier National Park. Others are at Spruce Park, Nine-mile Prairie, Swan Valley, and Flathead Lake—all opposed by local groups. Opposed or not, these dams do not add up to the storage sacrificed at Paradise, and their nonreimbursable costs for flood control would in all probability be higher, for less storage, at these sites than at Paradise. Pressure would be increased for upstream regulation, as at Glacier View, once Montana Power had completed its Buffalo Rapids No. 4 dam and required upstream reservoirs to firm up power generation. No other site could compete with Glacier View in this respect, for sheer engineering and economics.

In summary, if the apparent status quo should prevail, a private company could build Buffalo Rapids No. 4, Paradise could never be built, and to the present demand for Glacier View Dam would be added the demand of Montana Power Co.

If the Government takes the initiative, rather than wait for a private company to invite it to do so, Paradise Dam can be built instead, and the flood-control necessity and economic feasibility of major upstream storage can be eliminated, and all this probably at less cost to the Government. Glacier National Park would be safe from this threat.

Partnership: To be or not to be?

Full development at Paradise can probably be accomplished only two ways: (1) entirely by the Federal Government, or (2) by the Federal Government in partnership with a private utility, such as Montana Power Co. The former alternative would provide lower cost power to the region, at an indirect cost to the rest of the Nation, the theory being that this stimulus to an underdeveloped region would turn out to be a good investment for the rest of the Nation—the good elements of TVA or the upper Colorado project.

Under current administration policies, the second alternative may be chosen, provided it is decided to favor full development. Montana Power Co. would finance the power installation, while the Federal Government would add its own incremental share for flood control, navigation, reclamation, conservation pool, and recreation, and would sell falling water to the Montana Power Co. in order to pay out the Government's reimbursable costs. Power cost in the region would be higher, but the indirect cost to the rest of the Nation would be

minimized, as would the danger of Government power monopoly. Private initiative would be stimulated.

Either way, full development would insure maximum downstream power benefits and minimum upstream scenic impairment.

One Government official who watched the Sierra Club's role in the Dinosaur controversy has commented, "After all, you are in an advantageous position in this Paradise situation—as well off as you would have been if you had tackled the Echo Park problem back in 1946." But perhaps not. The building of Echo Park Dam and the destruction of Dinosaur would require legislative action in what you might call the fishbowl of Congress, where all could see and be heard. But the building of Buffalo Rapids No. 4 and the destruction, in time, of Glacier Park requires only executive inaction, pretty much behind closed doors.

At Echo Park in 1946, whatever danger there was, was obscure—so obscure that no one noticed. Not until 1953, when the direct-fire artillery was aimed at the white of the Dinosaur's eye, did the conservationist public become effectively excited. At Glacier in 1957 the danger is obscure. The artillery is laid for indirect fire—over the horizon and out of sight. Quite possibly without Montana Power's knowing it, the gun is laid on Glacier National Park. The lanyard will be pulled if the Federal Power Commission approves Buffalo Rapids No. 4; there will be no authorizing legislation, no debate, no more widespread conservationist interest than there was at Hell's Canyon. Just destruction by default. If that lanyard gets pulled, no amount of protest will stop the shell in its flight to Glacier.

A question of leadership

Who should take the initiative in seeing that this doesn't happen to Glacier, with the best damsite in the Clark Fork Basin being wasted in the bad bargain? The Federal Government? Executive or legislative branch? Local government? The Montana Power Co.? Or some wandering conservationist-without-portfolio?

One wouldn't envy the wandering conservationist his task of persuasion. He would need to be the best ventriloquist yet to get the Indian to say, "Flood my home and farm"; or the utility to say, "Please, Mr. Secretary, tie me with your partnership red tape instead of letting me make more money without it"; or the Great Northern to say, "Tear up this good railroad along the stream and replace it with one along the contours"; or the Montana Highway Department to say essentially the same; or the local county to ask that the reservoir basin land be taken off the tax rolls.

Isn't it leadership in reverse to expect this? There seems to be little doubt that a full treatment at Paradise will provide the greatest good for the greatest number in the long run—of flood control, water conservation, power generation, stimulation of agricultural and industrial development, and an intact national park, too. The Government has the staff and facilities for finding out for sure if this is so. Having found out, it has the means of explaining this to the local people, and of acting for the national interest if the people refuse to listen.

Major gains, minor losses

After all, the railroad won't suffer. The Bureau of Reclamation outdid the Southern Pacific's engineers at Shasta Dam. The highway can be accommodated as well. And there's no question of whether farmland will be inundated, but of which farmland. Five million acre-feet of water will cover far less acreage if it is stored at Paradise than if it is stored in dozens of smaller reservoirs instead—a pitcher of water will fill a good many saucers. Higher streams are steeper, take higher dams to store less water at greater cost. Montana Power Co. needn't suffer. Everywhere you look there are major gains for minor losses; the Government, acting for the people who will profit from these gains, and paid by those people to lead, can make this all clear and can do it authoritatively. The Sierra Club, or an equivalent organization, isn't equipped for the job, nor is that its purpose. For every dollar the club has to spend, the Government has a million.

Legislation may soon be introduced authorizing the construction of Paradise, the dam that promises to save a park—not by "making the park more beautiful," to quote a line from the old Hetch Hetchy refrain, but by being far enough away from the park, and big enough to minimize the inundation of other acres of scenery and fertile land. Paradise was almost lost. We have reason, however, to look forward to two new chapters in the story: "Paradise Be Dammed" and "Paradise Regained."

DAVID R. BROWER.

WATER RESOURCES CONFERENCE SUPPORTS UPSTREAM STORAGE

PARADISE DAM FAVORED

Storage dams are the best insurance that water will not be a limiting factor to economic development in Montana, Perry F. Roys told the second Montana Water Resources Conference at Missoula, June 29.

Roys, director of the Montana State Planning Board urged timely building of projects "because of the stimulating effect that water development has on economic development * * *."

He was 1 of 13 speakers to address the 2-day conference on the theme, "Upstream Storage."

ARMY ASKS MORE STORAGE

Leadoff speaker was John D. Walker of the Corps of Engineers office at Portland, Oreg. He emphasized the need for additional water storage reservoirs on upstream rivers of the Columbia River system to provide 21 million acre-feet storage to prevent the huge annual damages occurring during each summer runoff season.

To reach this minimum flood control goal one or more of the proposed dams such as Paradise, Smoky Range, Nez Perce, and Libby will have to be built, he said.

He emphasized that two Montana dams: Libby, providing 5 million acre-feet of storage, and Paradise with 4,080,000 acre-feet were two of the highly desirable multiple-purpose projects.

Three Department of Agriculture representatives, L. D. Love, John W. Wetzel, and William Dreskell, outlined the extent to which small dams and soil conservation methods provide water retention but cannot materially control floods in the Columbia River Basin.

Bernard Goldhammer and E. G. Starr of the Bonneville Power Administration outlined long-range power needs and that these needs could best be met by hydroelectric power since economical atomic power would not be competitive in this region until perhaps 1980.

Charles Hazen, of the Bureau of Reclamation, pleaded for more upstream storage for irrigation.

Dr. Everett D. Howe, University of California, explained the experiments for obtaining fresh water from sea water. Since no economical method is in sight he urged conservation of available water resources.

Dr. Carl Malouf, professor of sociology and anthropology, Montana State University, discussed research he had conducted at Canyon Ferry Dam in which he pointed out what he termed undesirable aspects of such projects.

Upon being questioned as to why he didn't also include in his research the pros and cons on privately built smaller single-purpose power dams, Dr. Malouf revealed that his endeavors had been paid for by a "private power company."

Dr. John Craighead, U.S. Fish and Wildlife Service urged reservation of the Middle Fork of the Flathead River area and opposed the Spruce Park Dam. On questioning he stated that he did not oppose Paradise Dam.

David Brower, executive director Sierra Club, favored retention of the wilderness areas.

PARADISE DAM BILL DISCUSSED

Concluding speaker was Mr. Mike C. Mapes, counsel of the Senate Committee on Interior and Insular Affairs who discussed the Paradise Dam bill in the light of the foregoing considerations.

PARADISE PROJECT AREA PLANNING BOARD

In drafting the Paradise project bill the Committee for Paradise Dam sought to answer not only the unfounded fears which had been raised at the 1948 hearing but also the real problems which have been observed at older Federal dams.

This gave rise to the provision for creation of the Paradise Project Area Planning Board of 14 members and a \$15,000-a-year administrator, to serve during the construction period and not more than 2 years thereafter. The bill reads:

"The Board shall be responsible for planning and assisting the readjustment and development of the project area for the maximum benefit of the people of the State of Montana and especially the people of the project area, including but not limited to the relocation of communities and community facilities, the reset-

tlement of residents, the development of recreation facilities, and the preservation and development of fish and wildlife resources within the project area." For these purposes the Board may expend up to \$5 million over and above the normal construction costs of the project.

EXHIBIT 9

BEFORE THE FEDERAL POWER COMMISSION

In the Matter of Montana Power Company

Project No. 2135

PETITION TO INTERVENE

The Northwest Public Power Association, Inc., 1311 Columbia Street, Vancouver, Wash., respectfully petitions to intervene in the above entitled proceeding, and in support of this petition states as follows:

1. The Northwest Public Power Association is a nonprofit, nonpartisan corporation organized under the laws of the State of Washington. The association is a service organization owned and operated by 93 public and cooperative electric systems, including rural electric cooperatives, peoples' utility districts, public utility districts, mutual electric cooperatives and municipal electric distribution systems in Alaska, Idaho, Oregon, Washington, and Montana. These systems have a public utility responsibility of providing electric service to almost 2 million people or about 39 percent of the population of the Pacific Northwest.

2. Many of these electric systems purchase all or part of their power requirements from Federal power projects in the region and will in the future be primarily dependent for power supply upon hydroelectric power projects, Federal or non-Federal, which may be developed in the region. They are vitally interested that any such development should provide for their needs in such manner as to insure the maximum benefits to the consumers whom they serve.

3. Petitioners submit that the project for which the applicant in this case seeks a preliminary permit is not in compliance with section 10(a) of the Federal Power Act, as it is not the one best adapted to a comprehensive plan for improving or developing the Clark Fork for the use or benefit of interstate commerce, for the improvement and utilization of waterpower development, and for other beneficial public use. Attention in particular is invited to the 308 Review Report, House Document 531, 81st Congress, 2d session, as prepared by the Corps of Engineers which recommends the construction of Paradise Dam with a capacity of 1,080,000 kilowatts on the Clark Fork 2 miles downstream from Paradise, Mont., with a storage reservoir of 6,520,000 acre-feet of storage at a full reservoir elevation of 2,700 feet above sea level, which level is coincident with the tailwater of the Polsom powerplant of the Montana Power Co., said reservoir to extend up the Clark Fork 49 miles and up the Flathead River 72 miles. The Paradise Dam would flood out the Buffalo Rapids site and cover it with water 60 feet deep. Conversely, the construction of the proposed Buffalo Rapids Dam would foreclose the building of the Paradise Dam above elevation 2,640 and would cut its storage in half to 3,220,000 acre-feet, and would reduce the usable storage from 4,080,000 acre-feet to about 860,000 acre-feet, a reduction of almost 80 percent, which in our opinion would render the Paradise Dam economically infeasible for construction. As designed, the Paradise Dam has a benefits-to-cost ratio of 1.71 to 1 which is highly favorable being exceeded only by Libby and Glacier View Dams of all those proposed in the Columbia River Basin. The construction of the Paradise Dam is recommended by the division engineer, Corps of Engineers, in House Document 531 and the details of the proposed project are described in detail in volume 1, pages 154-156, artist's sketch of Paradise Dam on page 136, and plates 25, 31, 32, and 33, and in volume 2 on pages 615-626 and 708-729 and plates 2, 11, 12, and 46-58. It is our view that the Paradise Dam would meet the requirements of section 10(a) of the Federal Power Act whereas a dam at Buffalo Rapids would not meet this statutory standard.

4. It is your petitioner's opinion and belief that the application of the Montana Power Co., if granted, will not be adapted best to conserve, utilize, and adapt the natural resources of the region economically or in the public interest.

5. It is your petitioner's opinion and belief that should the application of the Montana Power Co. be granted, such grant will forever prevent and impede full and complete utilization of the resources of the Clark Fork, the Pend Oreille River, and the Columbia River for the benefit of all of the people of the Pacific Northwest.

6. Petitioner is of the opinion and belief that the construction of Buffalo Rapids Dam by preventing the development or full development of the Paradise damsite would result in permanent loss of an appreciable portion of the more economical potential water power resources of the Columbia River Basin and would thereby ultimately cause higher wholesale power rates to be imposed upon the public and cooperative electric systems for the utilization of higher cost substitute power sources.

7. Petitioner submits that the complex multiple-purpose nature of the Paradise Dam for flood control, silt control, recreation, irrigation, at-site power production, river regulation, and for power production at a possible 19 downstream power projects, the size of the project, the cost involved, and the broad public interest implications necessitate construction of Paradise Dam by the Government of the United States, and that, in accordance with the provisions of section 7(b) of the Federal Power Act, the Commission should so find and should, therefore, so report to the Congress and deny the application of the Montana Power Co.

8. It is the opinion and belief of your petitioner that the organizations which your petitioner represents are not otherwise adequately represented in this proceeding.

9. Participation by petitioner in this proceeding is necessary to insure that any action by this Commission, insofar as it affects petitioner, the member electric systems, and their consumers, will be with full cognizance and regard for their just rights and interests.

Wherefore, your petitioner respectfully requests that it be permitted to intervene to raise the matters as described above and to seek from the Commission such orders, grants, or other relief as may appear appropriate pursuant to law or the discretion vested in the Commission.

If this petition for intervention is granted, petitioner respectfully moves that the application of the Montana Power Co. for a preliminary permit be dismissed. In the alternative, petitioner requests that public hearings be scheduled by the Commission in the Pacific Northwest on this application for preliminary permit.

NORTHWEST PUBLIC POWER ASSOCIATION,
GUS NORWOOD, *Executive Secretary.*

STATE OF WASHINGTON,
County of Clark, ss:

Gus Norwood, first being duly sworn, on oath deposes and says that he is executive secretary for the intervenor above named, wherefore he makes verification for and on behalf of said intervenor and as its said executive secretary, that he has read the petition for intervention on Project No. 2135, and knows the contents thereof, and that the matters therein stated are true to the best of his knowledge and belief.

GUS NORWOOD.

Subscribed and sworn to before me this 10th day of September 1953.

TILDEN W. RANDALL,
Notary Public for Washington.

My commission expires April 16, 1956.

BEFORE THE FEDERAL POWER COMMISSION

In the matter of Montana Power Co.

Project No. 2135

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing petition to intervene upon the Montana Power Co., Butte, Mont.

Dated at Vancouver, Wash., this 10th day of September 1953.

GUS NORWOOD,
Executive Secretary, Northwest Public Power Association.

INFORMAL PROTEST—PROJECT No. 2135

SOUTHWEST WASHINGTON PUBLIC UTILITY
 COMMISSIONERS ASSOCIATION,
 Seattle, Wash., September 15, 1953.

The CHAIRMAN,
Federal Power Commission,
 Washington, D.C.

DEAR SIR: The Southwest Washington Public Utility Commissioners Association, at a meeting in White Salmon, Wash., on September 12, 1953, adopted a motion directing me to file with the Commission an informal protest against the granting of a preliminary permit to the Montana Power Co. in connection with Project No. 2135 for the construction of a 60-foot, 80,000-kilowatt dam at Buffalo Rapids on the Flathead River.

The construction of a dam at Buffalo Rapids would conflict with the building of the Paradise Dam as recommended by the Corps of Engineers in its 308 Review Report, or it would limit the height of the Paradise Dam by 60 feet and thus cut in half its total potential storage, which would have the effect of reducing the "usable" storage of 4,080,000 acre-feet by 80 percent.

Since the Paradise Dam is a part of the comprehensive program of the Corps of Engineers for the development of the Columbia River and its tributaries, it is the view of this association that the Paradise Dam meets the requirements of section 10(a) of the Federal Water Power Act and that the proposed Buffalo Rapids Dam would be in conflict with and in violation of section 10(a).

It is furthermore the view of this association that the multipurpose nature, the large size and the cost of Paradise Dam necessitate its construction by the Government of the United States, and that in accordance with the provisions of section 7(b) of the Federal Power Act, the Commission should so find and should therefore so report to the Congress and deny the application of the Montana Power Co.

It is recommended that the Commission dismiss the application of the Montana Power Co. for a preliminary permit.

Sincerely yours,

SOUTHWEST WASHINGTON PUBLIC UTILITY
 COMMISSION ASSOCIATION,
 KEN BILLINGTON, *Secretary.*

 EXHIBIT 10

MONTANA'S POWER FUTURE

Montana is one of the Nation's leading States in waterpower potential.

Only the four States of Washington, California, Idaho, and Oregon have more waterpower. Montana in fifth place is followed by the other 43 States.

The Federal Power Commission recently issued a 196-page revised edition of its publication entitled, "Hydroelectric Power Resources of the United States—Developed and Undeveloped—as of January 1, 1957."

The Federal Power Commission recently issued a 196-page revised edition 610 kilowatts of which only 851,510 kilowatts or 13 percent has been harnessed leaving the remaining 87 percent yet to be developed.

The entire Nation has a hydropotential of 117.1 million kilowatts of which 23 percent is harnessed.

Montana has more hydropotential than the sum total of the hydropotential of 17 States plus the District of Columbia.

These are listed below. The State of Vermont leads with 655,475 kilowatts, but even this is less than 10 percent of Montana's potential of 6,650,610 kilowatts.

	<i>Kilowatts</i>
1. Vermont	655,475
2. Indiana	635,464
3. Maryland	634,165
4. North Dakota	598,800
5. Iowa	596,621
6. Massachusetts	494,116
7. Minnesota	420,520
8. Mississippi	409,900
9. Ohio	354,874
10. Connecticut	302,593
11. Kansas	295,910
12. New Jersey	233,878
13. New Mexico	212,330
14. Florida	102,661
15. Louisiana	45,500
16. Rhode Island	6,792
17. Washington, D.C.	3,000
18. Delaware	600
Total	6,002,999
Montana alone	6,650,610

The list for Montana is not complete. It already reflects the subtraction of 708,000 kilowatts because FPC listed Buffalo Rapids No. 4 with 300,000 kilowatts instead of Paradise Dam's 1,008,000 kilowatts.

This loss, if not rectified, is greater than the entire hydropotential of such States as Indiana or Vermont.

Other damsites on the upper Missouri also have been frittered away through underdevelopment.

MONTANA HAS HIGH POWER RATES

Although Montana people own these vast hydroelectric power resources, they pay high rates for electricity.

According to the Federal Power Commission the average price of 250 kilowatt-hours per month for home use in cities of 2,500 population and over as of January 1, 1957, in the leading States was as follows:

1. Washington	\$4.53
2. Tennessee	4.87
3.	5.40
4. Nebraska	6.23
5. Kentucky	6.28
6. California	6.28
7. Idaho	6.39
8. Georgia	6.40
9. Nevada	6.53
10. Wisconsin	6.53
11. Utah	6.62
12. Kansas	6.63
13. North Carolina	6.76
14. South Carolina	6.77
15. Montana	6.84

The Montana Power Co. rate for 250 kilowatt-hours per month for home use is \$6.83 whereas the comparable rate in Tacoma, Wash., is \$3.20 and Eugene, Oreg., \$3.15.

For increased usage of 500 kilowatt-hours for home use per month Montana Power Co. charges \$9.33 whereas Seattle, Wash., and Forest Grove, Oreg., ask only \$5.

THE INVESTMENT CHALLENGE

The biggest cost factor in electric power rates is interest paid on the large investments needed.

At Hungry Horse Dam, for instance, an increase of 1 percent in the interest rate would increase power cost 24 percent.

Not only is a low interest rate on borrowed money critical in determining electric rates but it is also the key to full, comprehensive multiple-purpose development of water resources. High-cost money often forces a cream skimming approach to conservation.

Without the availability of Federal Government credit the Hungry Horse Dam would not have been constructed.

Hungry Horse Dam well illustrates the philosophy which Abraham Lincoln put in these words:

"The legitimate object of Government is to do for the people what needs to be done, but which they cannot, by individual effort, do at all, or do so well, for themselves."

The key to Montana's future prosperity lies in the development of its unused 91 percent of the waterpower. The key to development on a comprehensive basis and at lowest cost is public financing.

That will require some public initiative.

EXHIBIT 11

Effect of storage on 1894 flood

	Gross usable storage (million acre-feet)	Storage used 1894 flood (million acre-feet)	Effective storage at The Dalles (million acre-feet)	Flow at The Dalles cubic feet per second	Vancouver Weather Bureau gage (feet)	Stage reduction at Vancouver (feet)
Natural (actual).....	0	0	0	1,240,000	33.4	-----
Confined by levees.....	0	0	0	1,240,000	34.3	-----
Existing storage.....	11.1	4.9	2.5	1,110,000	32.3	2.0
H. Doc. 531 with setbacks.....	13.5	10.4	9.4	920,000	29.0	5.3
Full main control plan ¹ as per H. Doc. 531.....	27.0	20.9	17.3	800,000	26.6	7.7
Tentative U.S. program.....	26.0	22.3	19.2	780,000	26.1	8.2
Tentative U.S. program plus Canada storage.....	37.5	31.6	25.2	690,000	24.0	10.3
Minor damage only.....	-----	-----	32.5	600,000	21.7	12.9

¹ Main control plan of report as published in H. Doc. 531.

EXHIBIT 12

[From the Pacific Northwest Public Power Bulletin]

THE MICA CREEK PROJECT—THE HYDROELECTRIC POWER AND THE FLOOD CONTROL POTENTIALS

(By Jack D. Stevens, consulting engineer)

(Speech before the Northwest Public Power Association Convention at Seattle, April 5, 1957.)

My subject deals with the hydroelectric and flood control potentials of the Mica Creek project.

The operations of all major Northwest projects are closely related. Also, there is a composite effect on the Pacific Northwest through our having, or our lack of having, adequate power and flood control. Therefore, a single project cannot be entirely divorced from other projects or the economy of the region. This being the case, I believe some historical background of the Columbia River Basin might be appropriate at this time.

This map shows the Columbia River and its major tributaries.

Trappers, miners, and farmers were living in various parts of the Columbia Basin in the early 1800's. In 1844, a couple of partners took out a claim near the mouth of the Willamette River. A village sprang up, and the partner from Maine wanted to call it Portland—the other was from Massachusetts and he wanted to call it Boston. They flipped a coin, and Portland won. Vancouver, across the river, was a Hudson's Bay settlement in 1824. It was Britain's southernmost foothold until the United States took over the Washington Territory in 1846.

In those early days, the area in the vicinity of Grand Coulee Dam was inhabited by a few cattlemen and dry farmers. It took about 2,000 acres to support a family on a dry farm. Now, 2,000 acres of irrigated land supports 25 families.

In 1888, early settlers dug a canal across Canal Flats to let their boats through and also to allow floodwaters of the Kootenay to enter the Columbia. Only one boat ever used the passage, and with the help of the Kootenay, the Columbia began flooding out the farmers. The farmers had a cure for it—they dammed the canal. ("Adventuring on the Columbia" by Fish.)

There are many wonderful things about the Columbia River, including its scenic wonders, navigation, fish runs, irrigation, power, and lots of clear, pure water. The Columbia River is, without doubt, the most important power stream on the North American continent. It drains the greater parts of Oregon, Washington, Idaho, and western Montana. It also drains corners of Wyoming, Utah, and Nevada. It drains a large area in southeastern British Columbia. Fifteen percent of the Columbia's drainage is in Canada; an area of 39,000 square miles. The balance of 220,000 square miles is in the United States. The total drainage of 259,000 square miles is equal in land area to Maine, Vermont, New Hampshire, Rhode Island, Massachusetts, New York, Pennsylvania, New Jersey, Delaware, Maryland, Virginia, and Ohio. Texas is only slightly larger.

The average annual runoff of the Columbia is 62 million acre-feet at the Canadian border and 180 million acre-feet at the river's mouth. Although the Columbia drainage area is only 6 percent larger than the Colorado, its annual runoff is about eight times greater.

A power stream must have two things—one is head, and the other is water. The elevation of the Columbia River at the border is 1,292 feet, and of this amount, 1,056 feet are already developed, or are being developed. In addition, 152 feet of the head remain to be developed at Wells and John Day. Prime power production of the present base system of Columbia River plants existing, or under construction, is 4.8 million kilowatts. When all of the Columbia plants below the border are constructed, the prime power capability will be 5.6 million kilowatts on the basis of present upstream storage.

When one considers the potential head on the Columbia, he is immediately impressed with the tremendous value of upstream storage. Present Columbia River plants benefit from 3.0 million acre-feet of usable storage at Hungry Horse, 1.2 million at Flathead Lake, 1.1 million at Albeni Falls, and 5.1 million acre-feet at Grand Coulee. There are also some minor amounts of storage at Priest Lake, Coeur d'Alene, and Long Lake.

On the basis of present conflicts with nonpower interests, there is considerable doubt that large amounts of new storage will be developed on U.S. tributaries to the Columbia. You are all familiar with Hells Canyon. The U.S. Supreme Court ruled against it early this week. The high dam would have developed 3.9 million acre-feet of usable storage for power production at site and at downstream plants. Under the Idaho Power Co.'s program, the Brownlee project will only develop 1.0 million acre-feet, and a low dam at Hells Canyon will develop only pondage. The Pleasant Valley project, as proposed by the Pacific Northwest Power Co., will develop 500,000 acre-feet, and the Bureau of Reclamation is now considering a high dam at Pleasant Valley that will develop 1.5 million acre-feet. A high dam at Pleasant Valley will flood out the upstream Hells Canyon site.

Your organization, with some recent encouragement from the staff of the FPC, is hopeful that a solution will be found for passing anadromous fish over high power structures. If this problem is solved, the large Nez Perce Dam can be constructed on the Snake River. Nez Perce will develop 4.8 million acre-feet of usable storage. It will also flood out the Mountain Sheep and Pleasant Valley sites. Summarizing, Brownlee and high Pleasant Valley will provide 2.5 million acre-feet; while a combination of Brownlee and Nez Perce will provide 5.8 million acre-feet of usable storage.

Proposals for the development of storage on the Clearwater River at the Penny Cliffs site have been violently opposed by the Fish and Wildlife people. The development of storage at Bruce's Eddy is also strongly opposed.

There are important storage potentials on the Clark Fork, Flathead, and the Kootenai Rivers in the United States. One is the Glacier View project, or its alternate, Smoky Range, on the North Fork of the Flathead River. Both sites are opposed by the Wildlife people and the National Park Service. Smoky Range would flood less Park Service land, and would develop 1.5 million acre-

feet of usable storage. Its chance of being constructed is not good. Paradise, on the Clark Fork, would develop 4.1 million acre-feet of usable storage, but this project is also beset with conflicts. At the public hearings in 1948, the project was opposed by the Montana State Chamber of Commerce, the Montana State Grange, the Flathead Indians, and others. Since that time, the Montana Power Co. has filed on the Buffalo sites in the reservoir area. These sound like insurmountable obstacles—and maybe they are.

In spite of all the obstacles, hydro is still the only logical source for current expansion to the regional power supply. Streamflows are ours if we use them. They are wasted if we don't. Great volumes of water flow to the Pacific each year without having turned a wheel. Without storage reservoirs, this energy cannot be conserved—when it is gone, it is gone forever.

In 1948, the Corps of Engineers released its famous "308" report, published as House Document 531. That report recommended the development of 21 million acre-feet of effective flood control storage so as to reduce the discharge at The Dalles to 800,000 second-feet under 1894 flood conditions, 21 million acre-feet of effective flood control storage required, and now, 9 years later, how much do we have? Less than 5 million acre-feet. Our record should be better.

Proponents of steam-electric generation have not been silent. Nor should they be. Our Northwest coal will be used in the power picture, but not on a large scale in the immediate future. Coal simply is not competitive with hydro generation at this time. Oil is even less competitive.

There have been some reports to the effect that coal-burning steamplants are economically competitive at this time because the plants during the natural course of operation would produce fly ash. This material has been used effectively as an admixture with cement in making concrete. It is good material, but certainly not as widely use as some have been led to believe.

The October 15, 1956, issue of *Electrical World* includes the fourth steam station design study, by Mr. John J. Kearney, associate editor. In this study, a detailed analysis is made of 202 items, covering 67 modern steamplants. The study comments on the sale of fly ash. Of the 67 modern steamplants surveyed, only 4 reported the sale of fly ash. This indicates that few utilities consider fly ash a fruitful source of revenue at this time. Later, when the national highway program gets into full swing, a great deal of concrete will be used and the coal-burning utilities may then take more interest in selling this waste product. Fly ash is not a valid talking point for the development of a Northwest steamplant at this time.

Several papers have been written, proposing the association of a chemical plant with a steam-electric plant, in order that coal may be treated chemically so as to obtain oil, char, and tar. One writer says that the revenues from the sale of oil and tar would be sufficient to pay the entire cost of power production. Possibly so, but the electric utility business is complex enough without getting into the manufacture and sale of oil and tar. A number of the utilities have considered this aspect of coal-fired generation, but to my knowledge none has been sufficiently impressed to want to try it. A special type of partnership arrangement might be put together to accomplish all of these things. I sincerely hope this will be the case.

In all likelihood, coal will play an important role in the resource development of this region. When only marginal, higher cost hydro plants remain, we can turn to large-scale use of our coal, and later to atomic energy. Coal differs from water in that we don't have to use it this year, next year, or the following year. It is stored in the ground awaiting our use when we are ready for it. This sequence of events of first developing lower cost hydro and then developing higher cost, fuel-fired generation is not new. The same pattern was followed in other areas, notably California and the Tennessee Valley. Some hydro is still being developed in California, but new generation is predominantly steam. For the Nation as a whole, 78 percent of the installed capacity is fuel fired, and 22 percent is hydro. In the Northwest power pool, 10 percent of the installed capacity is fuel fired, and 90 percent is hydro. The percentage of fuel-fired generation will increase in the future as it has in other areas.

It is only a matter of years until the Nation will have to turn to the development of atomic energy if it is to feed and clothe its people. I attended a management course in atomic energy at the University of California last summer. I learned that there are some important problems yet to be solved.

To begin with, there are reactor hazards. A reactor cannot explode like an atomic bomb. Some types have minor explosions, but most types will have a

sluggish release of radioactive material in case the unit fractures. Onsite safety problems are not as difficult to handle as the offsite ones. People working on the job are aware of the dangers and take a personal interest in their own safety. The offsite people may not even know the reactor exists. Air and water would be contaminated before offsite people could be properly warned and removed to safety.

Radiation is another problem. Science doesn't know how much radiation a human body can withstand without serious results. There is no fixed level of dosage that is dangerous to all people. The tolerance of one person is different from that of another. Time of exposure and concentration of exposure are important. Inhaled solids, if not released through the respiratory organs within 3 days, will require up to 10 years for disposal. One group of authorities believes that a certain number of roentgens will take 10 years off a person's life. If a person is exposed to the extent that 10 years will be taken off his life, it isn't the last 10 years. He starts degeneration immediately. Accurate information as to tolerance for radiation is entirely lacking.

Atomic energy for power production purposes is not competitive with hydro and probably won't be competitive for 10 or 15 years. Dr. Frederick DeHoffman, vice president of General Dynamics, was the guest speaker at the commencement dinner held for those who attended the atomic energy course at Berkeley. He had some advice for the electric utilities; he advised the utilities against building nuclear plants until they become competitive, unless they are forced to do so by outside influences. If a utility must get into the atomic field on a large scale, it should get in on a research basis. This will require \$30 million, including \$10 million for a research center. Dr. DeHoffman suggests that the utilities establish study groups that can keep abreast of advancements in the science and keep managements informed as to what is going on.

All resources presently available, or contemplated, will be needed for the economic development of the Pacific Northwest. The population of this region is increasing tremendously. The U.S. News & World Report has published several forecasts of population increases for the various States of the Nation. The most recent one, April 6, 1956, prophesies an increase for the State of Washington of 61 percent by 1975. The Stanford Research Institute, in a survey of population increases, forecasts an increase for the State of 39 percent by 1975. Even if the lower figure proves to be correct, the population increase will still be substantial. This means that there will be lots of young people growing up in this region and they will be looking for jobs. New job opportunities will not be created to any great extent by agriculture or fishing or commercial enterprises. Job opportunities can only result from the expansion of present industries, and the settlement of new industries in this region.

Now, what do we have in the way of a comprehensive program for the development of the power needed to insure the optimum development of our resources and the future welfare of our people. * * *

As I pointed out, the timing is not right for either conventional steam-electric generation or nuclear reactors. The obvious answer is that we must continue to develop our hydroelectric potential. We particularly need more storage development.

One of the great remaining opportunities for flood control and power storage is the Mica Creek project located on the Columbia River in British Columbia about 200 miles north of the international boundary. It is just below the Big Bend of the Columbia River. Preliminary designs call for a dam 700 feet high and about 2,800 feet long. This would be the highest rock-fill structure in the world. The dam and powerhouse are estimated to cost from \$250 to \$300 million. Usable storage would amount to 10.5 million acre-feet. This is over twice the usable storage at Grand Coulee.

In the course of parliamentary consideration by the Canadian Government of the International River Improvements Act, then known as bill No. 3, various methods of developing the upper Columbia River were set forth by Gen. A. G. L. McNaughton, chairman of the Canadian Section of the International Joint Commission. Three methods under consideration are briefly these:

Case I would provide for the development of 10.5 million acre-feet of usable storage at Mica Creek and about 4.0 million acre-feet at the Murphy Creek site, a short distance upstream from the U.S.-Canadian boundary. No diversions from one tributary to another.

Case II would provide for the construction of the Bull River Dam and the diversion of about 5,000 second-feet of water on an annual basis from the

Kootenay to the Columbia at Canal Flats. There would be no power installation at Bull River, but there would be powerplants at Luxor, Donald Canyon, Mica, Priest Rapids, Little Dalles, and Murphy Creek. All of these plants would benefit from the diversion of about 8.6 million acre-feet of water across the Canal Flats.

Diversion from the Kootenay to the Columbia would not reduce the amount of annual discharge reaching Grand Coulee, but it would reduce the power potential of the Libby site on the Kootenay River in Montana. An annual diversion of 5,000 second-feet would reduce the prime power output at Libby by 92,000 kilowatts on the basis of a 7-month storage drawdown period.

Case III would include the dam at Bull River, with the diversion from the Kootenay to the Columbia, and the creation of storage at Mica Creek. But, in addition, this third plan would provide for the diversion of about 15 million acre-feet of water each year from the Columbia to the Fraser River system. This water would be diverted each year at times required for regulation benefits to the Fraser River system. The diversion would be made either at Priest Rapids or Little Dalles.

Case I, in which there would be no diversions from one tributary to another, would, of course, suit us best. In Case II, the diversion of an annual average of 5,000 second-feet from the Kootenay to the Columbia would affect the Libby project, although I am told that Libby would still be economically feasible.

Case III, which provides for the diversion of the Kootenay to the Columbia, and diversion from the Columbia to the Fraser, would pose some serious problems. To begin with, we are all hopeful that the Libby project will someday be constructed. This may be a forlorn hope, however, since the Canadians are certainly entitled to some of the power benefits due to the encroachment of the Libby Reservoir on Canadian soil. Payments to Canada for this purpose may result in Libby becoming economically infeasible.

Even more serious than the impact on Libby, would be the diversion of 15 million acre-feet of water each year from the Columbia to the Fraser. This would be mostly stored water that we would want released for the benefit of downstream Columbia River plants. By the diversion, it would be released during similar low-water months on the Fraser.

Obviously, the diversion would be accompanied by the construction of powerplants on the Fraser and this would, in turn, result in serious conflict with the fishery interests. The sockeye run on the Fraser River was almost eliminated due to a rockslide in 1913. At that time, the Fraser produced 2,400,000 cases of salmon. After the landslide virtually blocked the river, the run dwindled to less than 150,000 cases per year. Tunnels and fish ladders were installed by the International Fisheries Commission, supported jointly by the United States and Canada. By this action, the sockeye run was restored (p. 28, "Study of Development of Upper Columbia River Basin," by Senator Richard L. Neuberger, 1955).

This is an international resource. We share the salmon catch in the straits—the Canadians take one-half the catch and we, the other half. The Canadian fishery people are convinced that the construction of dams on the Fraser River will seriously affect the sockeye run. One fish authority claims that a change in temperature of 2°, or a delay of 2 days in reaching the spawning grounds, would seriously reduce the sockeye run. I doubt if the sockeyes are that delicate. Some experts believe that the diversion of 15 million acre-feet of water into the Fraser would result in higher water temperatures on the lower Columbia and that this would endanger the health and vitality of the migratory salmon that use the Columbia and its tributaries for spawning. This appears to be a plausible conclusion. In any event, dams on the Fraser will not be conducive to the health, happiness, and welfare of the sockeye salmon.

The Columbia diversion would hit us from several directions. Our power potential on the lower Columbia River would be reduced, and our interests in the Fraser and lower Columbia fisheries would be adversely affected.

There appears to be no doubt that the Canadians can legally divert part, or all, of the natural flows of the Kootenay and Columbia Rivers that now enter the United States. The authority for such diversions is contained in article II of the Boundary Waters Treaty of 1909. This same treaty created the International Joint Commission. Article II reads in part:

"Each of the high contracting parties reserves to itself * * * the exclusive jurisdiction and control over the use and diversion, whether temporary or per-

manent, of all waters on its own side of the line which in their natural channels would flow across the boundary or into boundary water * * *."

Certainly we should oppose the diversion of the Columbia to the Fraser. If, however, we contend, as some of our people have, that Canadian storage will have no long-term benefit to the United States, then the Canadians might very well proceed to make the diversion on the basis of this erroneous contention.

Many of you are familiar with the special interagency study entitled, "U.S. and Canadian Storage Projects, Columbia River and Tributaries, April 15, 1955." The burden of that report was to enhance the U.S. storage opportunities and depreciate the value of Canadian storage. In my opinion, neither of these objectives was accomplished.

I disagree emphatically with the Federal interagency report wherein it states that "There is no great long-term engineering advantage to the United States in Canadian storage."

The interagency report examines Mica Creek storage benefits on the assumption that construction of Mica will follow the completion of a list of so-called C level plants. Under this assumption, Mica Creek construction would follow a number of highly controversial projects, and on this basis, the prime power attributable to Mica Creek storage would be greatly reduced.

The so-called C level is nothing more than a list of existing and potential projects. The potential projects were at one time, considered to have economic feasibility, but conditions have changed. This accounts for the fact that the Army is now reviewing the 308 report in the light of conditions as they now exist.

The interagency study states that when the far-distant D level operation of hydro and steam is reached, available water will be used to generate maximum energy at all hydroplants and flood control will become a byproduct in the operation of reservoirs for maximum power production. In other words, reservoirs would be maintained full so that all inflows would be used over higher heads and thereby increase the annual energy production. I don't believe this situation will ever occur, and I certainly disagree with the theory that flood control will become a byproduct of power production. Actually, under a situation of reservoirs being maintained full, there would be no flood-control storage. Potential flood damages will increase in the future as economies build up along the rivers, and flood control should, therefore, receive very great consideration in the future operation of storage reservoirs.

If the alltime peak flood of 1894 were to reoccur this summer, and if the Mica Creek project were then in operation, flood-control operations at Mica Creek would reduce the river elevation at Vancouver, Wash by a foot and a half and this reduction in river elevation would reduce flood damages on the Columbia by a total of \$60 million. Obviously, the flood-control benefits of the Mica Creek project are important in any man's language.

I pointed out earlier that the Army's 308 report, published in 1948, called for the development of 21 million acre-feet of effective flood-control storage so as to reduce the discharge at The Dalles to 800,000 second-feet. Now, 9 years later, we have less than 5 million acre-feet instead of the 21 million acre-feet recommended. Certainly the Mica Creek flood-control potential is tremendously important to the States of Washington and Oregon.

Now, let us summarize and let us assume that there will be no diversions from one stream to another in Canada. Let us also assume that Mica Creek will be the next large block of storage to be added to northwest power operations. On the basis of these realistic assumptions, the following results will be obtained:

1. Mica Creek Dam will impound 10.5 million acre-feet of usable storage at Grand Coulee, Albeni Falls, Flathead Lake, and Hungry Horse.

2. Storage releases at Mica Creek will add 1.1 million kilowatts of prime power to the Federal system of plants, existing, and under construction. Another 0.8 million kilowatts of prime will be added at Wells, Rocky Reach, Rock Island, Wanapum, Priest Rapids, and John Day. Total increase in lower Columbia River prime power—1.9 million kilowatts. This is equal to $4\frac{1}{2}$ Bonneville Dams.

3. As a measure of flood-control benefits, if Mica Creek were now constructed, and a flood of the 1894 magnitude were to occur this coming summer, the flood damage on the lower Columbia would be reduced by \$60 million.

4. A total of 1.6 million kilowatts of prime power will be produced at the Mica Creek, Priest Rapids, and Little Dalles plants in British Columbia.

Mica Creek is truly a great project, and every effort should be made to encourage its construction.

And now in closing, believe me, gentlemen, we need all the power we can put together—hydro, coal, atomic. Let us develop each carefully, thoroughly, and economically.

BPA SALES TREND

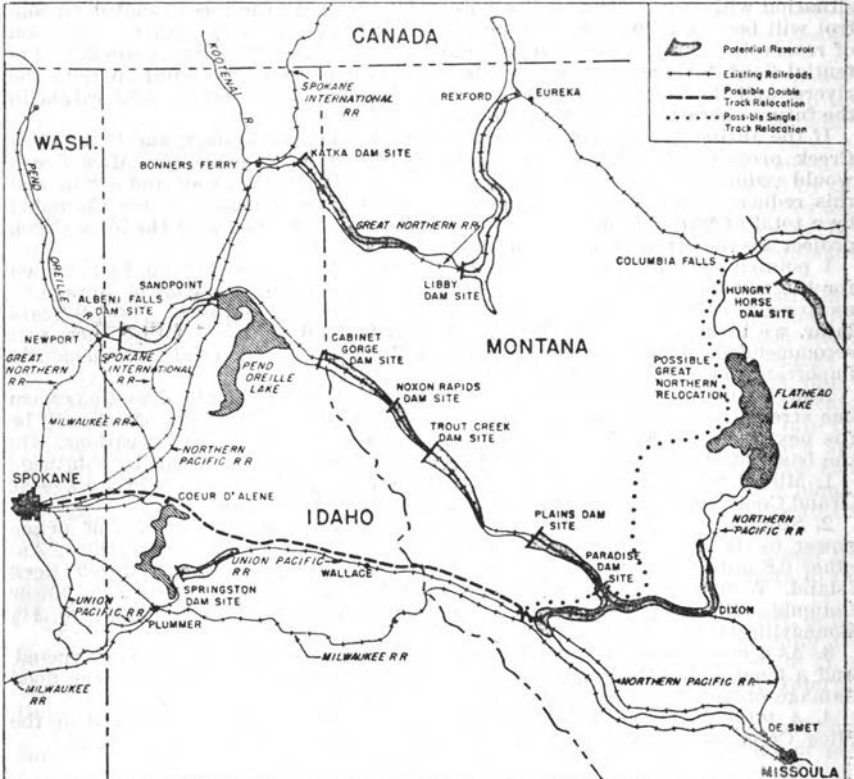
During calendar year 1956 the U.S. Treasury received \$20,534,810 from 76 consumer-owned electric systems or almost a third of the total electric revenue of \$62,822,408. Calendar year sales by BPA have been increasing at rapid rate as follows in millions :

Year	Sales to consumer-owned systems	All sales	Year	Sales to consumer-owned systems	All sales
1947	\$3.23	\$22.06	1952	\$14.03	\$38.34
1948	5.15	26.25	1953	13.91	41.91
1949	7.03	28.93	1954	15.80	46.49
1950	9.09	33.35	1955	18.81	55.74
1951	11.53	37.79	1956	20.53	62.82

EXHIBIT 13

POTENTIAL RESERVOIRS AND RAILROAD RELOCATION POSSIBILITIES

Columbia River Basin



SUPPLEMENTAL STATEMENT OF GUS NORWOOD, EXECUTIVE SECRETARY, NORTHWEST PUBLIC POWER ASSOCIATION

Mr. Chairman and members of the committee, in the last few days of visiting in Montana and discussing the possible impact of S. 1226, I have been advised of a number of important issues which warrant an additional amendment to S. 1226.

This amendment is in the form of a proviso to be added to section 3(a) which relates to the reservation of the at-site firm power of the project for use in Montana.

The amendment consists of changing the period at the end of section 3(a) at page 4, line 2, into a colon and adding the following proviso:

“Provided, That no power under this reservation may be sold to any private electric utility corporation except on condition that such corporation agrees to transfer power for the account of the Government including transfer to Federal installations and other preference customers of the Government throughout the service area of such corporation in Montana in accordance with contract terms and conditions satisfactory to the Secretary in his capacity as Administrator of the Bonneville Power Administration pursuant to the Bonneville Project Act of 1937, as amended.”

The purpose of this amendment is to insure that the at-site power reserved for Montana is to be made available under reasonable terms and conditions to public irrigation districts, rural electric cooperatives, Air Force bases, and other public installations throughout Montana.

This amendment is designed to preclude the situation now existing under the Montana preference clause of the Hungry Horse Project Act of 1944 whereby power is sold to the Montana Power Co. for use as far east as Billings and other portions of that company's service area throughout most of eastern Montana but is being denied to rural electric cooperatives and other public installations in eastern Montana. Thus under the Hungry Horse Project Act the preference clause relating to public bodies and cooperatives is not being carried out.

In fact, contrary to the Bonneville Project Act and other Federal power laws, the only real preference customer for Hungry Horse power in eastern Montana is the Montana Power Co.

A further purpose of this amendment is to insure the broadest possible market in Montana for Paradise Dam power and to prevent the monopolization of power by any limited group.

The need for a broad market approach is illustrated by the tragic case of the Canyon Ferry Dam. Here is a project which was advocated by the rural electric cooperatives of Montana. It was opposed by the Montana Power Co. Yet today the Montana Power Co. monopolizes the power output of Canyon Ferry Dam and obtains the power at sacrifice prices. The Government is thus not getting the revenues from Canyon Ferry Dam power that it should be getting.

The recent hearings by the House Government Operations Committee relative to service for the Yellowstone National Park emphasize how the Government loses both coming and going. Whereas the Government obtains only a low rate for Canyon Ferry Dam power it is forced to buy back the same power at Yellowstone National Park at a high rate. This could not happen if the Government owned its own transmission line from Canyon Ferry Dam to Yellowstone National Park or if it had a satisfactory transfer contract with the Montana Power Co.

From a sound business standpoint this amendment is needed in order that the Government be kept whole and be able to meet the repayment schedule for amortizing power investment of Paradise Dam.

Furthermore this amendment will enable the Government to merge the power output of all Federal dams in Montana in order to improve the power market for all Federal dams and improve the repayment record of all projects.

We cannot tolerate the making of large Federal investments in these projects and then let this one company achieve a virtual monopoly of the power output at sacrifice prices. For example, at Canyon Ferry Dam the Bureau of Reclamation is selling some very valuable peaking power to the Montana Power Co. at dump-power rates.

Another purpose of our amendment is to facilitate the integration and power pooling of certain Federal projects in the Missouri River Basin and Columbia River Basin.

We wish to make it clear that we favor accomplishing these purposes by the construction of Federal or other public transmission lines across Montana for delivery of Federal power to the load centers of our rural electric cooperatives.

In some cases this delivery of power may initially be accomplished more economically by transfer over private utility company lines.

Our amendment will insure that no private company will obtain Paradise Dam power unless the company agrees to such transfer.

The committee should be aware that three companies now wheel or transfer power for the Bonneville Power Administration to preference customers. These are the Pacific Power & Light Co., Portland General Electric Co., and Washington Water Power Co.

Indeed the Montana Power Co. is providing such transfer service to several rural electric cooperatives in western Montana.

The pattern and the terms and conditions are well known and have been in effect many years. This is not something new in our experience.

This amendment will not restrict the Montana Power Co. from buying considerable power from Paradise Dam for use in its own system. Nor will this amendment preclude the company from earning a fair rate of return on its investment in facilities used for power transfer. In fact, the company should be able to make more money because of the fuller utilization of its transmission system capacity.

This amendment should also enable the Federal Government to save money in its own power bill at Federal installations such as the Glasgow Air Base and Great Falls Air Base, both of which are adjacent to Federal transmission lines but are served by the Montana Power Co. at an unjustifiably high profit. The Comptroller General in one of his reports has called attention to the financial losses which the Government is suffering at these two airbases because these bases are not connected directly by short Federal transmission lines to the Government's Rainbow line from Fort Peck Dam.

For these reasons in part we respectfully urge the committee to adopt this amendment.

Thank you.

Mr. NORWOOD. Mr. Chairman, I have a telegram from Mr. Ken Billington of the Washington PUD Association advising that he will send a statement to the committee in Washington, D.C., in favor of the bill.

Senator GRUENING. It will be received.

(The telegram and the supplemental statement of the witness above referred to follows:)

SEATTLE, WASH., December 14, 1959.

GUS NORWOOD,
Missoula, Mont.:

Sending statement to Washington, D.C. in form of letter plus resolution for inclusion in committees hearings S. 1226. We are in support. Will you request record be kept open for inclusion by committees upon receipt.

KEN BILLINGTON.

WASHINGTON PUBLIC UTILITY DISTRICTS' ASSOCIATION,
Seattle, Wash., December 15, 1959.

Subject: Statement in support of S. 1226 for inclusion of hearing record at Missoula, Mont., December 15, 1959.

Senator JAMES MURRAY,
Chairman, Senate Committee on Interior and Insular Affairs,
Senate Office Building, Washington, D.C.

DEAR SIR: The following statement in support of S. 1226 is submitted in behalf of the Washington Public Utility Districts' Association, 1511 Tower Building, Seattle, Wash.

The association is comprised of membership from 25 public utility districts throughout the State of Washington furnishing electric and water utility service to in excess of 240,000 customers. Public utility districts in the State of Washington are founded on a law which directs them to conserve the power and water resources for the benefit of the people of our State.

Construction of a multiple-purpose dam on the Clark Fork River on or adjacent to the Paradise site is an integral part of the comprehensive development for

the Columbia River Basin. It is recognized that the primary benefit of the project should rightfully go to the people of the State of Montana, but it should also be recognized that certain downstream benefits from upstream storage can rightfully accrue to downriver projects because benefits from the local project at Paradise would be increased through an integrated basin operation.

Meeting in Seattle, Wash., on December 11, 1959, the following resolution pertaining to S. 1226 was unanimously approved by the delegate members of the association. It is submitted for inclusion in the committee hearing records.

PARADISE DAM

Hearings will be held in Missoula, Mont., on December 15, 1959, by the Senate Committee on Interior and Insular Affairs concerning the proposed Knowles project legislation. The bill as introduced provides for study of this particular reach of the Clark Fork River as an integral and important part of the Columbia River system. Possible construction would be the Paradise Dam, Knowles Dam, or Buffalo Rapids Dam. Relationships as regards total power, flood control, and other benefits rank from high to that named order. The Division Office of the Corps of Engineers on the basis of benefits-to-cost ratios recommends the Knowles project. Study of the findings on the three projects, however, discloses certain factors which could be reevaluated. When this is done, and in line with the desire of seeking development based on full conservation of available resources, there is definite indication that the Paradise Dam would be of greatest value.

We therefore urge a restudy of this reach of the river with direct attention by the Government to the following: (1) the seemingly high estimates involving railroad and highway relocation costs included in the original Paradise Dam studies; (2) the development of construction time schedules in behalf of savings on interest during construction; (3) the desirability of obtaining control over two rivers by the construction of one structure; (4) the small difference in cost of power even under present cost estimates as related to the substantial gain in the amount of power by the Paradise construction; and (5) the very limited number of large storage sites on the Columbia River system in relation to total amount of annual water flow. On the basis of findings to date, and the possible improvement in such findings upon restudy, we support authorization and construction of a dam at the Paradise site by the Federal Government at the earliest possible date.

Sincerely yours,

KEN BILLINGTON.

Mr. MAHONEY. Our next witness is Mr. Cy Tonner.

STATEMENT OF L. P. TONNER, PRESIDENT, MONTANA ELECTRIC CONSUMERS COUNCIL, INC.

Mr. TONNER. Senator Gruening, Senator Martin, my name is L. P. Tonner; I am a State representative of Flathead County and I reside at Martin City, Mont., which is 3 miles northwest of the great Hungry Horse Dam, and where I have operated a sawmill the past 15 years. I speak as president of the Montana Electric Consumers Council, Inc., and wish to go on record as favoring Senate bill 1226 for the construction of the Knowles Dam project in the Clark Fork-Flathead River Basin.

The purpose of our corporation is educational, social and promotion of social welfare; to disseminate information and help provide an abundance of low cost electricity to expand the agricultural and industrial productivity in Montana, thereby increasing the standard of living; and not for monetary gain or profit to the members. We have members in every county in the State. Our organization will be 1-year-old next February. Our principal goal is 1 cent per kilowatt power for Montana consumers.

We favor construction of this project by the Federal Government as it is primarily a flood control project and because competition of government wholesale power creates a yardstick for rates of the private utilities. This fact has been proven in both the Bonneville and TVA areas. The rates in other areas grow progressively higher as the distance from Bonneville and TVA increases. This statement is also true as in regard to the average price of power purchased by REA borrowers.

The low rates charged by the privately owned utilities bordering the TVA area, whether they are low by TVA example or by TVA competition, have not retarded the growth in these companies' common stock earnings. From 1937, the earliest year for which Federal Power Commission data are available, to 1957, the record shows that earnings available to the common stockholders of the larger privately owned power companies in the United States were multiplied three and one-quarter times, and similar earnings of nine companies bordering TVA multiplied eight times.

The average residential rates in the TVA area in 1958, for 250 kilowatt hours residential power, was \$5. In the Bonneville area, the State of Washington has the lowest average residential rates in the Nation with \$4.09 for 250 kilowatt-hours, January 1, 1959; Oregon, \$5.39; Idaho, \$6.41. These rates compare with \$7.53, January 1, 1959, in Anaconda, Mont. In all Montana cities served by Montana Power Co. the rate is the same. Glendive and other Montana cities served by Montana Dakota Utilities Co., \$7.25; Kalispell and other cities served by Pacific Power & Light and in the Bonneville area, \$6; while the skimmed milk REA's range from \$7.36 in Glacier County to \$7.75 in Toole County. Even Wyoming's average rate for this amount and type of service is \$7.16 against Montana State average of \$7.43.

In the State of Washington, where they have 22 operating and 8 nonoperating Public Utility Districts, 21 REA co-ops and 19 municipal systems, and where all phases of the public power movement arose out of a strong public demand for economic development of the State, it is very interesting to read in the Spokesman Review dated December 15, 1959, the following news release, titled "Third Unit Boosts Washington Water Power Pool."

Washington Water Power Co. can now substantially take care of its own power needs, since the third 100,000 kilowatt generating unit went on the line at Noxon Rapids Dam on the Clark Fork River in Montana.

"However, we fully realize that this favorable situation will be a very temporary thing," said Marshall L. Blair, vice president in charge of power supply. "If load requirements continue to grow as they have in the past, and we have no reason to feel that this growth will not continue, we will soon have to be looking to new power sources to supply our customers' needs."

Blair said Washington Water Power has added more than 10,000 customers on its lines in the past 10 years and that power use has jumped from under 5,000 kilowatt hours per customer in 1948 to about 9,000 hours in 1959. "Our system peakload has grown from 355,000 kilowatts to an estimated 655,000 kilowatts this winter," Blair stated.

When Noxon is completed, about next March, it will approximately double Washington Water Power's generating capacity. Despite that fact, Blair said, additional firm power will be needed in the next 5 or 6 years to meet anticipated growth.

Apparently all the public power competition in Washington State is also very good for the private utility companies there. In Oregon, recently a high official of the Portland General Electric Power Co.

decried as socialism the construction of Federal multipurpose dams. Now let us take a look at the facts. More than 60 percent of Portland General Electric's power supply comes from the Bonneville Federal system, serving almost one quarter million consumers. This power is generated at dams built with congressional appropriations delivered to this utility on transmission lines built with congressional appropriations. If this is socialism, whose socialism is it?

As early as 1882, in the first year of Central Station Electric Service in the United States, there were already four municipally owned electric systems in operation. This was Americanism in 1882 and will also be Americanism in the year 2082.

Our council believes that there is ample room for both privately and publicly owned utilities and that a healthy development of both is a must and an asset to America.

Our greatest resource, water, of our rivers and lakes in Montana must be wisely and fully developed and conserved for an expanded agricultural and industrial economy. We live in an electric age. Our standard of living, our health and welfare are all affected by the supply of electricity. Economic progress and national security are tied directly to the supply and cost of electricity. Therefore, all the great flood control projects in this country should be constructed and operated by the Federal Government. Private utilities never have, and never will, build a multipurpose dam. Paradise, Libby, Yellowstone, Glacier View, and Spruce Park are such projects in Montana.

In closing, I would like to comment a little on the propaganda advertising campaigns being carried on by the power trust in this country against Federal and public power. This propaganda dates back to the early 1920's. It is one of the shabbiest chapters in the history of American democracy. Their crusade is designed not merely to frustrate socialism or communism, but to formulate a restrictive definition of Americanism and a negative concept of loyalty. This new loyalty is, above all, conformity. It rejects inquiry into public works, public housing, or into the wisdom or validity of our foreign policy. It regards as particularly heinous any challenge to what is called the system of private enterprise.

My personal opinion is that these corporations which pay with consumer dollars for full page advertisements associating Americanism with the competitive system expect to profit from these ads. I believe that those organizations that deplore, in the name of patriotism, the extension of Government operation of hydroelectric power, also expect to profit from their campaign. I suggest that their effort to confine Americanism to a single pattern, to constrain it to a single formula, is disloyalty to everything that is held valid in real Americanism.

When the people of this country reject publicly operated electricity, they are moving toward ending the socialistic public schools and going back to tutors for the wealthy, academies for the middle class, and ignorance for the masses.

I thank you.

Senator GRUENING. Thank you very much.

(Several documents filed by the witness follow :)

EXCERPTS FROM "MORE POWER AT LOWER COST" AMERICAN PUBLIC POWER ASSOCIATION BULLETIN, SEPTEMBER 1959

Publicly owned electric systems are continuing to provide more power to consumers at lower cost than the private utility companies * * *.

In 1957, the average residential consumer of the public power systems used 4,266 kilowatts—45.3 percent more than the power companies' average residential consumer's 2,935 kilowatt-hours—and the average annual bill of the publicly owned electric systems' residential consumer was \$70.36, or 10.4 percent less than the average annual bill of \$78.54 paid by power company residential consumers.

* * * * *

Any comparison of the expenses of public and private operations would be incomplete without mention of taxes or in lieu of tax payments paid by the two types of operation. Many of the in lieu payments by publicly owned utilities are not listed as taxes in the FPC statistics; thus it is difficult to determine exactly how much the publicly owned segment of the industry contributes to the communities served.

* * * * *

The record is clear that the average consumer of the public systems enjoys a higher degree of electric living—and pays less for it—than the average consumer of a private power company. It is equally clear that a major factor is the highly efficient management of the public systems.

EXCERPTS FROM "NEWS FOR ELECTRIC CONSUMERS," NEWSLETTER OF ELECTRIC CONSUMERS INFORMATION COMMITTEE, SEPTEMBER 4, 1959

THIRTEEN DOLLARS OUT OF ONE HUNDRED DOLLARS FOR STOCKHOLDERS

Thirteen out of every one hundred dollars taken in by private power companies from the sale of electricity in the year ended June 30, 1959, went to stockholders in the form of dividends.

Total electric revenues came to \$9,078,245,000. Total dividends paid out—\$1,171,839,000 or 13 percent of revenues.

The private power industry boosted the dividend percentage a bit in the first 6 months of this year. Total electric revenues were \$4,616,528,000. Total dividends paid out, \$605,250,000 or 13.1 percent.

PRIVATE POWER PROFITS UP 9.4 PERCENT IN YEAR

Private power companies had total net profits of \$1.6 billion in the year ended June 30, 1959—a 9.4-percent increase over profits in the previous year. In the first 6 months of this year, the profit boost was even greater—10.2 percent (ECIC Newsletter July 31, 1959).

RATES UP \$421 MILLION A YEAR AFTER 8 YEARS

Electric consumers will be paying \$421 million a year more to private power companies come 1960 than in 1952. That's the total of yearly rate boosts granted by regulatory commissions since in 1952.

The year-by-year breakdown:

	Millions		Millions
1952-----	\$78	1957-----	\$50
1953-----	20	1958-----	79
1954-----	54	1959-----	¹ 100
1955-----	25		
1956-----	6	Total-----	421

¹ Industry estimate.

Source: ECIC Newsletter June 3, 1959.

PRIVATE POWER FIRMS ACCUMULATE \$700 MILLION WINDFALL

Private power companies had piled up almost \$700 million by the end of 1957 as a result of legal tax windfalls. Federal Power Commission figures show that 154 electric power firms had this money in "restrict surplus" or "reserve for deferred taxes." They acquired these huge amounts by using accelerated amortization or liberalized depreciation in writing off the cost of new plants and equipment.

There's general agreement that the \$132 million from liberalized depreciation is an outright tax reduction. The utilities will never have to pay it, even though it was collected from consumers as taxes. ECIC groups, some State regulatory commissions, and at least one FPC Commissioner maintain this tax saving should be passed on to consumers in the form of lower electricity rates.

As for the \$567.3 million from accelerated amortization, it represents at the minimum an interest-free loan to the utility companies. Some consumer groups also maintain that although the private power firms say they will pay it out in taxes at a later date, this figure is also a tax reduction and not a tax deferral. They doubt that this money will ever find its way to Uncle Sam as taxes.

But the gift of \$567.3 million interest-free loan is enough of a windfall for the power companies to make consumers protest. For a 6-percent rate of return over 33½ years—the usual depreciation period for a steamplant—the \$567.3 million interest-free loan represents a total subsidy of \$851 million.

WHEN THE SNOW MELTS

That there will be a major flood on the Columbia next spring is beyond doubt. Whether it will be as bad as the record flood of 1894 or merely as bad as the 1948 flood will depend on rains and snows yet to come and on the rate of snowmelt. The 1948 flood wiped out the town of Vanport, Oreg., killed 51 people and did about \$100 million worth of damages.

The region is hardly better prepared today to prevent such a disaster than it was in 1948. That flood led to swift preparation—on paper—by the Army Corps of Engineers and other Federal agencies of a main control plan. Under that plan new reservoir projects on the upper Columbia and its major tributaries would serve both flood control and hydroelectric power purposes. In combination with a system of levees along the lower river, the reservoirs would minimize flood damages.

Not one of the flood-control projects proposed in the main control plan has been built to date. Those projects on which construction has been started since 1948—Chief Joseph, The Dalles, Ice Harbor—add little to the control of floods. Nor have these lower river levees been brought up to recommended specifications. Despite improvements since 1948, Gen. E. C. Itschner of the Army Corps of Engineers recently referred to the protection afforded by some of the levees as "problematical." The Federal Government has spent none of the funds at its disposal for the strengthening of levees.

This administration's "partnership" policy (which waits for "local initiative" to provide power supply) has yet to produce a single kilowatt anywhere. It has yet to produce even minutest contribution to flood control on the Columbia. In fact, it looks to me that the present plans of the Corps of Engineers contemplate substituting for every one of the multipurpose projects formerly included in their original Federal main control plan, dime store, privately sponsored local projects which would not make full use of the most important Northwest damsites. They no longer apply the test of engineering-economic feasibility to a project but only that of "political feasibility." Or, in the words of General Itschner to his staff in 1955, the Columbia River program should be revised so as to become "fully acceptable to all interests concerned."

The Army Engineers may be confident that they have the Columbia River under control. However the people of the Pacific Northwest, less confident, are again laying in sandbags.

The 4 million acre-feet of flood storage is vitally needed at Paradise.

[From the Cooperative News Service, Oct. 27, 1959]

EUROPE ENJOYS CHEAPER POWER THAN UNITED STATES, CO-OP EDITOR SAYS

WASHINGTON.—In many ways Europe is ahead of the United States in electric service, a co-op editor said here October 22.

William Roberts, editor of Rural Electrification, who recently led a European tour of co-op power leaders, said public, private, and co-op power is combined in a giant grid that covers all of Western Europe. The result is that in some areas the retail price is 0.4 cent a kilowatt-hour "less than many firms' production costs here."

In Norway, he said, 99 percent of the 4-mill power comes from hydroelectric plants. Practically all consumers use electricity to heat their homes, as well as for cooking, water heating, and light. Farmers use a lot of power, and most rural areas are served. Norway uses more electricity per capita than the United States.

By using higher voltage electricity in their homes—220 volts instead of 110—Europeans can transmit power longer distances with less loss, Roberts said.

Sweden's co-op lamp bulb factory, Luma, has brought prices down and improved the product, he said. "The people have learned to put away enough money into their co-op savings banks so they can invest in such undertakings to reduce their living costs. As a result, you find little or no monopoly.

"We were amazed to see the development of co-ops in Europe. It seemed there's a co-op store of some kind on every corner."

In East Berlin, power is rationed, and the government permits only one 25-watt lamp bulb per room, Roberts said.—J.T.J.

UNITED STATES OF AMERICA FEDERAL POWER COMMISSION

Opinion No. 59

In the matter of Northwestern Electric Company, Pacific Power & Light Company, Portland General Electric Company, Puget Sound Power & Light Company, Washington Water Power Company

Docket No. IT-5647

Appearances:

Lowell P. Mickelwait and Ferd J. Schaefer, for Puget Sound Power & Light Company.

John A. Laing and Henry S. Gray, for Pacific Power and Light Company and Northwestern Electric Company.

Alan G. Paine, for Washington Water Power Company.

Cassius Peck, for Portland General Electric Company.

Lambert McAllister, Chas. V. Shannon and Wm. B. Spohn, for the Federal Power Commission.

Don G. Abel, for the Department of Public Service of the State of Washington.

Harry A. Bowen, for the Attorney General of the State of Washington.

Ormond R. Bean and Joseph Kennedy, for the Department of Public Service of the State of Oregon.

MEMORANDUM OPINION

By the Commission:

I. NATURE OF THE INVESTIGATION

The Federal Power Commission by its order dated October 4, 1940, instituted an investigation into the accounting disposition of expenditures for political purposes by Northwestern Electric Company, Pacific Power & Light Company, Portland General Electric Company, Puget Sound Power & Light Company, and Washington Water Power Company. Hearings were held in Seattle and Spokane, Washington; Portland, Oregon; and Los Angeles, California. The testimony taken between October 14 and December 20, 1940, covers 5,295 pages and is supplemented by 282 exhibits.

II. LARGE POLITICAL EXPENDITURES BY UTILITIES

The investigation shows that these five electric utilities (respondents), during the period 1935-1940, expended large sums of money to further their political and legislative interests and to influence public opinion. The following tabulation depicts in summary fashion the various amounts discovered to have been expended by respondents during the period under inquiry:

	Definitely political	Undetermined in part	Total
Puget Sound Power & Light Co.....	\$75,813.55	\$76,217.51	\$152,031.06
Washington Water Power Co.....	261,423.55	67,781.50	329,205.05
Pacific Power & Light Co.....	167,996.42	28,419.75	196,416.17
Northwestern Electric Co.....	121,590.03	15,677.87	137,267.90
Portland General Electric Co.....	163,829.52	58,766.81	222,596.33
Total.....	790,653.07	246,863.44	1,037,516.51

III. SUBSTANTIAL PART OF POLITICAL EXPENDITURES CHARGED TO CONSUMER'S COST OF SERVICE

Approximately one-half of these political expenditures were charged by the utilities to their operating expenses, that is, to the cost of rendering service to electric consumers. This was done in spite of the fact that the expenditures were obviously not made for the benefit of such consumers. The rest of the expenditures were charged to surplus accounts and were not reflected in the cost of service. The details of such charges so far as available are set out in the appendix to the Trial Examiner's Report which is issued herewith.

IV. PROPER ACCOUNTING PRACTICES WERE VIOLATED. INCOMPLETE, MISLEADING AND FALSE RECORDS WERE MAINTAINED

The investigation disclosed that the accounting practices followed by these utilities, individually and collectively, were neither consistent nor uniform, that they disregarded the fundamentals of good accounting, and violated the Uniform System of Accounts prescribed by the Federal Power Commission.

Accounting records relating to political activities and expenditures therefor were meager and inadequate. Vouchers covering such expenditures were misleading and, in some cases, deliberately false.

Records were not maintained to show the time consumed or expenses incurred by employees on political and legislative matters or on efforts to mold and influence public opinion.¹

Expense accounts of employees, officers, and other paid workers were abused to hide political and legislative expenditures. For example, William H. Ude, an official of the Washington Water Power Company, charged \$485 for a multi-signature telegram in opposition to the Wheeler-Rayburn bill to operating expenses through his personal expense account. The keeping of expense accounts by Charles M. Sanford, secretary and political agent of the Pacific Power & Light Company and Northwestern Electric Company, became such a travesty that the companies eventually canceled his obligation to account for \$2,850. Although there was thus no proper accounting for the use of these funds, the entire amount was charged to operating expenses. Through these means the operating expenses of the utilities were burdened with the cost of hiring indirectly individuals not otherwise identified with the utilities, with the payment of their expenses, hotel bills, etc., and with the financing of many other activities.

V. UTILITIES MADE LARGE INDIRECT CONCEALED POLITICAL EXPENDITURES

Many political expenditures were made indirectly to conceal the fact that they were being made by the utilities. Chairman of the Board and former President Franklin T. Griffith of the Portland General Electric Company frankly admitted this. The extent and nature of these activities were concealed until the present

¹ With the exception that the Portland General Electric Co. records show this information for 1940.

investigation brought them to light. To the public they purported to be the activities of disinterested organizations and citizens rendering advice for the public weal. In fact they were actually subsidized partisan activities.

Various "front" organizations were provided with funds to campaign and promote political and legislative activities favorable to the utilities. The Washington State Taxpayers Association was of this character and, during the 28 months ending with November 1940, received \$115,000 from the utilities, substantially more than half of its revenues. During 1940 this Association, in turn, advanced some \$48,000 to the "Let the People Vote League" to support Initiative 139, a measure designed to cripple public power districts in the State of Washington. All the revenue of the Let the People Vote League came from this source.

There were many other allegedly disinterested organizations financed in large part by respondents in Oregon and Washington. Some of the principal ones, in addition to the Washington State Taxpayers Association and the Let the People Vote League, were: Washington Bureau of Governmental Research, Washington Business and Investors, Spokane Taxpayers Economy League, Oregon Business and Tax Research, Inc., Oregon Tax Fax, Inc., Oregon Tax Review Publishing Company, and many other so-called citizens' committee and local groups.

Typical of the public deception was the fact that the Washington State Taxpayers Association, far from being the independent public-spirited organization its name implied, was used as a tool of the utilities for their political purposes. For example, the Taxpayers Association, along with F. H. Young and the Washington Business and Investors, was used by the Pacific Power and Light Company as a vehicle by which funds paid out by these utilities were conveyed to the U. S. National Bank in Portland, Oreg., to repay a debt of \$48,000 (\$46,000 plus interest) incurred by sixty of the companies' higher-paid employees in financing the political activities of the companies.

VI. EMPLOYEES' COMMITTEES AND PRETENDED USE OF EMPLOYEES' FUNDS

Employees' committees supporting the utilities' political activities were directed and financed by the utilities. Sixty of the higher-paid employees of the Northwestern and Pacific Companies, referred to above, formed a committee known as the Northwestern-Pacific Employees Protective Committee. The Committee never functioned as such, although the employees in question posted notes equal to their salaries for two months with the United States National Bank of Portland and secured a loan of \$46,000.

The work of the Committee and its funds were handled by Charles M. Sanford, political agent for the companies, in a devious series of check and cash transactions.

When the political campaign was over the companies bailed out their employee "protectors" and did it with the aid of their organizational "fronts" by a series of financial transactions based upon falsified vouchers.

VII. BELLRINGERS, CARD INDEXES OF VOTERS, USE OF EMPLOYEES ON COMPANY TIME

The utilities conducted systematic house-to-house bellringing campaigns through employees schooled for the purpose. For example, in the fall campaign of 1940, the Washington Water Power Company used 196 employees, approximately one-eighth of its 1,600 employees, in fulltime doorbellringing campaign, in attempts to defeat PUD proposals in three districts which it served, and to procure passage of Initiative 139.

An elaborate card system was developed showing house numbers, residents of voting age, names of registered voters, persons interviewed, their position on the PUD proposals, and other information which might have a bearing on power campaign issues. The areas to be canvassed were systematically organized, and crew leaders designated to whom the campaign workers reported daily.

The employees worked early and late and they were paid overtime at union rates. Expenses were provided and transportation furnished. Mileage was allowed for personally owned automobiles used. The record shows that Washington Water Power spent \$173,499.60 to carry on such campaigns—practically all within the last 3 years. Such expenditures were described in the books and records of the company as "Customer Information Programs." Washington Water Power spent \$21,512.31 to school its employees in campaign issues. The expense incurred in this regard was described in the company books and records as "Employees Education Program."

Even when expenditures of the character described were charged to the "Customer Information Programs" and the "Employees Education Program," the charges were not complete because the salary of the individuals so engaged were not charged to the programs if during absence from their regular jobs no one was hired specially to do their work. While most of the reported items charged to the "Programs" were not charged to operating expenses, the salaries of politically active employees who had no substitutes during such activity were charged to operating expenses.

Portland General Electric Company and Northwestern Electric Company, the latter aided by Pacific Power & Light Company employees, carried on a similar campaign during the Portland PUD campaign of 1940.

Political expenses were constantly charged to consumer's cost of service through the use of employees on company time for political activity. All the officers of the utilities questioned in the investigation admitted that they engaged in political activities—speaking, conferences, lobbying and the like—on company time. The use of many other employees on company time was disclosed.

VIII. FORMER UTILITY OPPONENTS INDIRECTLY PUT ON PAYROLL

Former opponents of the utilities were hired by respondents and their compensation charged to operating expenses. For example, Washington Water Power Company, Pacific Power & Light Company and Northwestern Electric Company, units in the Electric Bond and Share group, paid Joseph C. Cheney, a Yakima attorney and former advocate of public power, \$5,515.75 indirectly through Laing & Gray, counsel for Northwestern and Pacific, to support certain of their political activities. Of the \$5,515.75, \$300 was advanced in cash to Cheney by Charles M. Sanford, secretary and political agent for Pacific and Northwestern. Laing and Gray billed the three companies for the total amount and deposited \$300 to Sanford's bank account to reimburse him for the amount advanced to Cheney. Laing and Gray also purchased two cashier's checks from the United States National Bank of Portland payable to Cheney for \$2,715.75 and \$2,500, respectively, so that Cheney could conceal the source of this income.

IX. UTILITIES MADE SECRET PAYMENTS TO PROMINENT CITIZENS

Prominent citizens in the Northwest were paid by these utilities, or through purportedly civic organizations financed by respondents, for political activities favorable to the utilities. Connection of these citizens with respondents was not made known so that such individuals appeared to give disinterested advice to the electorate. For example, in one instance Portland General Electric, through the expense accounts of Franklin T. Griffith, its President, paid over to the late George T. Brodiek, a former United States Minister to Finland and Slam, large sums of money to be spent, as Griffith intimated, where it would do the most good.

There were many other instances where individuals, well known and respected in their community, were paid to carry the torch for private utilities. Among these, Joseph C. Cheney's activities have already been recounted. N. C. Richards, a local attorney in Yakima, was paid for his services in opposing the formation of a PUD in that area in 1936, 1938, and 1940. He received a total of \$3,750 in all. Owen Clark, a Yakima attorney, was secretary of Richards' committee in 1940 and received \$500 salary. The committee itself received \$12,499.10 from Pacific Power & Light Company. Irving Bounds, another Yakima attorney, received \$1,600 from the same company during 1938 and 1939 for his activity against PUD's. E. J. Barnes, a Yakima real estate dealer, was frequently employed by Sanford, and in the 1938 campaign against PUD in that area received \$2,788 for organizing and heading up a group of citizens called "Small Home Owners Committee" to oppose the formation of a PUD.

After the 1939 PUD campaign in Wasco County, Oregon, Pacific Power & Light paid \$1,000 to L. J. Kelly of The Dalles (a director of Oregon Business and Tax Research, Inc.), who was chairman of a Special Committee to oppose the PUD.

A. J. Peters, a real estate operator in King County, Washington, was induced by an officer of Puget Sound Power & Light Company to organize a committee known as "Rural King County Committee" in 1938. Puget Sound Power & Light Company assisted Peters in securing \$3,000 from Washington State Taxpayers Association to finance his activities and also provide speakers for Peters' campaign meetings. Peters received \$250 for his services. Again, in 1940, Peters was provided with \$900 direct from the company for his "Committee." He

admitted that in 1940 he himself constituted the only member of the committee. From time to time Fred Adams, a former member of the Legislature, was hired directly or indirectly by the utilities for work in the Spokane area.

Numerous other individuals were hired and made use of by the utilities in like manner.

X. THE USE OF DOMINATED PUBLICATIONS

The circulation of publications whose policy was dominated by the utilities was increased at the utilities' expense. For example, the "Washington Taxpayer," a monthly magazine of the Washington State Taxpayers Association, increased its circulation from 60,000 to 440,000 copies during the 1940 campaign.

XI. ATTEMPTS TO INFLUENCE THE PRESS AND RADIO

Extensive advertising and radio programs were featured by the utilities during political campaigns, thus providing indirect subsidies to the organs of public opinion. Kinsey N. Robinson, president of the Washington Water Power Company, boasted that 90 percent of the newspapers in the territory served by his company favored the point of view which he advocated in utility matters.

Many of these definitely political advertising and radio programs were charged to operating expenses. For example, "advertisements with reference to PUD's and related matters" during 1940, "advertisements re condemnation election," and political advertisements entitled "Where Do We Go From Here?" and the like, were charged to Account 787 to which only charges for promotion of sales of electric energy should have been made.

XII. EXPENDITURES BY UTILITIES IN CONDEMNATION SUITS IMPROPERLY CHARGED TO COST OF SERVICE

Of particular significance in this regard is the fact that Puget Sound Power & Light Company, to and including December 1940, and in addition to the amounts expended by that utility as shown in section II of this opinion, spent in excess of \$670,000 in contesting the Whatcom County PUD condemnation suit and charged all such expenditures to operating expenses, contrary to the Uniform System of Accounts prescribed by the Federal Power Commission, and notwithstanding the fact that all such expenditures were for the sole benefit of the stockholders of the Company.

Extravagant expenditures in such proceedings are unwarranted. That principle is very clearly recognized by the Supreme Court of the United States in *Smith v. I.C.C.* (245 U.S. 33, 46 (1917)), where the Court definitely stated that a utility "may not * * * use its funds and its power in opposition to the policies of the government."

XIII. UTILITIES INTEND TO CONTINUE IN 1941 THE PRACTICES DESCRIBED ABOVE

Because of the revelations of the Commission's investigation, the Commission thought it advisable on February 4, 1941, to ask information of the respondent utilities as to their current and intended expenditures and accounting practices for 1941. All the respondent Utilities have replied except the Puget Sound Power & Light Company, which has stated its intention to respond not later than March 1, 1941.

The replies received indicate that all the utilities intend to continue many of the practices before described and to make substantial charges to the cost of customer's service for such expenditures.

The Washington Water Power Company in its report states that it intends to contribute \$8,000 to the Washington State Taxpayers Association and \$7,000 to the Spokane Chamber of Commerce, the latter item to be charged to operating expenses.

In addition to these expenditures, the Washington Water Power Company states that in the present municipal ownership election in Spokane, Washington, it expects to expend \$43,000 more. Of this \$23,000 will be paid to employees in opposing the municipal power ordinance. However, this will not cover the time of officers and other employees whose jobs are not filled while they are out campaigning. The Company also states it will spend further sums of \$10,750 for advertising in newspapers and on billboards, \$1,500 for radio talks, \$5,000 for printing and \$2,750 for miscellaneous expenses.

The fact that the Company's actual expenditures to influence public opinion, uncovered by this investigation, exceeded more than twelve times over those which the Company was originally willing to admit suggests that the proposed expenditures for 1941 may well be exceeded by a wide margin.

The Commission will hereafter issue orders deemed requisite in connection with accounting entries disclosed by the record and promulgate such regulations relating thereto as may be done within the limits of our statutory authority.

LELAND OLDS, *Chairman.*

CLAUDE L. DRAPER, *Commissioner.*

BASIL MANLY, *Commissioner.*

CLYDE L. SEAVEY, *Commissioner.*

Dated at Washington, D.C., this 27th day of February 1941.

LEON M. FUQUAY, *Secretary.*

SEPARATE CONCURRING OPINION

In the Matter of Northwestern Electric Company, Pacific Power and Light Company, Portland General Electric Company, Puget Sound Power and Light Company, Washington Water Power Company

Docket IT-5647

Scott, Commissioner, Concurring:

I concur in the action and general conclusion of the Commission. In addition thereto, however, my examination of the record developed in this investigation impels me to discuss further a situation which, in my opinion, strikes at the very roots of our democratic form of government.

The companies investigated were created under franchises of the State, to engage in the public service, a business affected with a public interest. The very essence of their right to exist is a contract with the sovereign people that, in consideration of receiving a virtual monopoly, they shall devote their property to a public use in furnishing essential utility services. The utility companies subject to this inquiry are *public service corporations*. They "exercise a sort of public office, and have duties to perform in which the public is interested." They were granted no authority to participate in political matters and were not created for the purpose of moulding public opinion.

Chief Justice Waite, speaking for the Supreme Court of the United States, as far back as 1877, in *Munn v. Illinois* (94 U.S. 113, 24 L. Ed 77), stated that:

"When, therefore, one devotes his property to a use in which the public has an interest, he, in effect, grants to the public and interest in that use, and must submit to be controlled by the public for the common good, to the extent of the interest he has thus created."

The activities of these companies, disclosed by the record, show no willingness to permit the sovereign citizenship of the areas in which they operate to maintain by normal democratic processes the choice of the means of providing for themselves essential utility services. Through the expenditures and subversive activities of these companies the strength gained from nursing at the public breast was used to strike at the very heart of the continuance of free elections by free people in the determination of great public issues. The record discloses that by subterfuge these companies sought to pollute the political processes of free choice at public elections. Funds obtained from the consuming public have been lavishly expended to prevent the people from obtaining electric energy through publicity or cooperatively controlled organizations. The companies arrogated to themselves the right to defeat, if possible, the choice by the people of using other instrumentalities than company-owned facilities to supply their requirements for electric energy.

With respect to such multipurpose, public projects as those at Bonneville Dam and Grand Coulee Dam, the record discloses that the companies have continued to resist their development and utilization by the public, long after the will of the people has been expressed through their duly elected representatives in Congress. With other so-called private utility interests these companies have engaged in activities constituting economic warfare against such public instrumentalities created by the people through the duly and regularly conducted democratic processes of the ballot and election.

If activities such as the record discloses, defying the will of the public, are permitted to continue, the people may be prevented from obtaining the full bene-

fits of cheap electric energy made available to them by the Bonneville and Grand Coulee Dams.

The public has invested millions of dollars in these great projects, not for the purpose of increasing the profits of the private utilities, but to provide cheap electric energy for consumers generally. Not only is this public purpose threatened by the utilities' activities, but the great public investment itself is endangered. To make accounting entries or adjustments in the books of the utility companies is no solution of the basic problem posed by the record in this matter. The important thing is the adequate protection of the inherent right of the people to make economic and social progress and to permit them to utilize and enjoy a great natural resource.

To accomplish these ends Congress may wish to notice the facts disclosed by this record and consider the necessity for appropriate action to protect the public investment and principles involved.

JOHN W. SCOTT, *Commissioner*.

FEBRUARY 27, 1941.

Mr. MAHONEY. Joe Crosswhite.

**STATEMENT OF JOE CROSSWHITE, BUSINESS REPRESENTATIVE,
INTERNATIONAL UNION OF OPERATING ENGINEERS LOCAL 371**

Mr. CROSSWHITE. Senators, ladies and gentlemen, my name is Joe Crosswhite; I reside in Columbia Falls, Mont., and am business representative of the International Union of Operating Engineers Local 371, with its main office in Kalispell, Mont. Local 371 has in its territorial jurisdiction the eight western counties of Montana and Glacier Park, which includes virtually all of the Columbia River drainage in Montana. Local 371 is the largest craft union in western Montana, composed of several hundred taxpaying citizens who earn their livelihood almost exclusively in the maintenance and operation of heavy earth-moving, timber-clearing, and building-construction equipment. I am also the vice president of Montana AFL-CIO, which has membership in excess of 22,000 members in Montana.

Both of these organizations are on record, through both convention and membership action, in full endorsement of S. 1226 and favor immediate construction of Paradise Dam in order to bolster the lagging economy and progress of western Montana, and to develop our water resources for the maximum benefit of all the people of western Montana.

I have attended public hearings held in western Montana concerned with water resource development since prior to Hungry Horse Dam up to the Senate hearing conducted here today. In the hearing being held here today, as in all prior public hearings, including press releases in our western Montana dailies, the Upper Columbia Development Committee and the organizations I represent here today agree on one point in the development of our water resources in western Montana, and that one point is, we have all stated in testimony that it is mandatory and essential that immediate steps be taken to construct suitable water storage area on the upper Columbia River drainage in Montana for the twofold purpose of flood control and to maintain uniform flow of our main rivers both summer and winter, but this is as far as we agree.

The UCDC in testimony have presented their proposal for an alternate to Paradise Dam for flood control and storage by the construction of over 200 small dams located high in our mountains on head-water streams of the upper Columbia River drainage. The maps that

accompanied this proposal resembled the population map of a large city with each of its marks indicating a damsite and reservoir.

Each one of these backwoods dams would first need construction of a service road into the proposed site. Second, the only logical site would be a small headwater valley or basin which would have to be cleared of all timber and other growth for a storage reservoir. Third, an earthfill dam with headgates, spillways, and caretaker's residence would be constructed; also a communication service such as telephone lines would be necessary. Multiply these phases of work by over 200 times and you can clearly see the magnitude of this proposal.

As I stated before, Local 371 of the Operating Engineers Union are the operators and maintenance men on heavy earthmoving and timber-clearing equipment and the UCDC proposal would make many, many prosperous years in our field of the construction industry. But the members of this union are also associated with sportsman clubs and civic clubs and are citizens of western Montana who want the development of our water resources used for the best interests of all the people. Therefore, local 371 went on record unalterably opposed to the UCDC proposal of water storage and flood control for these reasons:

First, these small headwater dams would logically be located at the mouth of high mountain valleys or basins in order to use these small valleys or basins for water storage, causing irreparable damage to the habitat of fish and wildlife. It would also cause such an explosion among sportsman groups that the rest of us would be forced to leave Montana.

Second, the purpose of these small headwater reservoirs would be storage of spring and summer runoff to be let loose in low-water periods in order to keep a constant uniform flow of our main rivers in order to generate electric power at all times of the year. Now the low-water period on the Columbia River drainage occurs during the winter months, as you all know; the reason for this is these headwater streams almost cease to exist in subzero weather, due to springs and tricklets freezing up, snowpack not melting, and so forth. This is nature's way of protecting our high mountain valleys and streams from becoming icefields during the winter months; this is the time of the year this water would have to be released to maintain a uniform flow of water to keep generators turning downstream. Can you picture releasing water from a small reservoir back in the high mountains of western Montana at temperatures ranging from zero to more than 40 below zero after a month or two of winter weather and blizzards have piled high snowdrifts in the streambed below this dam? Can you picture this water getting no more than a short distance below the dam before it froze to ice or freezing up behind huge snowdrifts causing nothing but a streambed choked with ice the rest of the winter?

Third, and most important reason we are opposed to the UCDC proposal is even if it were possible to release this storage water when needed, these dams are too small to install generators for the purpose of making low priced and abundant electrical energy, and we have to have this commodity in order to entice new industry and the expansion of our present industrial plants. So we would have storage water that couldn't be used when needed and no facilities to produce electric power if it could be released.

We have seen the success of Hungry Horse Dam as a storage reservoir, flood control, and a producer of electric energy, and the progress and economy it has brought to the Flathead. And there are no reasons why Paradise Dam will not live up to what Hungry Horse Dam has done.

The UCDC has stated here today in the press prior to this hearing that if Paradise Dam is built, the people of western Montana will lose their water rights on our main rivers. Again we agree on one point, after completion of Hungry Horse Dam the people of the Kalispell area and the surrounding valley lost a good share of their water rights. Prior to the completion of Hungry Horse Dam and according to the laws of nature in Montana, each homeowner in that area was allocated every year at least one basement full of water; snowpack and weather permitting they received several basements full. Now, 7 years after completion of Hungry Horse Dam, not one of these homeowners would even consider asking for the water rights back that they "enjoyed" in pre-Hungry Horse years.

Over the past years to the present time at these public hearings, the same factions and individuals who are in opposition to multipurpose dams such as Paradise Dam were opposed to Hungry Horse Dam, but about 3 months ago, national recognition was given to Harry J. Kelly, better known as Hungry Horse Kelly, for his long campaign fighting for Hungry Horse Dam.

The people of Montana have seen fit to install the name of Harry J. Kelly in the Montana Newspaper Hall of Fame, simply because Hungry Horse Dam lived up to everything Harry Kelly promised them it would.

In closing, I wish to commend Senators James Murray and Mike Mansfield for their efforts in authorizing S. 1226 which will advance western Montana's economy and progress even more than the Hungry Horse Act, on which these two Senators worked so hard. I also wish to thank the Senators who have given their time and effort to be here today to hear the people of western Montana speak.

And I would like to turn in three communications: one from the Central Trades & Labor Council of Kalispell; one from the Building & Construction Trades Council; and one from the Northwestern District Council of Carpenters Unions.

Senator GRUENING. They will be received and placed in the record at this point.

(The documents referred to follow :)

CENTRAL TRADES & LABOR COUNCIL,
Kalispell, Mont., December 11, 1959.

Re S. 1226.

COMMITTEE ON INTERIOR AND INSULAR AFFAIRS,
U.S. Senate.

GENTLEMEN: We wish to be regarded as proponents of S. 1226 but favoring construction of Paradise Dam over Knowles Dam.

We favor the immediate Federal construction of Paradise Dam because of the urgent need for more and more power for Government and industry and the resulting development of industry and jobs in the Northwest. There is a dire need for stimulating industrial expansion in the Pacific Northwest so that more employment opportunities would be provided. This vital water resource should be conserved through Federal development of Paradise Dam to further develop the area economy and assist in breaking the economic stranglehold on Montana by a few large, related, corporations.

The Federal development would aid industrial development which in turn would slow the exodus of our young people from the State and help provide them with a future not dependent upon the few sawmills and mines which in many cases operate only seasonally.

Federal development of this resource would also assure allocation of power for Montana purposes and Montana industry, which cannot now be obtained from private power interests. Paradise Dam would provide maximum use of Montana water to Montanans before release for downstream uses.

This Kalispell Central Trades & Labor Council through its affiliated unions, delegates, and officers urges immediate construction of Paradise Dam.

Yours very truly,

JOE CROSSWHITE,
President,
ROBERT C. WELLER,
Vice President.
R. P. PETERSEN,
Secretary-Treasurer.

KALISPELL MONTANA BUILDING & CONSTRUCTION TRADES COUNCIL,
Kalispell, Mont., December 11, 1959.

Re Senate Bill 1226.

COMMITTEE ON INTERIOR AND INSULAR AFFAIRS,
U.S. Senate, Washington, D.C.

DEAR SIR: The Kalispell Montana Building & Construction Trades Council, its affiliated unions and delegates, desire to go on record in favor of immediate construction of Paradise Dam by the Federal Government. We are in favor of Paradise Dam over construction of Knowles Dam.

This council feels that the Federal development of Paradise Dam would promote industrial growth in this area through availability of adequate power for that industrial growth. This section of the Northwest is badly in need of more diversified, year around industry, and the resulting job opportunities for our increasing number of young people. Our younger population is now forced to migrate elsewhere to earn a living. Such opportunities should be open to them here with our tremendous store of natural resources which lie untouched. Federal development of Montana's water resources would open up tremendous industrial opportunities.

We support full development of Montana water resources for Montana, before these resources are made available to further use outside Montana.

We urge immediate construction of Paradise Dam.

Yours very truly,

KALISPELL MONTANA BUILDING &
CONSTRUCTION TRADES COUNCIL.
JOE CROSSWHITE, *President.*
NOEL M. GIES, *Secretary-Treasurer.*

RESOLUTION OF NORTHWESTERN DISTRICT COUNCIL OF CARPENTERS UNIONS, UNITED BROTHERHOOD OF CARPENTERS & JOINERS OF AMERICA

Whereas Senate bill S. 1226 providing for the construction of the Knowles Dam project and containing an alternative provision permitting its location at the Paradise site, and which has been twice read since its introduction on March 2, 1959, was referred to your honorable committee for action; and

Whereas the U.S. Army Corps of Engineers whose prime responsibility in such matters is navigation and flood control, has held numerous hearings on control and development of the waters of the Columbia River and its tributaries during which it was made clear that additional impoundment of waters was necessary to provide such flood control; and

Whereas legislation such as that contained in S. 1226 is long overdue and vitally needed to provide, not only flood control, but industrial expansion comparable to that existing in other areas of this Nation where use is made of the natural resources of this Nation belonging to all its people to provide abundantly for the well-being of its citizenry and reinforce the sinews of national defense; and

Whereas every survey of public sentiment has indicated an overwhelming majority in favor of such a project as provided in S. 1226: Be it

Resolved, That Northwestern District Council of Carpenters Unions (United Brotherhood of Carpenters & Joiners of America) earnestly request that your honorable committee take early and favorable action in recommending passage of S. 1226 including a recommendation that the damsite be at the Paradise site instead of at Knowles on a basis that the latter site would be a loss of the opportunity to insure optimum development which is forecast as so badly needed to meet future development needs.

Senator MARTIN. I would like to ask one question. You spoke about the UCDC plan and its effect on fish and wildlife. I wonder if you have available for us any study of that matter.

Mr. CROSSWHITE. I haven't, Senator. All I am going on is what the sportsmen's associations have told me concerning high mountain dams.

Senator MARTIN. I suppose we could get a study of the upstream small dams and their effect on fish and wildlife, could we not, to put in the record?

Senator GRUENING. I think we should request that from the—

Senator MARTIN. I am not enough of an expert in this field to pass judgment on the testimony.

Senator GRUENING. Proponents of the small dams. We will have the UCDC people prepare a study giving the effect on the fish and wildlife, and we would like a study from the other side, too.

Mr. CROSSWHITE. Thank you, Senator.

Mr. MAHONEY. I would like to call Dave Brower.

STATEMENT OF DAVID R. BROWER, EXECUTIVE DIRECTOR, SIERRA CLUB

Mr. BROWER. Mr. Chairman, Senator Gruening, Senator Martin, and members of the staff, my name is David Brower; I live in Berkeley, Calif., and come here to represent the Sierra Club.

Our time is getting short and I will try, if I may, to just submit my prepared statement for the record, to brief a few of the high points of it, and to comment on some of the things that I think may be pertinent relating to what testimony we have already heard.

First, I want to thank you for the opportunity to be here and also to pay tribute to Montana for the extraordinary leadership it has in its delegation in Congress in conservation matters. It has been my privilege to travel a good many places in this country to talk to leaders in a good many conservation organizations, and I know of no delegation which is held in higher esteem than that of Montana in these matters.

Our definition of conservation, and that is what we are interested in in the Sierra Club, conservation is humanity fighting for the future. And we don't measure that future in terms of one person's lifetime or the years remaining in it. We are trying to think of two or three generations, at least, trying to leave them some important resources, some opportunity to choose what to do with resources, to pass that opportunity on to their children.

I come from California, which is fairly far from Missoula, but I may speak with some justification as a future citizen of Montana. I say that partly in josh. I am a native Californian, but every year I watch the smog rise higher and higher around San Francisco Bay. It is already, of course, a national disgrace in southern California, but it

is getting worse and worse in central California. The development has come too fast there, and as I told someone here jokingly, I was really just coming up here to see if we could arrange for California to buy Montana to use it for space and perhaps to keep Texas from getting in first and trying to be larger than the State of Alaska.

Senator GRUENING. I would call your attention to the fact that even if Montana were added to Texas it still would not be larger than Alaska.

Mr. BROWER. My full statement tries to explain why the Sierra Club should be concerned at all with Paradise Dam, which is so far away from where the Sierra Club is founded, in San Francisco. We are an organization that is perhaps the oldest organization in the United States that has been devoted to the conservation of scenic resources. We were founded in 1892. We now have a membership of just under 15,000 all over the country, some in Senator Gruening's State, a good many here in Montana, all interested in saving for the future some of the things that have made America beautiful.

We figure that the development of Paradise, full development of this site, can bring scenic resource preservation to important areas upstream, as in Glacier National Park. Let me develop that a little bit more in a moment.

For one thing, we have heard as an alternate proposal some various recommendations of upstream dams. When I was in Butte perhaps 2 years ago, it was described as upstream dams in worthless canyons. We do not think the back country of Montana is worthless by any means. We think that it is some of the most important country Montana has, even though it is not walked on a great deal.

When the opponents of the Paradise and Knowles projects have listed what damage will be done to tax rolls, what lands will be inundated, they have overlooked the important question, it seems to us. The question is not whether there will be costly dams built or whether land will be inundated, but where and how much. And I can assure you, Senator, that if I took this little decanter of water and were to get every ashtray in the room, I would still be able to fill each ashtray and have water left. I am trying only to say that you cover a lot less area in one big storage vessel than you do in a lot of small ones, so that if we go to the alternatives that have been suggested, but never with a price attached to the suggestions, we would find that far more of Montana's good high country, and some of it very irrigable, very good country with respect to agriculture as well as scenic resource enjoyment, would be under water.

Part of my statement mentions what happens in that respect. For example, if Paradise is not built, the pressure immediately increases, and we have heard it mentioned today, for building Glacier View Dam. There have been various proposals for the dam. Right now it is not under active consideration, but a counterpart of this proposal was what happened on the Colorado River storage project where an attempt to build a dam which related to a national park system area brought about nationwide opposition which blocked all development of the Colorado until it had been satisfied.

I don't think that Montana would like to see its future development held up in that way, and yet that is something that could happen

if the Nation gets excited about what happens to its primary scenic area. But not only would the park itself be bothered—that is here in Glacier View—there would be these other damsites that we keep hearing about. There is the Spruce Park site which would invade important wilderness country, important whether or not it has dedication, important for wildlife purposes. There would be very good values of agriculture and just plain amenity lost in the Nine Mile Prairie proposal, or the Swan Lake proposal, or the channel improvement that would expose acres and acres of mud at Flathead Lake periodically.

Wherever this water is stored there is going to be trouble, there is going to be fluctuation, so our plea in the Sierra Club is that this storage be concentrated, that you get good development of some of the few sites that really can stand the development.

Just a few minor odds and ends here. One is a thought that seems to me that too often our national resources are for sale to the highest bidder and not for the highest use. We know we are going to need more water development. We need also, we know, something more than kilowatts when we flick on a light switch. We are going to need places to go when we have this increasing leisure that we know is coming, that is being planned for by the National Outdoor Resources Review Commission, which Senator Martin knows so well.

We are going to need all these things; we are going to need full multiple use of our lands, but this doesn't mean a multiplicity of uses in the same place. So our plea is a place for each kind of use, each most efficient kind of use, and always a place for beauty.

Just a few more odds and ends, if I may. I happen to have listened with great interest to the testimony of the later representative of the Northern Pacific, and I think he is a little pessimistic about what railroad engineers can do and even about what Bureau of Reclamation engineers can do when it comes to rerouting a railroad. In California, two transcontinental roads, the Western Pacific and the Southern Pacific, go through terrain which is just as rugged as is contemplated for the rerouting here. The Western Pacific is in the process of getting ready to reroute its transcontinental lines now because of the proposed Feather River project. When Shasta Dam was built in California, the Southern Pacific line was rerouted by Bureau of Reclamation engineers, and I assure you the trains go through faster, not slower, than they did before the Bureau brought in its rerouting technique.

I think that I am very happy that Mr. Norwood made the statement he did to correct some of the impressions left by the president of the Montana Power Co., Mr. Corette. I have heard a rather interesting conflict in the opponents' testimony, where, on the one hand, Mica Dam will solve all the problems and, on the other hand, there is the promise that Mica Dam will never be built.

I think the important thing is that we need far more storage, flood-control storage primarily, on the Columbia than we have. If we try to push the burden over into Canada to supply this, we are not doing right by our own people. We are not doing right by Canada, and Canada might very well choose to say, "All right, if we don't get any more cooperation than that, we will take our third of the Columbia and a lot of that down the Fraser."

At any rate, in this country we still have to build quite a bit of flood-control storage. Paradise is one of the good sites; Libby is one of the good ones; there are not very many really good ones left. There has been partial development in such as Hells Canyon and downstream on Priest Rapids. Everywhere you go there is a little bit lost because the Government has not come in to help the construction.

In my fuller statement I make it clear we are not trying to get into the private versus public power controversy. That is not our role; we think there should be both. We think that there are still possibilities for real partnership development that have not really been explored or exhausted.

Whatever happens, Mr. Chairman, we hope that Montanans will realize that people outside this State are looking to Montana for a place to go where there is still some beauty, where there is still some space, whether they come here in vacation time or whether they come here to live when they get crowded out of the pleasant places that used to be in other States that are now getting crowded.

My closing paragraph is simply that America's scenic beauty is something very special. Much of it is still unspoiled. It is an important part of what man needs in life besides bread, that man will need still more than he does now, that he will choose to keep if we leave him that choice. Posterity has no vote except in us. Its people must live with what we decide upon now.

As one of our members has said, "God bless America; let's save some of it." And I think we can save quite a bit if we concentrate our water development when we get a good site and leave some of the places alone to enjoy God's handiwork there. Thank you.

Senator GRUENING. Thank you very much.

Senator MARTIN. I just had one question to ask. I am a rather new member on the Outdoor Recreation Resources Review Commission, and I wanted to ask if you think we should generally advocate the building of higher dams as part of our interest in preserving recreation resources.

Mr. BROWER. Now you say "higher dams." Higher in elevation, or bigger dams?

Senator MARTIN. Bigger dams and higher in elevation, yes.

Mr. BROWER. I think, Senator—let me first say that the scenic resources, the outdoor recreation resources review is something that I am quite familiar with, because our organization initiated it.

Senator MARTIN. I know you are.

Mr. BROWER. And I have been talking to some of the people up here about one of the opportunities perhaps for the Commission in this very matter, and that is a classification of streams, and I think another witness will talk about that. But if the Commission were to take it upon itself to classify streams so that we could see which streams really are wild, should be left wild, which should be semiwild, and so on, and which should really be developed to the maximum. In this way the Outdoor Recreation Resources Review Commission can help assure that we won't be trying to pile all kinds of development in all parts of the country, but really zoning the country; and if it makes a special, brings a special hardship to one particular area, then making sure at the national expense that that area isn't penalized but is reimbursed for the sacrifice it is making; if, for example, as in Mon-

tana, it happens to have more beautiful scenery than any other State, say, in California or Alaska or Iowa, but doesn't have all the other opportunities. That was too long an answer, possibly, to the question.

Senator MARTIN. I am interested in your observations because I know your work in this field, and I am glad to have your classification here as you have just made it, because it is rather important in that field that we move with caution in that Commission as to our attitude toward this matter of dams, and the multiple-purpose dams especially.

Mr. BROWER. I would hope that the Commission did not end up thinking that there should be a lot of little dams up high, and in case the Commission does not have this in their file, or any of the audience here either, I think that a careful reading of the book, "The Flood Control Controversy," written by L. A. Leopold, who is now the chief hydrologist of the U.S. Geological Survey, and Tom Maddock, who was a high reclamation engineer, will find out that these small dams scattered all around are not the answer. At least I think this will shake any residing faith—

Senator MARTIN. That is for recreation preservation?

Mr. BROWER. Or even flood control. They don't answer that problem.

Senator MARTIN. In my State we must look to holding the water on the upland as much as we can, because if we let that water run down, it takes our very valuable productive soil out and we are losing too much of our best productive soil now through allowing the water from way upstream get that acceleration there that builds tremendous washouts for us of highly productive land. Now, that is an agricultural production area primarily and wouldn't necessarily be governed by the same principles you have in the scenic parts of the country.

Mr. BROWER. I quite agree with you that as a soil conservation measure in agricultural land it is essential. As a flood control measure in wild land, it is not essential and it is a delusion. The good Lord put very good flood control protection on these wild lands in the natural cover.

Senator MARTIN. I appreciate your statement here; it has bearing on some other committees and commissions I am serving on.

Mr. BROWER. Thank you.

(The formal statement of the witness, together with article entitled "Scenic Resources for the Future," follows:)

STATEMENT OF DAVID R. BROWER, EXECUTIVE DIRECTOR, SIERRA CLUB

In behalf of the Sierra Club, I am appearing to request that the agencies charged with Columbia Basin water development, as well as other interested groups here, give most careful consideration to planning for the preservation of the Columbia Basin's scenic resources in the course of working out a program of water development. We hope that all groups may work together to assure that the needs of progress are met without sacrifice of unique qualities which are of great importance to the region and to the Nation—qualities which cannot be put together again once they have been taken apart.

The Sierra Club is 67 years old. It consists of more than 14,500 members from all walks of life and all parts of the country, but most of them from California. The club has members who are prominent and many more who are not. They share one purpose: to explore, enjoy, and protect the natural scenic resources, including the wildlife resource, which make this land America the beautiful. We are conservationists, all interested in wise use, but especially interested in preserving from development those scarce and special places in our vanishing wilderness which dollars can never replace in kind and for which there will always be human need.

We are a small part of what you might call a national force that has been building to protect the special resource of parks, wilderness, and wildlife. That force is represented, in a way, by the Natural Resources Council of America, of which I was recently chairman. This is a forum of 37 national and regional conservation organizations having a total membership of 2 million. That force is further represented by the voice of the people themselves, who are realizing in increasing numbers that the few samples we have left of original American must not be sacrificed needlessly.

Witness that public force on the national scene as it was measured in the controversy over Dinosaur National Monument and the proposed Echo Park Dam. The Colorado River storage project bill was doomed to a 70-90 vote defeat in the House of Representatives so long as Dinosaur was threatened. The threat was removed, whereupon the bill coasted through with a 120-vote majority.

The same force brought a 3 to 1 defeat at the polls in New York State to a proposal to invade for a dam part of the Adirondacks which New York citizens wanted to keep forever wild—strong wilderness support in spite of eminent opposition.

All I am trying to say is that we are witnessing a change in the American temper—witnessing a mature realization, in the nick of time, that we must vigorously and dynamically support the preservation of our scenic resources and especially our living wilderness. This doesn't mean that we're building a breed of people who don't like man's handiwork; it's just that people are discovering that even the most civilized man needs places where he can appreciate what God's handiwork is like, unaided by man. People are recognizing that we cannot forever continue to multiply and subdue the earth without losing our standard of life and the natural beauty that must be part of it.

POLICIES APPLICABLE TO THE BASIN

The Sierra Club believes that the flood-control and power-development needs in the Columbia Basin can be met without jeopardy to important scenic and wildlife resources. There should be optimum use of damsites which do not imperil these resources, no matter whether public or private agencies or combination of both build on the acceptable sites. These sites should be developed fully enough to meet the overall flood-control requirements with a minimum number of structures. There should be proof that there is no alternative course of action before irrevocable damage is inflicted upon the important scenic and wildlife resources.

The club—and this is the general feeling in most other conservation organizations I know of—is in favor of sound water development. However, we consider it not in the public interest in the long run, and therefore oppose, any dam or reservoir proposal which would adversely affect a national park or monument or duly designated wilderness area.

Conservationists in general are feeling a growing concern about indirect peril to major scenic resources. For example, the Citizens' Committee on Natural Resources, Washington, D.C., voiced conservation opposition to what they were convinced is inadequate development in Hells Canyon. They are not concerned with the public versus private power controversy. But they are concerned with the threat to major scenic and wildlife values arising from partial development in Hells Canyon. Nearly 3 million acre-feet of storage was blocked there. This has already led the Corps of Engineers to seek replacement storage on the Clearwater River, where conservationists are opposing the proposed Bruce's Eddy and Penny Cliffs Dams. Likewise, apparently, the Bureau of Reclamation is seeking further control of the upper Snake River in the tremendously important scenic country above the Narrows, in Wyoming, and in Grand Teton National Park and the Teton Wilderness Area—an effort which conservationists must oppose.

CONSERVATIONIST THINKING ON THE COLUMBIA

Let me summarize conservationist reasoning here, so that you may understand it even if agreement with it may not be unanimous:

1. It is clear, in the Columbia Basin, that there is not enough flood control now.

2. Remedial action can take four forms:

(a) Flood insurance. This still requires more legislative pioneering; it will not save lives.

(b) Evacuation of flood plain by zoning to prevent new construction or replacement of present structures. This is uphill work, literally and figuratively.

(c) Upstream watershed management. Practiced with care, this is good conservation; but, it is not effective in controlling the big floods.

(d) Flood-retarding structures—midbasin dams and lower basin channel improvement. This action has strong engineering and political backing. We are spending billions on it.

3. To protect scenic resources from flood-control action we must concern ourselves with the effects of dams.

4. The corps and the Bureau agree that to skim the flood crest from the Columbia River, we need a main control plan, and eventual flood-control storage of 20 to 30 million acre-feet can be presumed.

5. Scenic resource needs should be integrated with this flood-control need.

6. Whenever storage is provided, someone's special interest will be damaged.

7. The first projects authorized should be those causing tangible damage which can be reimbursed with money; for example, at a cost in dollars, railroads and highways can be rerouted, power generation can be substituted for, and farm land can be replaced in kind.

8. The very last to be authorized should be those projects causing damage which no amount of money can replace. This would include damage to national parks and wilderness which man cannot duplicate.

As things stand, in the Columbia River Basin, we seem still to need to provide about 15 million more acre-feet of usable storage in the main control plan. Conservation opposition has delayed about 2 million at Glacier View and we hope will continue to delay it indefinitely. Partial development plans seem to have blocked 3 million at the John Day and Priest Rapids sites; partial plans blocked nearly 3 million at Hells Canyon and may well block up to 3.5 if a run-of-the-river plant is built instead of a major storage structure at Paradise; moreover, the smaller development will add greatly to the pressure of major upstream storage in Glacier National Park, either at Glacier View or at Smoky Range. Conservationists will be forced to oppose both of them.

Thus, to many conservationists, the solution would seem to be to assure full development at Paradise, Libby, and in the outlet-works improvement at Grand Coulee, saving the upper reaches of the Flathead in Glacier National Park, the Snake in and near Teton National Park, the Salmon and the Clearwater for scenic and wildlife resources, which in all probability will be in very short supply by the year 2000.

The Columbia Basin is an especially good area in which to make certain that we have comprehensive plan for adequately protecting now, with an eye to the long-range future, an optimum reservation of the basin's scenic resources of parks, wilderness, and wildlife and their tangible and intangible values for public use, enjoyment, and education; together with necessary water development.

If there is anything unique about water-development problems in the Columbia Basin, it is the abundance of water there. Scarcity of water, however, doesn't necessarily make it any easier to balance water development against scenic-resources preservation. The contest to prove that natural scenery and water development could coexist in the Upper Colorado Basin was a rugged contest, and very much worth it. California's future will probably see many similarly rugged contests as the California water plan, designed to move water from areas of abundance to areas of scarcity, begins to take shape.

Let me go into more detail about Paradise and our reason for being concerned about it. I should like permission to extend my remarks concerning the proposed Knowles Dam after this hearing closes.

A decision is imminent that will result in a very serious threat to Glacier National Park. The threat is all but unknown. The Sierra Club just happened to stumble upon it in the long course of urging the National Park Service and the Secretary of the Interior to protect Glacier National Park from the proposed Smoky Range Dam, the obscure name for a dam put forth as a substitute for the proposed Glacier View Dam. Both dams would severely impair Glacier Park. Former Secretary of the Interior Douglas McKay firmly opposed Glacier View, but the Department's Smoky Range position wasn't clear. One of Secretary of the Interior Fred Seaton's first moves when succeeding Mr. McKay was to oppose Smoky Range firmly and clearly.

But this isn't to be about Glacier or Smoky Range Dams, or any of the long list of dams in the Pacific Northwest that the Sierra Club is alert to in their relation to the Outdoor Recreation Resources Review. Let's focus instead on

three mutually exclusive dams—Buffalo Rapids No. 4, Knowles, and Paradise. One of them promises to be history making: we see a firm basis for conservation support for Paradise dam.

WHAT IS PARK THREAT?

Montana Power Company has contemplated a moderate-sized dam at a site known as Buffalo Rapids No. 4, on the lower Flathead River, well downstream from the sites within Glacier National Park. This site lies within the impoundment area of the proposed Paradise site which Bureau of Reclamation's studies determined to be the best of the 109 sites studied in the Clark Fork Basin. Paradise Dam was locally opposed early in the decade owing to its effect on Indian lands, on settlements, and on a transcontinental railroad and highway. It would inundate pretty country, but nothing scenically outstanding. The reclamation aspects of the project would bring in more agricultural land than would be inundated. Rail and highway relocation costs would not preclude financial feasibility for the project.

But local opposition and Montana Power Co.'s interest in Buffalo Rapids No. 4 combined to remove Paradise from active consideration by the Bureau of Reclamation. Montana Power Co.'s license to study Buffalo Rapids No. 4 was renewed. If the company asks the Federal Power Commission for permission to build and if the Bureau of Reclamation is prevented from arguing the superiority of the Paradise development, then Paradise Dam can never be built. This will lose what we believe to be the finest water-storage opportunity in the Clark Fork Basin. It will eliminate one of the major opportunities for flood-control storage (Paradise has seven times the capacity of Buffalo Rapids No. 4) in the Columbia main control plan. In contemplation of this eventuality, the Corps of Engineers and the Bureau of Reclamation are jointly studying other sites where this flood-control opportunity, as fragmented, can be compensated for. Best of these, but not under active consideration at present, is the Glacier View damsite within Glacier National Park. Others are at Spruce Park, Nine-Mile Prairie, Swan Valley, and Flathead Lake—all opposed by local groups. Opposed or not, these dams do not add up to the storage sacrificed at Paradise, and their non-reimbursable costs for flood control would in all probability be higher, for less storage, at these sites than at Paradise. Pressure would be increased for upstream regulation, as at Glacier View, once Montana Power had completed its Buffalo Rapids No. 4 Dam and required upstream reservoirs to firm up power generation. No other site could compete with Glacier View in this respect for sheer engineering and economics.

In summary, if the apparent status quo should prevail, a private company could build Buffalo Rapids No. 4, Paradise could never be built, and to the present demand for Glacier View Dam would be added the demand of Montana Power Co.

If the Government takes the initiative, rather than wait for a private company to invite it to do so, Paradise Dam can be built instead, and the flood control necessity and economic feasibility of major upstream storage can be eliminated; and all this probably at less cost to the Government. Glacier National Park would be safe from this threat.

PARTNERSHIP: TO BE OR NOT TO BE?

Full development at Paradise can probably be accomplished in only two ways—(1) entirely by the Federal Government, or (2) by the Federal Government in partnership with a private utility, such as Montana Power Co. The former alternative would provide lower cost power to the region at an indirect cost to the rest of the Nation, the theory being that this stimulus to an underdeveloped region would turn out to be a good investment for the rest of the Nation—the good elements of TVA or the Upper Colorado project.

Under current administration policies, the second alternative may be chosen, provided it is decided to favor full development. Montana Power Co. would finance the power installation, while the Federal Government would add its own incremental share for flood control, navigation, reclamation, conservation pool, and recreation, and would sell falling water to the Montana Power Co. in order to pay out the Government's reimbursable costs. Power cost in the region would be higher, but the indirect cost to the rest of the Nation would be minimized, as would the danger of Government power monopoly. Private initiative would be stimulated.

Either way, full development would insure maximum downstream power benefits and minimum upstream scenic impairment.

One Government official who watched the Sierra Club's role in the Dinosaur controversy has commented, "After all, you are in an advantageous position in this Paradise situation—as well off as you would have been if you had tackled the Echo Park problem back in 1946." But perhaps not. The building of Echo Park Dam and the destruction of Dinosaur would require legislative action in what you might call the fishbowl of Congress, where all could see and be heard. But the building of Buffalo Rapids No. 4 and the destruction, in time, of Glacier Park requires only executive inaction, pretty much behind closed doors.

At Echo Park in 1946, whatever danger there was, was obscure—so obscure that no one noticed. Not until 1953, when the direct-fire artillery was aimed at the white of the Dinosaur's eye, did the conservationist public become effectively excited. At Glacier in late 1959 the danger is obscure. The artillery is laid for indirect fire—over the horizon and out of sight. Quite possibly without Montana Power's knowing it, the gun is laid on Glacier National Park. The lanyard will be pulled if the Federal Power Commission approves Buffalo Rapids No. 4; there will be no authorizing legislation, no debate, no more widespread conservationist interest than there was at Hell's Canyon. Just destruction by default. If that lanyard gets pulled, we fear, no amount of protest will stop the shell in its flight to Glacier.

A QUESTION OF LEADERSHIP

Who should take the initiative in seeing that this doesn't happen to Glacier, with the best damsite in the Clark Fork Basin being wasted in the bad bargain? The Federal Government? Executive or legislative branch? Local government? The Montana Power Co.? Or some wandering conservationist without portfolio?

One wouldn't envy the wandering conservationist his task of persuasion. He would need to be the best ventriloquist yet to get the Indian to say, "Flood my home and farm"; or the utility to say, "Please, Mr. Secretary, tie me with your partnership redtape instead of letting me make more money without it"; or the Great Northern to say, "Tear up this good railroad along the stream and replace it with one along the contours"; or the Montana Highway Department to say essentially the same; or the local county to ask that the reservoir basin land be taken off the tax rolls.

Isn't it leadership in reverse to expect this? There seems to be little doubt that a full treatment at Paradise will provide the greatest good for the greatest number in the long run—of flood control, water conservation, power generation, stimulation of agricultural and industrial development, and an intact national park, too. The Government has the staff and facilities for finding out for sure if this is so. Having found out, it has the means of explaining this to the local people and of acting for the national interest if the people refuse to listen.

MAJOR GAINS, MINOR LOSSES

After all, the railroad need not suffer. The Bureau of Reclamation outdid the Southern Pacific's engineers at Shasta Dam. The highway can be accommodated as well. And there's no question of whether farmland will be inundated—but of which farmland. Five million acre-feet of water will cover far less acreage if it is stored at Paradise than if it is stored in dozens of smaller reservoirs instead—a pitcher of water will fill a good many saucers. Higher streams are steeper, take higher dams to store less water at greater cost. Montana Power Co. needn't suffer. Everywhere you look there are major gains for minor losses; the Government, acting for the people who will profit from these gains, and paid by those people to lead, can make this all clear and can do it authoritatively. The Sierra Club, or an equivalent organization, isn't equipped for the job, nor is that its purpose. For every dollar the club has to spend, the Government has a million.

Legislation has been introduced authorizing the construction of Paradise, the dam that promises to save a park, not by "making the park more beautiful," to quote a line from the old Hetch Hetchy refrain, but by being far enough away from the park and big enough to minimize the inundation of other acres of scenery and fertile land. Paradise was almost lost. We have reason, however, to look forward to a better destiny for a project of great promise.

In a country growing as rapidly as this one, we all face a special challenge that requires a careful review of our scenic resources. This will guide us, I think, toward a multiple use of our ever-more-crowded lands. But it won't put conflicting uses in the same place. To each its own place; and always a place for beauty.

America's scenic beauty is something very special. Much of it is still unspoiled. It is an important part of what man needs in life besides bread—that man will need still more than he does now; that he will choose to keep if we leave him that choice. Posterity has no vote except in us. Its people must live with what we decide upon now.

To quote Weldon Heald, "God Bless America. Let's save some of it."

SCENIC RESOURCES FOR THE FUTURE

(By David R. Brower)

Why can't Johnny read? Because he's only 3, our youngest. But, he walks quite well for his age. He covered 9 of our 10 miles of the trail into the Glacier Peak country last summer on his first wilderness trip. That was far enough. Very few miles more, and he would have walked out the other side; none of us wanted to get back to civilization that soon.

John is not much different from other children you know who are his age and who, before you know it, will be voting for president for their first time. The very year they do, this Nation will celebrate its 200th birthday.

Which brings me to the point. How beautiful will America be then?

And when John is about as old as his father is now—which will happen, God willing, much sooner than he thinks—he'll be able to bid one millenium goodby and watch the year 2,000 come in. In an understandable way, that puts me there too. It gets me to wondering what wilderness will be there for him to walk his youngest into; what wild creatures and natural beauty in a world otherwise filled with artifacts; what choice of scenic experience for a whole crowded land, hardly two generations away.

There aren't many places left where we, ourselves, can choose whether to exploit or leave wild. Although the budget of natural things may have looked unlimited to grandfather, we know it is a finite budget. Wilderness is a fragile thing. Man can break it but not make it. And we are quite capable, in our own time, of breaking it all—quite capable of using up all the choices America will ever have between saving and spending what is left of its unmarred natural heritage.

Only our own self-restraint, in a way, can assure Johnny and his contemporaries more than a world of ersatz scenery. A Reuters dispatch of last May suggests how close that world is. The dispatch tells us that a Paris clinic has found a synthetic equivalent for a month's rest in the mountains.

"Ten short visits to a clinic here will give tired Parisians treatment by oxygen equivalent to a month's rest cure in the mountains, the newly opened Paris oxygen center claims.

"The treatment in rooms decorated with colors to 'suit the condition of the patient' costs 15,000 francs (\$37) and lasts 25 minutes for each of the 10 visits.

"The center has red rooms reserved for patients who seek the tonic of mountain treatments. Green rooms, said a center official, suggest the quiet of a rest in the country. And blue rooms provide the right atmosphere for the highly strung who would like to take it easy at the beach.

"Each room has artificial windows looking onto giant photographs of soothing land and seascapes and the temperature is regulated with the oxygen to give an impression ranging from balmy days in sunny meadows to invigorating mountain climes. Patients take the oxygen in transparent nylon tents."

I know of no one who is willing to exchange wildness for a synthetic, or who would consciously make decisions today that would leave his children only a scenic nylon tent in a Paris clinic, or the two-toned, streamlined equivalent we could expect in the domestic marketplaces. Yet it takes no more than two or three moments of quiet contemplation to demonstrate how fast we are moving in this direction.

While I write, at an elevation of 1,000 feet in the Berkeley hills, my eyes are smarting. We built here for the view of San Francisco Bay and its amazing setting. But today there is no beautiful view; there is hideous smog, a sea

of it around us. "It can't happen here," we were saying just 3 years ago. Well here it is. And on the land around us, where just two generations ago a man could be born "on a farm in the North Berkeley hills," there isn't room to plant another iris corm when I separate those that are now stifled by crowding. For all this, our planners talk breezily, even happily, of an ultimate population of 17 million people around the bay. To enjoy the view? To breathe the clean sea air? To stroll in the park on an autumn afternoon? What park?

"The only thing necessary for the triumph of evil," we are told, "is for good men to do nothing." Some good men are doing very well; those of them who are in the business of transforming natural resources into commodities for the commercial world are planning ahead admirably. The forest products industries and the Forest Service are looking hard at the year 2000 and to meet that year's needs are rapidly adding to our vast tree-crop lands by converting the last of our virgin forests. The agencies that develop water and hydro-power are building the dams now that will meet the next century's requirements and are creating reservoirs where the bottom lands were, and the living space for wildlife and recreation. Highway engineers, in long-range plans, are trying desperately to pave pasture fast enough for the new hordes of horses our automotive engineers are placing under millions of hoods—65 million hoods this year, or twice as many as were on the road a decade ago.

The conservationist, however—and by conservationist I mean the man (or part of him) concerned with what natural resources do for his spirit, not his bank balance—is not doing so well in making certain that civilization will retain the wild islands that are essential in his tamed world. In the race to the future it seems as if we are riding a detached little red caboose, destined never quite to catch up, resigned to arriving at that future only to find that all the land is already staked out for practicable utilitarian progressive realistic commercial purposes.

We need to get out of that caboose and ride the engine instead. Or at the very least to get everybody to ride the caboose and arrive at the same time. And there's a way to do it.

Early in 1956 the Sierra Club board of directors proposed a scenic resources review—a full-scale conservationist effort to look ahead as far as the commodity producers are looking. To summarize a summary of it, the review would provide that public and private agencies combine speedily to find what scenic resources are still left, to make an estimate of the future's need for them, and to devise ways of protecting them in time. The term scenic resources is only a convenient short cut; for our purposes it covers local, State, and national parks, appealing wilderness wherever it is, the wildlife that brings vitality to these scenes, and the vitality, resourcefulness, and creative ability that people regain when they get off the pavement and onto the world. A medium-length definition would be the resources of parks, wilderness, and wildlife and the recreation derived from them. And now let's shorten it to the SRR.

The SRR affects you directly, and poignantly affects anyone you know who is Johnny's age. It relates to what we and his contemporaries will see out of our windows and through our windshields. It has major bearing on what we and he will be able to do on those days when we want to see less of the world as man has remade it and more of it as God made it in the first place. The SRR has meaning in the sights, sounds, smells, tastes, and feelings we ought to be able to know when we head for a far, clean horizon to come to our senses, or to let them come to us.

So much for the general import. What are the specific steps of the inquiry? Let's take them one by one.

1. WHAT DO WE HAVE?

The country's most distant horizons are now less than 8 hours apart and the time is shrinking. What scenic resources lie between? We need an inventory. We don't have it.

We already know, of course, where our present national and local parks are, but we don't know how many people the key areas of a park can withstand without defeating the esthetic purposes for which the park was set aside. Nor do we know what areas of park caliber exists which may be set aside to meet the presumably growing need.

We already know what wilderness and wild areas have been designated in national forests, but we don't know their carrying capacity in people. We don't know what wild lands have been designated, or could be designated, in parks,

wildlife refuges, on Indian lands, on State lands, or on the public domain in general. For that matter, no compilation exists of where our roadless areas are in this country.

One of the most important categories of scenic resources does not even have a name. It is unlike parks, where you can drive but don't hunt, and unlike wilderness, where you may hunt but not drive; for in this category you may drive and hunt. Its scenic and recreational importance is great, but will be all but obliterated if exploitation of commodity resources is permitted. The Forest Service has designated many of these places as recreation areas; people camp and ski there, or visit resorts and lease summer homesites. But there are many such places on national forests which are not so designated and none of them has strong protection against incompatible uses. We don't know how many there are, or how many people they could accommodate, or how many similar areas there are outside the jurisdiction of the Forest Service or National Park Service.

This is not the place to spell out scenic-resource land classifications, but merely to point out the need of their being spelled out. Each of us knows what kind of scenic place he likes to go to when there's a chance; in simplest terms, then, the question on a national scale is, what places like this are there, where are they, and how many people can use them without spoiling them?

2. HOW MUCH SPACE WILL WE NEED?

Assuming that the future will want freedom; assuming that freedom is meaningless without freedom of choice; and assuming further that tranquility should always be an available choice, somewhere, sometime, however briefly—assuming all this, what will our needs be for scenic open space by the year 2000? This is an arbitrary choice of year—it's just the well-rounded year that Johnny should see come in—but it is well within our ken. Many of the Nation's leaders can remember well what has happened in the last 44 years and can thus bring that experience to bear in looking ahead that far. Short though the span of that backward look may be, there is something about it that is terribly important in relation to our look ahead—in those four decades the world mined more of its resources, and used them up, than in all its previous history.

A keyman in recreation planning asks, "How can you tell what anybody's going to be doing 50 years from now?" He has a point. A point, but not an answer. Conservationists must do their best at estimating future needs simply because all the resource managers—the commodity producers—are doing their best. We don't have to wait on our own research to find out about 2000. The resource managers have estimates of what the population will be, assuming that it will continue its amoebalike doubling. They have estimates of how much more leisure time we shall be likely to have, and how much faster we shall be traveling to what more distant destinations.

So take their figures, and apply them to Yosemite, for example. It's overcrowded now. If the population is going to be twice as great and the trend shows that each person is likely to spend twice as much peak-season time in national parks by the year 2000, and if we further assume that Yosemite should stand no greater-peak-season overload than it already gets, then we had better look around for scenic space for the 3 million people who won't squeeze into Yosemite in the year that Johnny takes his youngest out to introduce him to the mountains.

3. WHO ELSE NEEDS SPACE?

Growth brings many problems; competition for space is one of them. An adolescent admires growth; a mature person is more likely to deplore it, for it doesn't seem to happen in the right places any more. In the adolescent, the thymus turns growth off as soon as the contour is right. The mature person has no such automatic phenomenon to turn to; only judgment and/or conscience will save him.

Our civilization has yet to show much evidence of a built-in thymus for its adolescence, and we can only hope that judgment and conscience will succor its maturity. There is not yet much embarrassment about the daily homage to the great god Growth, so secure in his chrome-plated niche. This very statement, if it were to be widely read, would probably cause widespread resentment. But does it really miss the truth?

In our commercial world have we yet seriously questioned the difference between the bigger and the better? Can you find any remorse, on the financial

page, in the report that this year's volume was greater than last year's? Is the increase ever expressed in terms of the resources spent from the earth's savings? In terms of a new empty space against the sky that another tree will not fill so well for 500 years. In terms of thousands of tons of iron ore, never to be renewed, now processed and scattered beyond recovery? Or of millions of barrels of oil, an energy reservoir aeons in the making, exhausted into the atmosphere? Or of fertile lands lost under today's new tract or tomorrow's new freeway while the hearts of cities develop an ominous murmur?

No, there are no questions. This is called progress, and of course these things happen. Perhaps it's better not to think too much about how progress is depriving Johnny's youngest of the best of the world we know.

But we can't dismiss him. Assuming that we will be some years in devising a new model of progress—one that won't move us ahead so fast, but will carry more people longer—we can without much trouble make projections of the future's need for resources, and we can then color in, on our master map, the space which we think should be managed primarily for those resources. This 400 million acres must grow food; that hundred million should bear a tree crop; these 10,000 miles of streams must be inundated by reservoirs or diverted through penstocks; those mountains must be processed for their ore; these plains paved for industry; those hills recontoured for tracts of houses.

4. WHERE ARE THE CONFLICTS FOR SPACE?

Whatever else may grow, and whether the growth is admired or deplored, there is still only one world to count upon and our part of it has firm boundaries. Wherever we might go to look for more space, we could fully expect to bump into someone coming this way on the same quest.

Within our borders there are difficult conflicts already. Final touches are being put on the master plan for controlling the Columbia. There is conflict over the same space by those who are concerned on the one hand with flood control, hydroelectric development, and river navigation and those who, on the other hand, would retain anadromous fish runs, trout streams, wildlife range, national parks, wilderness, and forest recreation. The preliminary plan is well underway for developing California's water. The combatants are essentially the same. A vast sum is being released for highway development—enough to decimate our scenic resources if it is not spent carefully, producing a final product of finer and faster highways to poorer and sadder places, and affording a chance to hurry through what could have been beautiful in order to arrive at a carbon copy of what you started from.

In the forests the conflicts are already legion. The forester's theme, more and more, is "Nature never does anything right," a theme rejected by all who have contemplated the works of two of the greatest foresters, Aldo Leopold and Robert Marshall, who so skillfully showed why man needs large preserves to which he can turn from time to time to see if nature was not right after all. The exploitation for minerals still goes on, by and large, subject to one test: Is there mineral there? Seldom it is asked, Is there beauty there, and what would a 2 or 3 years' gain in minerals cost in terms of two or three generations' loss in beauty? And finally, for the lands not preempted for farms, cities, reservoirs, power development, forest industries, highways, and mining, there are the signs which say, "Keep Out—Military Reservation."

If these are today's conflicts, what of tomorrow's? As we plot those which exist and those which are likely, we see that the master map looks pretty busy. It will be a perplexing map to consider, but we dare not try to escape that perplexity, not unless we wish to resurrect the rejected philosophy of *après moi le déluge*. The important thing is to project all future needs on the same screen with the same projection distance and same focal length of lens for each scene, and also, to the best of our ability, with the same illumination. Let the light be a cool one.

5. WHO NEEDS THE SPACE MOST?

It would be helpful, in resolving the conflicts for space which we see taking form, to have on hand a battalion of men with the wisdom of Solomon. They should also be handy at putting bells on cats. It is easier to suggest criteria for the men on the court than to propose guidelines for decision, but we're in this too far to back out now. So let us ask: For which of the conflicting demands are we most likely to find substitutes?

For example, consider the Northern Cascades of Washington, near Glacier Peak. Here there is a low-grade copper deposit, development of which would bisect one of the primary scenic areas of the entire country, an area equal in caliber to our most magnificent national parks. We are going to run out of inexpensive copper one day and will have to get by with substitutes. We had a taste of what this will mean in the course of World War II, when we were confused a little, but not hurt, by having to use substitutes for copper pennies. Mr. Lincoln lent the same dignity to both, and neither bought more than the other. Our economy went on. Glacier Peak copper can delay our dependence upon ersatz copper but few years. We shall have to find a substitute eventually for gross uses of copper, and our scientists will. But man will never be able to reconstitute the primeval in Glacier Peak once he has breached its superlative redoubt, which he has the tools to do. These are the years of decision—the decision of men to stay the flood of man. We shall have to decide whether to hand the future two voids or one—a world without copper and the primeval, or just without copper.

A Congressman wrote me that he thought this fifth question, who needs the space most, was a loaded one, designed to get someone else to look for substitutes. He is right. Further, the question should remain a loaded one. The decision needs to reserve the possibility for reversal by a higher court, the next generation, which ought to have a few choices left to make. A copper substitute or a wilderness? Fewer pages in a newspaper, or a virgin forest? Another button for starting a new kind of appliance, or a jubilant stretch of white water? Faster transportation to more distant housing, or a greenbelt for a city? If we make all these choices, if we use up all this freedom, what is there left for a more crowded world?

We can't be Solomon, but we can remember his most famous decision, and who was awarded the child. Let those who want the wilderness to remain whole phrase the question as they will. A decision adverse to that whole can never be reversed.

Finally, having decided in favor of the future, we need to make sure that the decision sticks; wilderness protection is paper thin, and the paper should be the best we can get—that upon which Congress prints its acts.

WHO SHOULD CONDUCT THE REVIEW?

There is ample room for difference of opinion about how the Scenic Resources Review should argue its questions, but there seems to be a consensus that the questions need to be asked soon, very soon, and that irreversible decisions relating to natural-resource uses should await the answers.

Various ways of undertaking the SRR are being discussed. What should be the roles of private agencies, of local and State government, of the national executive branch and of the Congress? An attempt to answer this question with a concrete proposal runs into the difficulties confronting any attempt at positive action—difficulties which should never be underestimated. Nevertheless, a *modus operandi* for the SRR needs to be outlined, and we'll try it, then step aside for constructive suggestions.

Should the review be conducted by private agencies, financed by foundations? Probably not. This is too much the responsibility of all the people. Foundations, with their limited resources, might however assist with pilot projects or conduct some spot checks. This is a job for the people by the people's agency, government.

Local and State government only? Much responsibility lies here, but a State isn't equipped to act for the Nation; the nearer the government, the more accessible it is to advocates of the short-term interest. The review needs the best perspective we can get. And appreciation of a scenic resource often languishes in the minds of those who see it every day. We need a national view of our scene to guide the best efforts of local government.

Then where in the National Government should the review head up?

The National Park Service has some limited authority under existing law to assist in coordinating national recreation planning, and it is staffed with some of the Nation's top people in landscape architecture and recreation planning. But it would probably be a mistake to try to use the Park Service for more than the spark plug; a higher echelon is needed at the wheel. Consider the many agencies concerned: in addition to the Department of the Interior and its lands function, we must take into account the Departments of Agriculture (farms and

forests), Defense (military land withdrawals), Labor (leisure for working people), Commerce (travel), Education, Health, and Welfare (sociological values), and such other agencies as the Federal Power Commission and the Bureau of the Budget.

This all seems to point directly to a Presidential committee or commission, set up under authority of Congress in order to establish a continuity of policy, program, and people to carry on a continuing review. Such an organization is a large order, but are there many who doubt that its creation would receive wide support as soon as the public learns of the need?

WHILE WE WAIT—A CRASH PROGRAM

We need an interim, stopgap step, a *modus vivendi*, while we wait for the public to become informed and for necessary data to be gathered. The premature quality of any crash-program decisions will do no permanent harm if they set aside too much scenery for the time being, whereas the premature exploitation of resources in the absence of the broad considerations proposed in the review could be irreversibly damaging. So many major decisions are imminent that there is certainly not time to precede them with complete programs of research to produce the data we shall eventually need.

Right now, today, however, we have in our bureau chiefs a group of very capable men who can give horseback estimates of the answers to the five questions. In the beginning we can tolerate quite a wide margin of error and make adjustments as the data come in. These men can sketch in the inventory of scenic resources; in time the boundaries can be made more precise. Good sets of figures already exist for estimating the rising demand. We already know quite well what space is wanted for commodity production. That, in a way, is the trouble; that is why scenic-need estimates must be sketched in quickly. Once we have the resulting clear view of the major conflicts for space, we have the National Research Council for counsel on the likelihood of substitutes and their imminence.

There is still no shortcut for resolving the big conflicts. We know that the democratic process can carry on from here. We can rest easy about what will happen so long as we insist that all the cards are on the table before we decide who is high man, and so long as we act in the context of a Golden Rule extended to Johnny's contemporaries: For them, a world as beautiful as ours.

REPORTS AND CORRESPONDENCE—REVIEWING OUR NEEDS FOR SCENIC RESOURCES

(By David R. Brower, executive director)

In the course of the year it has been my privilege to represent the Sierra Club at various meetings about the country, and to stress the importance of the concept of the Scenic Resources Review. As far as I can tell, the reaction has been reassuringly favorable every time. The concept adapts itself well to just about every kind of conservation contest we have entered. Perhaps a condensation of part of the testimony I gave will serve two purposes: show in some detail what has been said about several subjects which concern the club—water development, forests, parks, wildlife, wilderness, roads—and clarify their relation to the Scenic Resources Review.

ON THE COLUMBIA BASIN

A typical presentation is the statement made at hearings held by the Army Corps of Engineers in Missoula and Spokane on July 9 and 10 concerning ways to revise earlier plans for control of the Columbia River and its tributaries—an international problem, and very complex. I said in part:

In behalf of the Sierra Club, I am appearing to request that the agencies charged with Columbia Basin water development, as well as other interested groups here, give most careful consideration to planning for the preservation of the Columbia Basin's scenic resources in the course of working out a program of water development. We hope that all groups may work together to assure that the needs of progress are met without sacrifice of unique qualities which are of great importance to the region and to the Nation—qualities which cannot be put together again once they have been taken apart.

The Sierra Club is 64 years old. It consists of more than 10,500 members from all walks of life and all parts of the country, but most of them from California. The club has members who are prominent and many more who are not. They share one purpose: to explore, enjoy, and protect the natural scenic resources, including the wildlife resource, which make this land America the beautiful. We are conservationists, all interested in wise use, but especially interested in preserving from development those scarce and special places in our vanishing wilderness which dollars can never replace in kind and for which there will always be human need.

We are a small part of what you might call a national force that has been building to protect the special resource of parks, wilderness, and wildlife. That force is represented, in a way, by the Natural Resources Council of America, of which I am the present chairman. This is a forum of 37 national and regional conservation organizations having a total membership of 2 million. That force is further represented by the voice of the people themselves, who are realizing in increasing numbers that the few samples we have left of original America must not be sacrificed needlessly.

Witness that public force on the national scene as it was measured in this Congress. In the controversy over Dinosaur National Monument and the proposed Echo Park Dam, the Colorado River storage project bill was doomed to a 70 to 90 vote defeat in the House of Representatives so long as Dinosaur was threatened. The threat was removed, whereupon the bill coasted through with a 120-vote majority.

The same force brought a 3 to 1 defeat at the polls last November in New York State to a proposal to invade parts of the Adirondacks which New York citizens wanted to keep forever wild—strong wilderness support in spite of eminent opposition.

The same force showed itself recently at the city level in Eugene, Oreg., where the people chose at the polls not to sacrifice for a power project a beautiful stretch of wild stream, the McKenzie River headwaters. Similar forces are developing rapidly to protect the intangible values of the Rogue River.

All I am trying to say is that we are witnessing a change in the American temper—witnessing a mature realization, in the nick of time, that we must vigorously and dynamically support the preservation of our scenic resources and especially our living wilderness. This doesn't mean that we're building a breed of people who don't like man's handiwork; it's just that people are discovering that even the most civilized man needs places where he can appreciate what God's handiwork is like, unaided by man. People are recognizing that we cannot forever continue to multiply and subdue the earth without losing our standard of life and the natural beauty that must be part of it.

Policies applicable to the basin

The Sierra Club believes that the flood-control and power-development needs in the Columbia Basin can be met without jeopardy to important scenic and wildlife resources. There should be optimum use of damsites which do not imperil these resources, no matter whether public or private agencies or a combination of both build on the acceptable sites. These sites should be developed fully enough to meet the overall flood-control requirements with a minimum number of structures. There should be proof that there is no alternative course of action before irrevocable damage is inflicted upon the important scenic and wildlife resources.

This club—and this is the general feeling in most other conservation organizations I know of—is in favor of sound water development. However, we consider it not in the public interest in the long run, and therefore oppose, any dam or reservoir proposal which would adversely affect a national park or monument or duly designated wilderness area.

Conservationists in general are feeling a growing concern about indirect peril to major scenic resources. For example, the Citizens' Committee on Natural Resources, Washington, D.C., have already voiced conservation opposition to what they are convinced is inadequate development in Hells Canyon. They are not concerned with the public versus private power controversy. But they are concerned with the threat to major scenic and wildlife values arising from partial development in Hells Canyon. Nearly 3 million acre-feet of storage is seemingly about to be blocked there. This has already led the Corps of Engineers to seek replacement storage on the Clearwater River, where conservationists are opposing the proposed Bruce's Eddy and Penny Cliffs Dams. Like-

wise, apparently, the Bureau of Reclamation is seeking further control of the Upper Snake River in the tremendously important scenic country above the Narrows, in Wyoming, and in Grand Teton National Park and the Teton Wilderness area—an effort which conservationists must oppose.

Conservationist thinking on the Columbia

Let me summarize conservationist reasoning here, so that you may understand it even if agreement with it may not be unanimous:

1. It is clear, in the Columbia Basin, that there is not enough flood control now.
2. Remedial action can take four forms:
 - (a) Flood insurance. This still requires more legislative pioneering; it will not save lives.
 - (b) Exacuation of flood plain by zoning to prevent new construction or replacement of present structures. This is uphill work, literally and figuratively.
 - (c) Upstream watershed management. Practiced with care, this is good conservation, but it is not effective in controlling the big floods.
 - (d) Flood-retarding structures—midbasin dams and lower basin channel improvement. This action has strong engineering and political backing. We are spending billions on it.
3. To protect scenic resources from flood-control action we must concern ourselves with the effects of dams.
4. The corps and the Bureau agree that to skim the flood crest from the Columbia River we need a main control plan, and eventual flood-control storage of 20 to 30 million acre-feet can be presumed.
5. Scenic resource needs should be integrated with this flood-control need.
6. Whenever storage is provided, someone's special interest will be damaged.
7. The first projects authorized should be those causing tangible damage which can be reimbursed with money; for example, at a cost in dollars, railroads and highways can be rerouted, power generation can be substituted for, and farmland can be replaced in kind.
8. The very last to be authorized should be those projects causing damage which no amount of money can replace. This would include damage to national parks and wilderness which man cannot duplicate.

As things stand in the Columbia River Basin, we seem still to need to provide about 15 million more acre-feet of usable storage in the main control plan. Conservation opposition has delayed about 2 million at Glacier View and will probably continue to delay it indefinitely. Partial development plans seem to have blocked 3 million at the John Day and Priest Rapids sites; partial plans are in the process of blocking nearly 3 million at Hells Canyon and may well be about to block 3.5 million at Buffalo Rapids No. 4 if a run-of-the-river plant is built instead of a major storage structure at Paradise; moreover, the smaller development will add greatly to the pressure for major upstream storage in Glacier National Park, either at Glacier View or at Smoky Range. Conservationists will be forced to oppose both of them.

Thus, to many conservationists, the solution would seem to be to assure full development at Paradise, Hells Canyon, Libby, and in the outlet-works improvement at Grand Coulee, saving the upper reaches of the Flathead in Glacier National Park, the Snake in and near Teton National Park, the Salmon, and the Clearwater for scenic and wildlife resources, which is all probability will be in very short supply by the year 2000.

Conclusion

The Columbia Basin is an especially good area in which to initiate a scenic resources review—a comprehensive plan for adequately protecting now, with an eye to the long-range future, an optimum reservation of the basin's scenic resources of parks, wilderness, and wildlife and their tangible and intangible values for public use, enjoyment, and education.

The plan would consist of a cooperative inquiry by many agencies to develop answers to five basic questions. * * * We believe that the best possible answers to these questions should be sought out before irrevocable decisions are made. Adequate answers are not now available. The Nation has immediate need for a broad perspective such as detailed answers to these questions could provide. We believe such a long-range interagency study can be conducted within the framework of present law. Or it may need new legislation. We invite your comment and help.

STATEMENT OF JAMES VIOLETTE

Mr. VIOLETTE. Senator Gruening, Senator Martin, my name is James Violette; I have been a resident of Lake County for 31 years, and I am here simply to submit a statement for the people of St. Ignatius favoring Paradise Dam, and it is signed by four-fifths of the businessmen in St. Ignatius.

And I would like to add on my own behalf that I have been recently employed as a farm equipment salesman, have had contact with a majority of the farmers in the St. Ignatius area, and I find that they favor Paradise Dam about 4 to 1. I thank you.

(The statement referred to follows:)

To save the time of your committee, we businessmen of St. Ignatius are joining in one brief statement in support of S. 1226.

We have seen that the use in Flathead County of a fraction of the Hungry Horse power reserved to Montana has more than doubled the taxable valuation, provided over 600 jobs in one industry alone, improved local markets and created much new business and general employment in that county. Similar benefits from the low-cost power accrue to Silver Bow County, and Montana Power Co. distributes a large block of the power profitably. Paradise, from the standpoints of river control and cheap power, would be roughly the equivalent of two Hungry Horse Dams; its recreational and tourist values would also be far greater.

S. 1226 sets a new high level in the protection and advancement of local interests. It guarantees taxing bodies against loss of revenue. It specifies the lowest industrial at-site rate for a distance of 35 miles. It directs compensation and relocation to keep owners at least as well off after as before. It recognizes all of the tribal values affected and authorizes negotiation accordingly.

Many of the dwindling number of farmers who have managed to hang onto their farms must have off-farm jobs in order to make both ends meet. Our wage workers, together with business and public services, face a disastrous upset when defense industry in the region and military personnel are curtailed, if such large backlogs as self-liquidating Knowles-Paradise Dam are not immediately available. Nearly all of our young people now find it necessary to leave this area when they finish high school in search of employment.

For these reasons and many others, such as national security and threats to our freedom from abroad and from power monopoly at home, we hope for the early enactment of S. 1226.

(The above statement was subscribed to by 38 individuals, constituting four-fifths of the businessmen of St. Ignatius. The names are on file with the committee.)

(STAFF NOTE.—In the interest of saving time, the two following statements were submitted as letters for inclusion in the record at this point, rather than being personally presented.)

DECEMBER 14, 1959.

Senator JAMES E. MURRAY,

Chairman, Senate Committee on Interior and Insular Affairs.

DEAR SENATOR MURRAY: I urge that you and your committee use much wisdom with your decision on the passage of Senate bill 1226. Knowing the population explosion which will happen about 1965 with the marriage of World War II babies, also the normal growth of population, our Nation will need more of all resources to meet the demands and needs of our people.

Senator Murray, the United States, which is one of the leading nations of our time, is at this very moment competing for its place as a leading country of the world. Therefore, it is my belief that we should use every means possible, working in unity to reach our objectives, which will make this a better country to work and live in.

I'm for the passage of S. 1226 or any other good works which your committee deems favorably for the good of the people.

Talking with people on this water development matter, I find that the greatest majority is in favor of this Paradise Dam.

Sincerely yours,

HERBERT M. MILES.

MISSOULA, MONT., December 15, 1959.

Senator JAMES E. MURRAY,
Chairman, Committee on Interior and Insular Affairs,
Montana State University Theater, Missoula, Mont.

DEAR SIR: It is fitting Senator Murray, chairman, Senate Interior Committee, has scheduled this momentous dam hearing at Missoula, Mont., in connection with full water resources development over the Clark Fork River Basin. No Member in Congress today has been more creative and courageous in carrying forward the cause for conservation of our natural resources than Senator Murray. Conservation of our natural resources constitutes the basic problem of which water resource is a part of that problem. Unless we solve that problem, it will avail us little to solve all other problems. Teddy Roosevelt said if there is any one duty which more than another we owe it to our children and our children's children to perform at once, it is to save our natural resources, for they are the first and most important element in our national life.

Conservation and utilization of our water resource, which is currently being wasted as the unharnessed water tumbles downstream from Montana, is imperative for full development of our area. We are confronted with shortages of prime power to attract industries into western Montana. It goes without saying, Montana is in the economy cellar. Business Week, the conservative mouthpiece for the United States main-street businessman, has an eye-opener stating the total personal income for the Treasure State in September 1959, adjusted for seasonal variations, \$102.1 million, or 7.6 percent lower than the comparable month last year. How will Montana recover this large drop in personal income? By the construction of a multipurpose dam on the Clark Fork River in western Montana which will create jobs, improve markets for Montana's agriculture, and enhance the betterment of man's eternal struggle for a decent livelihood.

Montana headwaters of the Columbia River help turn downstream dam turbines for the economy of Oregon and Washington. These same States are enjoying penny power rates and, in some instances, less than penny power rates. Why aren't we in Montana enjoying penny kilowatt rates? The answer lies at the door of the Upper Columbia Development Council, a front organization for Montana Power Co. and Northern Pacific Railway. These enterprises are not interested in wise resource development.

MPCo is fearful of competition so it seems in the kilowatt field. NPRy is also concerned over freight revenues, the attractive water barge traffic which will eventually be a reality on the upper Columbia River. This is not intended as any criticism of the private power company or the railway company, but it is one of the facts of life which must be considered in any comparison of service at competitive rates.

Yes. Multipurpose river development should be considered only in relation to the end results to be achieved; the principal criteria is full comprehensive river development for the common benefits to serve the greatest good of the largest number for the longest time. Our water supply, once believed unlimited, is rapidly diminishing in widespread sections of the country. It is calculated that an outlay of some \$50 billion will be needed during the next 12 years if we are to provide adequate water and sewage disposal to our explosive urban communities. The present administration's policy of no new starts, no matter how urgently they were needed, poses a disturbing factor when population projections are contemplated to be upward of one-quarter the present level by the turn of the century. Yet the current Federal budgets for these activities provide hardly one-half as much work as was provided in 1950.

In conjunction with S. 1226, Representative Lee Metcalf of Montana's First Congressional District has a companion legislation (H.R. 5144) before the House Interior Committee, of which LeRoy Anderson of Montana's Second Congressional District is a member. We need this legislation to manage our waterpower, to regulate streamflow for kilowatt production, irrigation, navigation, and to harness destructive floodwaters in the upper reaches of the Columbia River. We must hasten to accomplish this water development before we find ourselves in a too little and too late situation. Our water resource is not infinite, nor is our

national appetite. Therefore, one of the important aspects is fresh, clean, usable water. Any community lives or dies according to its supply of water.

I feel that further streamflow management through a Paradise-type project will play an essential role in future provision of abundant low-cost power for the Nation and our region, and in conserving for maximum effective use our undeveloped water resource. I'd like to reemphasize the fact that multipurpose dams are self-liquidating through the savings in flood prevention, repayment from power revenues, and other benefits from the stored water.

S. 1226 has all the provisions that are desirable for this key water resource development in the Clark Fork River Basin. S. 1226 has favorable reaction from various conservation groups on wildlife habitat. A high dam on the Clark Fork River will have no adverse effect on migratory fish. It is a sad commentary that a few special interests are so bent on "pork barrel" legislation in the field of water resource development that it is unprecedented in the annals of wise resource management.

We must not overlook the endeavors of U.S.S.R.; and Red China, hydroelectric development. U.S.S.R. is a crash program to accelerate dam building to produce more power for heavy industries, in contrast the bulk of power in our country is earmarked for commercial and residential consumption. Russia has successfully tested 500 kilovolt transmission lines and are planning 700 kilovolt lines. Our transmission lines are a small 345-kilovolt capacity. However, I realize there isn't anything we can do about the U.S.S.R program in the field of hydromanagement, but to concentrate on our water resource development.

Power business, by its vital importance to the people, is public business. This water resource, our rivers, are public, not private property. By all avenues we should work to accelerate water resource development in the Clark Fork River drainage.

Let's not be lulled into complacency from the opponents that Montana is in no need of wise water resource development, hence jeopardizing Montana and the Nation's water resource to meet human, economic requirements, and further the enhancement to future generations. "This is it," if we are to utilize this most important dam hearing and give wholehearted support to S. 1226.

I do appreciate this opportunity to express my views on this highly significant subject—the conservation of our vital water resource.

Sincerely yours,

ELMER W. ENGSTROM.

STATEMENT OF PAUL K. HARLOW, PRESIDENT, COMMITTEE FOR PARADISE DAM

MR. HARLOW. Senator Gruening, Senator Martin, other gentlemen of the committee, I am Paul Harlow, a farmer living near Thompson Falls, Mont., and president of the Committee for Paradise Dam.

Earlier in this meeting Senator Gruening asked a witness what was the thinking of the people affected by the dam—how did the people in the particular area surrounding the Paradise project feel. Well, in the statement that I have presented to you, I think I have covered that rather completely. I am not going to take time to read it, but will ask that it be printed in the record.

(The statement referred to follows:)

STATEMENT OF PAUL K. HARLOW

I am Paul K. Harlow, a farmer living near Thompson Falls, Mont., and president of the Committee for Paradise Dam.

I believe that all the remarks made here today in support of Senate bill 1226 can be summed up by the speech made by our distinguished junior Senator from Montana, Mike Mansfield, before the Senate on March 16, 1959. From this speech, entitled "Hydroelectric Power, the Key to Montana's Future," I wish to quote a few sentences for particular emphasis:

"Industry and commerce follow the transmission lines; they come after, not before, the power that they need.

"Montana, today, does not have adequate electric power. * * *

"What we lack in Montana is not power potential but power development."
A complete copy of this speech by Senator Mansfield follows:

"HYDROELECTRIC POWER, THE KEY TO MONTANA'S FUTURE

"Speech of Hon. Mike Mansfield of Montana in the Senate of the United States,
Monday, March 16, 1959

"Mr. MANSFIELD. Mr. President, the past 100 years are unsurpassed in history for the great multiplication of mankind's abilities to produce for his needs. This multiplication of abilities is due in large part to the increasing use of power sources additional to human and animal power. First it was steam. Then came electric power. In fact, throughout the world there is a close identity between the per capita use of electricity and living standards.

"Electric power is now an essential of a modern diversified economy. An abundance of assured power is indispensable for the continued growth of the economy of each of the 49 States. Assured power supplies are a prerequisite to the establishment of a firm industrial base in the Western States. Insufficient supplies of electric power now restrict western areas, rich in raw materials, to what are, essentially, exploited economies whose potentials for serving the peoples of these areas and the entire Nation are scarcely tapped.

"My home State of Montana is an example. It is, in an economic sense, a nation within a nation, with a great future. Its growth is dependent on the equitable and proper exploitation of its abundance of resources. That, in turn, depends on an adequate supply of hydroelectric power. Industry and commerce follow the transmission lines; they come after, not before, the power that they need.

"Montana, today, does not have adequate electric power. The inadequacy is reflected in the small number of manufacturing and processing industries. And, today, it is also reflected in Montana's high rate of unemployment.

"What we lack in Montana is not power potential but power development. Montana is richly endowed with hydroelectric resources. Great rivers rise in my State. Out of the mountains, the waters of the Columbia and Missouri River systems plunge down steep grades through deep canyons and gorges along which are many sites suitable for reservoirs.

"Regrettably, these great hydroelectric resources are largely undeveloped. Less than 15 percent of Montana's 6,500,000-kilowatt potential has been harnessed. According to the Federal Power Commission, there are, in the State, some 70 potential power projects with an aggregate capacity of over 5 million kilowatts.

"In Montana there are several sites which cry out for Federal development at an early date: Libby Dam, Yellowtail Dam, and the proposed Knowles Dam are examples. We already have Hungry Horse Dam and the Fort Peck Dam. If we add to them the others I have cited, we will assure an adequate supply of power for present consumers, and preference customers, and we will provide the incentive for new industries to move into one of the most seriously underdeveloped areas of the Nation.

"Just one-fourth of this 5 million kilowatts of hydroelectric potential, which I have just mentioned, would double Montana's entire supply of electricity from all sources. If this additional power can be put in service, it would convert communities now stagnant with unemployment into prosperous centers. One-fourth of the undeveloped, hydroelectric potential of Montana's rivers would bring diversified industries to our towns. It would bring diversified markets to our farms and ranches. It would do much to restore, on a sound and continuing base, a measure of prosperity for Montana and it would, at the same time, add to the strength and security of the Nation.

"We have seen this happen in one portion of my State. In 1952, the generators at Hungry Horse Dam went into service. By the terms of the congressional authorization, Montana has preference in the use of Hungry Horse power. This great energy supply has brought industry and commerce to the western part of the State. Following the flow of power, came the Anaconda Aluminum plant, the Victor Chemical Co., the Diamond Match Works, and expanded lumber activity. Around these clustered new shops, new homes, new services, and new trading centers. In addition, the new power made possible the extension of rural electrification to the farming and ranching areas of western Montana.

"Mr. President, there are two significant observations to be drawn from the Hungry Horse experience. First of all, we had to develop the potential power

resource—that is, we had to build the dam and install the generators. The second is that the power had to be reserved by a preference to the State of Montana where it was produced; that is what brought industry to the area. This was done by the authority and guidance of Congress. By way of clarification, I ask unanimous consent to have printed at the conclusion of my remarks, the February 19, 1959, letter of the Assistant Secretary of the Interior, reciting the manner in which this preference works out.

"The Hungry Horse story is a happy one. Unfortunately, we also have an unhappy story, involving another large multipurpose project. Fort Peck Dam in eastern Montana. This great project was authorized in 1938 and was intended to supply power for meeting Montana's needs. The records of the Senate show that this was the original intent, but unfortunately, the congressional authorization was not explicit in fixing the preference. As a result, today, with 175,000 kilowatts capacity being installed at Fort Peck, Montana will receive less than 24,000 kilowatts of the power which will be drawn from its reservoirs. This is the allotment decided upon by the administration, not by Congress. It seems to me persuasive evidence that allocations should be fixed by Congress rather than left to the discretion of the Department of the Interior. It is a consideration which will be uppermost in my mind in considering any future legislation which authorizes additional development of Montana water resources. Montana must have a first and definite claim on all waters rising within the State.

"There is one final point I would like to make. In seeking to assure to the people of Montana a fair share of the benefits of the State's resources, I do not intend to ignore the needs of neighboring States. We are all citizens of one Nation. The people of Montana have no desire to be less generous in their attitudes toward others, than others are toward them.

"By building Hungry Horse to its maximum effectiveness, benefits have accrued, not only to Montana, but also to downstream neighboring States. This approach, I believe, ought to be the key to future public power projects. By full development of each site, it will be possible to share the benefits widely and generously. As we move forward with water resource programs. I believe we must, to the fullest extent possible, seek the benefit of whole regions of the Nation. No State will suffer if the needs of all are met. No State in the long run will gain, if the needs of any are ignored.

"Mr. President, in conclusion I want to say that any multipurpose project in the State of Montana must have the following prerequisites:

"First. Montana must be given primary preference on the order of the Hungry Horse project.

"Second. Any proposed project must be feasible and economically sound.

"Third. Any proposed project must have the approval of the majority of the people directly affected by its construction."

In the closing paragraph of Senator Mansfield's speech he set up three prerequisites that any multipurpose project in Montana must have.

First: Montana must be given primary preference on the order of the Hungry Horse project.

This is definitely provided for in Senate bill 1226 in section 3(a).

Second: Any proposed project must be feasible and economically sound.

This prerequisite is adequately documented in the affirmative in every report the Army Engineers have made on the project, as well as in the report of the Bureau of Reclamation. From a report of the joint hearings before the Committee on Interior and Insular Affairs and a subcommittee of the Committee on Foreign Relations, March 22, 26, 28, and May 23, 1956, beginning on page 286, I wish to quote the following facts:

"Prior investigations have been made by the U.S. Bureau of Reclamation, U.S. Army Corps of Engineers, U.S. Geological Survey, as well as by States, power companies, and others. These studies are all summarized in reports by the Bureau and the corps.

"In the coordinating comprehensive plan for development of the Columbia River Basin, developed by the latter agencies and embodied in the agreement signed by the Secretaries of the Interior and the Army in April 1949, the superior storage sites singled out in the Clark Fork Basin were those known as Paradise on the Clark Fork River and Glacier View on the North Fork of Flathead River, a principal tributary of the Clark Fork.

"The reexamination of storage needs and storage possibilities made below, involving consideration of more than 20 sites in the Clark Fork River Basin, tends to confirm earlier conclusions. The Paradise site presents the best opportunity,

all things considered, for obtaining in the Clark Fork River Basin multiple purpose storage required for power and flood control purposes in the Columbia Basin."

After a listing of 17 sites in a graph the report further states: "Of the sites listed Paradise is outstandingly the most desirable from physical and cost standpoint," and further in the report it says: "Extensive investigations have revealed no site as satisfactory as that at Paradise."

The third prerequisite set up by Senator Mansfield is: Any proposed project must have the approval of the majority of the people directly affected by its construction.

This approval has been given by the people affected in a number of ways.

First, in the hearing held on May 28, 1948, at Hot Springs, Mont., as reported in the 308 report, House Document 531, 81st Congress, 2d session, volume II, page 626, paragraph 342: "Opposition to the project outweighed the support in volume of testimony presented although probably not in numbers of people represented."

Later, when by public demand the Paradise project was activated again, the three weekly newspapers in Sanders County held a poll of the people in Sanders County in regard to Paradise Dam. The poll showed 2 to 1 in favor of the Paradise project.

In 1958 after the Paradise project was really hot, after the people had been thoroughly aroused and brainwashed against the Paradise project by the superlative propaganda machine of the private power companies, and the facts had been given to the people by the Committee for Paradise Dam, a general election was held in November 1958.

In that election I believe the people have spoken clearly and emphatically for Paradise Dam.

I submit a very careful and complete analysis of the results of that election in the eight counties of northwest Montana that make a solid block surrounding the Paradise Dam site:

THOMPSON FALLS, MONT., *November 18, 1958.*

Senator MIKE MANSFIELD,
Senate Office Building, Washington, D.C.

DEAR SENATOR MANSFIELD: Statements have been made repeatedly by Senators, Congressmen, personnel of the Corps of Engineers that they would favor Paradise Dam and that it would be built if the people in the area were in favor of it. I believe the people have spoken clearly and emphatically for Paradise Dam in the election on November 4.

When the people who would be directly affected by the building of Paradise Dam got the chance to express their personal views in the secret sanctuary of the voting booth they voted for Paradise Dam. The results in the eight counties of Northwest Montana which make a solid block surrounding Paradise show the strength of support for the project.

Lincoln County: Senator H. H. Anderson who sent a letter favoring Paradise to the Army hearings, defeated former Senator Winton Weydemayer, master of the State grange, who appeared at the hearing against Paradise. Arthur Sheldon, a supporter of Paradise, defeated Ann Brockway.

Flathead County: George Siderius, a strong supporter of Paradise, a former representative running for the senate, defeated James Murphy, one of Governor Aronson's appointees on the Columbia Interstate Compact Commission, who testified against Paradise. Three Democrats, McGarvey, Sheldon, and Tonner, and one Republican, Broeder, were elected to the house. Tonner says all four are "public power men."

Mineral County: In the senate race Mr. LaCombe had no opposition. In the house, Arthur Jensen, a director and strong supporter of Paradise, defeated Annie Faulk who took no stand.

Missoula: Donovan Worden, a long-time senator, one time floor leader, opposed to Paradise, was defeated by Edward Dussault, a proponent of Paradise who joined the committee in 1957. In the house, of the five elected, the two strong supporters of Paradise topped the ticket, followed by three who took no stand.

Granite County: In the senate race Cummings, a supporter of Paradise, easily defeated Murphy who opposed it. In the house, Mrs. Dolly Page, a supporter of Paradise, defeated Enman, an anti-Paradise candidate.

Ravalli County: Joe Strnisha, a strong supporter of Paradise, who testified for the project at the hearing, led the ticket by 482 votes over his rival, Mr.

Nichols, one of the two candidates in the whole area who appeared against Paradise who was elected to either house or senate. Neither senate candidate expressed an opinion in public on Paradise.

Lake County: Lake County has been a strong Republican county, dominated by three Republican weekly papers strongly opposing Paradise in their editorials and news columns. Steve Demers, a subordinate official of Montana Power Co., campaigned extensively for the anti-Paradise candidates. No senate race. In the house, of the four candidates running, two to be elected, three expressed strong opposition to Paradise. The fourth, Charles Harball, a young farmer, a worker for Paradise, a director of the committee, topped the list. Ray Loman, a newspaper editor, president of U.C.D.C. and the most active worker against Paradise in the whole area, ran second. Clarence Bick, representative for two sessions, a Democrat working against Paradise, received fewest votes of the four.

In Sanders County, which will be most dislocated and disrupted by Paradise, the Paradise ticket made a clean sweep. The senate race: Mahoney versus Larson, both strong men. Mahoney was speaker of the house in 1957. Larson had been majority floor leader in the senate. He was an appointee of Governor Aronson on the Columbia Interstate Compact Commission. He has been a member continuously since its inception. The Governor came to Sanders County twice to campaign for Larson. Harold Dean, of the Butte law firm of Corrette, Smith & Dean, legal counsel for Montana Power Co., was also campaigning in Sanders County for Larson. Unlimited funds were available for Larson's campaign. Larson strongly opposed Paradise, sent a letter in opposition to the Army hearing.

Mahoney campaigned strongly for Paradise, appeared for Paradise at the Missoula hearing. Mahoney won over Larson by a good majority.

In the house race, Gill versus Stearns. Both men were newcomers in politics. Stearns, strongly against Paradise, appeared in Missoula against the project. Gill, who appeared in Missoula for Paradise, won easily over Stearns.

It was the Paradise Dam issue that won the county commissioner race in Sanders County. Jack Harwood, a director of the Paradise committee, appeared for Paradise in Missoula, ran without support of his wife's folks, the Diehls, owners and operators of a big sawmill in Plains, a well-to-do family opposed to Paradise.

Dale Shook, not publicly committed, supported by all the big money in the county, was his opponent.

The race was neck and neck until the returns came in from Dixon, a town which would be completely drowned out by Paradise Dam. Harwood campaigned in Dixon in favor of Paradise, and won by 2 to 1. That put him in as commissioner.

All other county candidates in Sanders supporting Paradise Dam won easily. Not a single candidate opposing Paradise won in Sanders County.

A study of the returns shows that in all three towns which will be flooded out, Dixon, Perma, and Paradise, Mahoney and Gill were the winners.

Tabulating the above, we find that seven candidates running in 1958 appeared at the Missoula hearing in opposition to Paradise, seven in support. Of the seven appearing in person or by letter against it, only two were elected. Of the seven appearing for it, all were elected.

Against: Weydemayer, defeated; Murphy, defeated; Larson, defeated; Stearns, defeated; Bick, defeated; Loman, elected; Nichols, elected.

For: Anderson, elected; Tonner, elected; Mahoney, elected; Gill, elected; Harball, elected; Jensen, elected; Strnisha, elected.

At the national level, where the final decision must be made, Metcalf, who had announced he would introduce a bill for Federal multipurpose development of the river at Paradise (or Knowles) as soon as the engineers' report is made public, was elected by a margin of 38,500, the largest plurality ever recorded in the first district. The size of this vote is a tribute to one of the most respected Members of the House who is generally recognized as the outstanding leader in the fields of education and resource development. His margin in Lake County is nearly double what it was in 1956 when Paradise was not an issue. In Sanders County in 1956 he won by not quite 2 to 1. In 1958, when Paradise was the hot issue, he won by almost 3 to 1. In Mineral County his majority was a little over 2 to 1 in 1956; almost 4 to 1 this year.

In his first race for the Senate in 1952, Mansfield carried the State by something over 5,000 votes; in 1958 by 119,000. Of course, we recognize many national and international issues played an important part in this tremendous vote

of confidence. It constitutes an endorsement of his whole record, a prominent aspect of which has been his vigorous and consistent support of natural resource development through construction of multipurpose dams. Before the election he stated in a speech at Polson that he was more proud of Hungry Horse Dam than of any other legislation he had ever introduced. He said, "Hungry Horse is the best thing that ever happened to Montana." In 1952 he lost Lake County. In 1958, with the Paradise issue red hot, he won Lake County by better than 2 to 1.

Summarizing the foregoing it becomes clear that a large majority of the people who will be directly affected by the building of Paradise Dam support the project.

We respectfully submit this analysis for your information and consideration.

Sincerely yours,

PAUL K. HARLOW,
President, Committee for Paradise Dam.

One of the many results that show the people in this area want Paradise Dam is the vote on legislative candidates. Seven candidates had appeared in person or by signed written testimony at the Missoula hearing in opposition to Paradise Dam, and seven in support of it. Of the seven appearing in opposition only two were elected. Of the seven appearing in support, all were elected.

In 1952 Senator Mansfield lost in Lake County. In 1958 when Paradise was a hot local issue, Senator Mansfield carried Lake County 2 to 1.

This year a local resident of the town of St. Regis made a house-to-house canvass of the entire town in regard to their position on Paradise Dam. They wanted it by more than 2 to 1. I submit a newspaper writeup of this story from the Great Falls Tribune.¹

In closing I wish to point out that among those appearing here today in support of Paradise you have the following organizations:

Montana Farmers Union.

Montana AFL-CIO.

International Union of Mine, Mill & Smelter Workers.

Montana State Association of R.E.A.

The Committee for Paradise Dam.

Several statewide union councils.

City trades and labor councils and individual unions.

These organizations represent a large percentage of the people in Montana.

Mr. HARLOW. The election returns which appear in the center of the report, the election of 1958 in western Montana, which includes the eight counties which make a solid block around the Paradise project, pretty carefully give you exactly how the people feel in this particular area. Out of 7 legislative candidates in this area—out of 14 legislative candidates in this area, 7 of them appeared here in Missoula or by testimony opposing the Paradise project when the Army Engineers held their hearing. Seven of them appeared either in person or by testimony in favor of Paradise Dam. Out of the 7 appearing opposing the Paradise Dam, only 2 were elected. Out of the 7 appearing in favor of the Paradise Dam, all 7 were elected.

Mr. Violette, who appeared just ahead of me, told you how the people in St. Ignatius, or how the businessmen in St. Ignatius feel. I have here with me a statement from all of the—in other words, from the people of Dixon. This statement says all the businessmen—Dixon, you will note, is one of the small towns which will be completely inundated by the Paradise Dam. All right, this man made a complete survey of the town of Dixon and he said all of the businessmen—which he has their signatures here to prove his statement—and a majority of the residents in Dixon, favor the proposed Senate bill 1226.

¹ Filed with the committee.

The majority of the people living in the little town of Perma, which is also to be completely inundated, are members of the Committee for Paradise Dam.

I wish to make just a few remarks also in regard to the remarks made by some of the witnesses here earlier, particularly the witness for the Northern Pacific Railroad. I am particularly pleased that we have, or we are going to—I guess we do not but we are going to have from 10 to 15 passenger trains a day through Thompson Falls, because I have lived in Thompson Falls since 1919 and at no time have we had that many passenger trains, regular passenger trains, through Thompson Falls in any one day. At the present time we have four passenger trains through Thompson Falls in a 24-hour period.

Also I have here something which I feel that you Senators would be most vitally interested in. The UCDC, or the opponents, have made various remarks about how many people are opposed to Paradise Dam and how all of this action is spontaneous. I have a letter here from a man who lives in Charlo, Mont., and it states—I wish this to be put into the record and kept very carefully so that it will not be lost somewhere in the shuffle, because it is the only one that we have written from this particular individual. We may be able to get others from other individuals, but it is the only one I have now. He was not able to be here today. He was much disappointed because he wanted to present this himself.

DEAR MR. CHAIRMAN: About the middle of September 1959, I received in the mail a membership card of the Upper Columbia Development Council showing that I, Tom Felton, is a certified member, to which I have never asked to be, contributed, or asked for any information on the above organization.

He has attached here a card which states, membership card of the Upper Columbia Development Council, to Tom Felton, he has contributed to the support of the council and is a member for the calendar year 1959, and it is signed by the executive secretary, C. P. Fickes, I believe it is. I may be wrong in the initial. And it is dated September 25, 1959.

Mr. Felton goes on further:

If this is the way the opponents are going about to claim more members on their list, then I say "Their membership list should not be recognized." As to my estimation, it is a very low-down trick, and also fraud to use someone else's name without permission. I don't want anything shoved down my throat when I don't ask for it. Therefore, I want everything carried on in a democratic way, just as the proponents are doing. Therefore, I am in favor of Paradise Dam and have joined the Committee for Paradise Dam by voluntarily paying \$1 membership fee.

We have considerable testimony which can further substantiate such practices carried on by the opposition. We will submit those in written testimony later on. I thank you.

Senator GRUENING. Thank you very much.

(The documents referred to and filed by the witness follow:)

To the Senate Committee on Interior and Insular Affairs:

GENTLEMEN: The undersigned constitute all businessmen and majority of residents of Dixon. Because the time for oral testimony is necessarily limited, we wish to present this brief testimony jointly in support of S. 1226.

Although our town and the surrounding area will be submerged by the proposed dam, we are convinced that it should be built at once, because the welfare and security of the Nation require it, and that it is necessary for the development and prosperity of western Montana. While as citizens we would be prepared to make personal sacrifices for progress and the public good, we think the terms of this

bill specifically relating to the protection and advancement of the interests of those whose homes and businesses will be flooded are so just and wise that this project will greatly benefit all in this area even more than it will benefit the State and region in general.

Enactment of this bill early in the next session of Congress will stop the outflow of people from the area and bring increasing hope, prosperity, and freedom for the people here and throughout our State.

Respectfully,

C. T. Ebel, Nat McZucker, Ellen Nye, A. M. Kroll, Harry West, Harry C. Smith, Lela M. Smith, G. E. Cantrel, Harry G. Smith, Clara D. Smith, Olga Gould, John J. Meckle, Mrs. Virginia Jollie, Albert C. Paul, Oliver McCrea, G. F. Hukathois, Albina McTucker, Jessie Allen, Elmer L. Allen, Steve Lozeau, R. W. Priddy, Eunice Conner, B. Conner.

CHARLO, MONT., *December 14, 1959.*

MR. CHAIRMAN: Until a few weeks ago I hadn't planned on testifying on behalf of Paradise or Knowles Dam, because of inundating farmlands of neighbors and friends. Though I have always been in favor of large multipurpose dams for flood control and cheap electricity and also be able to irrigate more land when the time comes that we need it. Now this is the reason that I am entering this testimony.

About the middle of September 1959, I received in the mail a membership card of the Upper Columbia Development Council showing that I, Tom Felton, is a certified member to which I have never asked to be, contributed, or asked for any information on the above organization. If this is the way the opponents are going about to claim more members on their list, then I say, "Their membership list should not be recognized." As to my estimation it is a very lowdown trick, and also fraud to use someone else's name without permission. I don't want anything shoved down my throat when I don't ask for it. Therefore I want everything carried on in a democratic way, just as the proponents are doing. Therefore I am in favor of Paradise Dam and have joined the Committee for Paradise Dam by voluntarily paying \$1 membership fee.

THOMAS "TOM" FELTON.

(The exhibits submitted with this letter are filed with the committee.)

Mr. MAHONEY. Mr. Leif Erickson.

STATEMENT OF LEIF ERICKSON, REPRESENTING THE COMMITTEE FOR PARADISE DAM

Mr. ERICKSON. Senator Gruening, Senator Martin, members of the staff, I am Leif Erickson. I am an attorney practicing law at Helena, Mont. I am a member of the Paradise Dam Committee. I appear for myself and I also appear on their behalf without remuneration.

I have been interested in these matters of river development for many, many years. I was chairman of the MVA Association of the Missouri River, and I have followed all of these developments rather closely.

Now, I am supposed to be the rebuttal witness for the organization and for the proponents, and I know that the Senators will understand how I feel and have felt as the time has slipped away that was allotted to me, and I will have to cover what I have to cover very rapidly, and if it is somewhat disjointed, I hope the Senators will forgive me, as well as everyone else.

I have attended a number of these hearings, and I have been interested in seeing the change of attitude of those who oppose. The first hearing I attended here before the Engineers, most of the oppo-

nents were flatly and unalterably opposed to the construction of Paradise Dam or Knowles. I am sure the Senators have been struck, and I know the questions asked by the chairman have indicated that a great many of those who are appearing here today are not in the class of those who are absolutely against Paradise under any circumstances. That has been indicated, of course, by the answers of the representatives of the Kalispell Chamber of Commerce. At the first of the year former Governor Bonner was opposed to Paradise no matter how it was built, and today he said, and I am sure I quote him correctly, in context at least what he intended to say, that with these safeguards he would then be in favor of Paradise, and I think there has been a very decided change in the attitude of many people on Paradise, and it is revealed here today.

I want to talk about some of these specific items of testimony, and I will jump from witness to witness in doing that. I listened, as I have listened many times, to Mr. Haw of the Northern Pacific, a man for whom I have the greatest personal respect, and I think in his zeal to oppose Paradise, zeal that most of us who are advocates have, he has misstated himself. That has been pointed out by other witnesses but I want to call attention particularly to the statement that the Reclamation Bureau was not in favor of Paradise, and his statement which was direct that the Secretary of the Interior has never recommended the construction of Paradise.

The Reclamation Bureau made its report in February of 1953, special report on multiple-purpose storage possibilities, Clark Fork River Basin. That is a part of the record that the committee already has, and it either has been introduced or will be introduced. In that report the Secretary of the Interior, speaking through his Reclamation Bureau, said, at page 8, "Of the sites listed, Paradise is outstandingly the most desirable from physical and cost standpoints."

Then, the suggestion was made, also by the same witness, that there was not land which was suitable for irrigation in this particular area. Here again the Secretary of the Interior, speaking through his own agency, the Reclamation Bureau, said, again at page 8:

Investigations have been started to determine the location and extent of potentially irrigable lands in the basin. These irrigable lands will not only compensate for agricultural land which may be inundated by storage reservoirs, but will provide opportunities for additional settlement.

The report considers all of these small dams that have been suggested by the Upper Columbia Development Association, and, by the way, I may say to the members of the committee that I heard the statement that the Upper Columbia Development Association was an organization which had for its purpose the advancement of the economy of the region. I do not live in this area, although I am here a great deal, and I have never heard of a single project that the Upper Columbia Development Association has ever been for. Its activities, so far as I know, have been limited exclusively to the opposition to this project. But the Reclamation Bureau considered all of these small dams that there has been general reference to and the Bureau comes up with the conclusion that no substitute for a large-scale storage development at or near the Paradise site is available.

Then it speaks for these small sites, and it is one I think everyone is interested in:

Moreover, the average unit cost of storage at sites other than Paradise would be far greater and proposals for its development would be attended in many instances with equal or greater economic displacements and objections.

One witness testified as to the acre-foot cost of the storage and gave a figure that was lower for the small units, which I don't think is supported by the records, than that to be provided by Paradise. This assumption overlooks, this statement overlooks the power that would be developed at either Knowles or Paradise, and we believe Paradise is the only proper place for the construction of the dam for the reasons that have been given.

Now, there is also a statement in the Burgess statement, which was handed to you by the witness for the Northern Pacific, in which it appears, and I know that it is in that statement because it was there when it was given last time, that the Northern Pacific would lose a lot of revenue by reason of the flooding of Perma and Dixon and that they would no longer be able to originate freight at those two points. Within a matter of 2 weeks of that last hearing, the Northern Pacific applied for and got permission to abandon Perma and Dixon as stations, and they have been abandoned now for these many months, so that there is no freight now originating at Perma and Dixon and there wouldn't be whether there is flooding or there isn't flooding.

Now, one other point on the testimony of your representatives of the Northern Pacific, and this is in an exhibit which is going to be offered to the committee, if it has not already been offered. The Great Northern doesn't join the NP in its concern about what is going to happen to freight revenues when you build these projects, because the Great Northern has run a series of ads in Time, Newsweek, and other magazines of national circulation, one of them headed, "Why Don't You Pick Yourself a Dam Site?" and urges the location of industries on the Great Northern because of Hungry Horse, and a picture of Hungry Horse appears in the ad.

Another ad has the same general theme, and it also appears in this exhibit.

Now I listened with a great deal of interest, of course, as any citizen of the State of Montana would, to his Governor. You know, I attended a dedication of a reclamation project just outside of Helena this spring. I happen to own an irrigated farm in that valley, and under the new project. And I heard the Governor dedicate that project, and I recall that he had quite a little praise for Canyon Ferry because that is where we get our water for that project. Now somewhere or other, Canyon Ferry, between the time somewhere in April when this project was dedicated over there and today, has changed and it is no longer the wonderful project that I understood it was after I heard the Governor's remarks in April.

He suggested in his testimony here today, and I don't want to misquote him, but as I understood it he didn't think much of the recreational opportunities in Tiber Dam, which was built up south of Browning, and Canyon Ferry, because of the fluctuating water level. But the Great Falls Tribune of November 18 carries a release obviously from the Governor's own highway commission, which is in

charge of recreation development in this State, and it tells of the construction of 70 more picnic tables at Canyon Ferry, 41 more fireplaces, three boat launchers, and so forth, and it quotes from Mr. Roberts, who is the head of recreation facilities development in the highway commission, who says:

The skyrocketing increase of persons who visited the Canyon Ferry area this summer is one of the reasons for the project.

And by the way, former Governor Bonner is chairman of the committee for the development. He has a boat at Canyon Ferry and is an ardent boating fan, and he is chairman of the association that has been developing private facilities down there. Going on with Roberts:

He estimated the number of visitors increased 10,000 this year over 1958—totaling more than 50,000. One of the reasons for the increase, he said, was the completion of a paved road off U.S. Highway 10 to the area.

Then they have spent—the State—\$20,500 on Tiber, so I believe any picture of a lack of recreational facilities at Paradise certainly is not supported by what happened in two similar projects.

Now, the one other thing that struck me as we went along here, of the opponents of Paradise Dam, some of them thought that we were a little wild on what we thought would be accomplished by the construction of Paradise, in the main seemed to ignore the rather desperate situation of the people of the State of Montana find themselves in, not only in their individual situations, but also so far as the Government is concerned.

Seven years ago the State of Montana had a credit balance in its general fund of \$12 million. Now that wouldn't be very big down in your State, Senator Martin, and it would be in Alaska; any credit I am sure would be good there at the time, Senator. But we have not only dissipated that \$12 million of surplus in the general fund, but we have been running constantly in the red, and anyone who attended the last session of the Legislature of the State of Montana knows that the situation is becoming more desperate.

Now we feel, those of us who favor these dams, and others, that there is only one way we are going to solve our problems of government and it is the only way Lake County is going to solve them. Mr. Maxwell, the county commissioner, told you how desperate their situation was there. Another witness testified that they reached an all-time high in delinquent property taxes, \$180,000. There is only one way any of these problems are going to be met and that is by increasing the tax base.

Well, turning to the Tennessee Valley area, and reference, of course, has been made many times to that area—and I know Senator Gruening is especially familiar with it, and I know Senator Martin has some familiarity with it—the Tennessee Valley Authority was established, of course, about 1933, and it didn't really get into operation until some years after that. In 1949, they had a celebration in the State of Tennessee, and the National Tennessean got out a special edition of their paper, and the headline on page 46, "Tennessee Has Advanced 50 Years Since Establishment of TVA." That would be a 10-year period, or a little more.

At the time TVA was established, taxes on property for the State purposes were 35 cents per \$100 of valuation. After 10 years of TVA and successive reductions in the property tax for State purposes, property taxes for State purposes were about abolished entirely, and that is what we need to do here in Montana, because of our great equalization difficulties. But the Nashville Tennessean gives that credit to the stimulus that came to the economy with the construction of the TVA.

The figure that has been given to the Senators and the committee many times here today, the one for Flathead County \$700,000 this year from the aluminum plant, that is taxes; that is not valuation; that is money paid into the county.

Now that must be the solution for Lake County, because no one has suggested here today, any of the opponents, a solution for the very, very difficult problems that Lake County has. So we feel that it is through this that we will advance.

Now the issue of the Montana Business Review of October of 1959—and I will offer that, although I don't have sufficient copies, before I leave—that is an official publication of the business administration department of the University of Montana, and it compares the personal income of the citizens of Montana and the rate of increase with all of the other States in the Nation. The per capita increase for the Rocky Mountain region from 1950 to 1958 was 12 percent, in real income. For the Nation it was 15 percent; for the State of Montana it was zero. We have had no per capita real income increase in 8 years here in this State. The per capita income of Montana, the rate of increase has not even stayed even, and the article points out that it cannot resume a rate of growth that will keep us up with the national average without a great increase in industrialization and in manufacturing enterprises.

Senator GRUENING. In other words, you need new starts, is that it?

Senator MARTIN. What years are those 8 years?

Mr. ERICKSON. 1950 to 1958.

Senator MARTIN. Does the health of the mining industry have any bearing on that?

Mr. ERICKSON. Yes. And it points out that the mining industry, of course, this publication points out that within the last year there has been the reduction. The mining industry, actually, in 1956 and 1957 was operating at a very high rate. One of the things it points out, Senator, and you would be interested, coming from Iowa, is that the number of our farm units has decreased, the percentage of our total farm income; the percentage of farm income in our total income has gone down and it is continuing to go down. I think now 27 percent of our total income is agricultural and the whole import of the article is that—well, actually, this article points out, if it were not for the building of Noxon Rapids Dam, Cabinet Gorge Dam, the building of the airbase at Great Falls, and the very substantial amounts of money spent on public roads, our condition would be very much worse than it is now.

Senator GRUENING. Judge Erickson, I regret to say that your time has expired. I would like to give 10 minutes to each side now for further summing up or rebuttal. I think we can do that, and if you would yield temporarily to Mr. Loman, and then your side can come back and take another 10 minutes.

Mr. ERICKSON. Thank you, Senator.

Mr. LOMAN. Senator, did I understand that you were possibly going to extend a little further?

Senator GRUENING. Ten minutes to each side.

Mr. LOMAN. I would like to call George Mushbach.

STATEMENT OF GEORGE E. MUSHBACH

Mr. MUSHBACH. Mr. Chairman, my name is George E. Mushbach; I reside at the Elks Club, Missoula, Mont., and I have lived in Montana since 1885. I have been engaged in wildlife conservation work for more than 40 years, both State and Federal Governments. Prior to my retirement in 1950, I was employed by the U.S. Fish and Wildlife Service for more than 30 years, most of which was as superintendent of major game refuges. This experience, I believe, qualifies me to evaluate the needs and requirements of the animals confined in wildlife areas.

For 11 years I was superintendent of the national bison range at Moiese in Lake and Sanders Counties. This range will be seriously affected by the construction of either Paradise or Knowles Dam.

At this time I desire to go on record as strongly opposed to either of these proposals, which, to all intents and purposes, will greatly impair, possibly to the extent of forcing the total abandonment of the national bison range.

My appearance today is as a private citizen. I desire that the records show that I do not represent the Fish and Wildlife Service or any Government agency and have not consulted any such, nor obtained their views.

The national bison range was established by an act of Congress in 1908, primarily for the perpetuation of the American bison, commonly known as buffalo, which at that time were threatened with total extinction. Later it was made preserve for all forms of wild game.

The area has 18,540 acres, consisting of a series of timbered hills rising steeply to an elevation of 4,585 feet above sea level and 2,000 feet above the floor of the valley. Around the base is an area, on three sides, of lowlands, rolling low hills, gentle slopes and flats, all excellent grazing lands with an abundance of native wild grasses of a type suitable and attractive to grazing animals.

It is the lowlands below the slopes that is a must for the buffalo and is their chief grazing area. The bulk of this will be flooded or rendered unavailable as a result of the dam construction and the rerouting of the Polson Branch of the Northern Pacific Railroad.

The map prepared by the Army Engineers shows that 2,292 acres of the range will be flooded. While only that acreage will be under water, more than double that acreage will be rendered unusable. All of the land north of the pool will be isolated due to the intervening lake and the animals cannot reach it. The location of the railroad right-of-way has been indicated only in a general way, but unquestionably it will be located high on the slopes and will be back from the pool level of 2,700 feet. All land between the railroad and the lake cannot be used as the railroad will be fenced. The railroad will be within the range boundaries on the south, west, north, and a portion of the east. Under these conditions, only the high country will be available, except for a limited area in the northeast corner. The high

country is suitable only for seasonal use. The principal dependable water supply, Mission Creek and the Jocko River, will not be available for game. The lake water cannot be reached due to the railroad fence. Most of the small springs are intermittent and are insufficient for large game population.

To all practical purposes, either the Paradise project or Knowles will spell the ruination of this area which has stood as a monument to conservation for more than 50 years.

As an indication of the interest by the public, 3,000 people gathered at the bison range in 1958 to commemorate the 50th anniversary of its establishment. That is one group who will resent any action that will detract from its value to the public.

The acquisition of other lands to compensate for the acreage destroyed adjacent to the remaining acreage is out of the question, as none suitable is available. Even if a new location could be found at some distant point, it would not be practical to transfer the 1,500 or so wild animals to it. Buffalo, deer, elk, mountain sheep, and antelope cannot be driven as would be the case with domestic stock.

Aside from the value of the bison range as a refuge for wildlife, it has much value to western Montana from a business standpoint as it attracts thousands during the tourist season; it is a popular recreation area for local people.

In the past it has served as a storehouse from which thousands of animals were drawn to provide foundation stock for depleted game ranges in Montana and other States as well. A popular feature is the annual sale of buffalo meat from surplus animals and live animals for private herds. So great are the applications for meat that the demand exceeds the supply, so that a drawing is necessary. Income from such sales goes far toward repaying administrative overhead and maintenance costs. The area has proven of great value for education and research, being used extensively by the University of Montana.

The cost of compensating for loss of improvements, roads, and fences will amount to hundreds of thousands of dollars. The entire headquarters area, with its dwelling, shops, barns, sheds, administrative buildings, etc., will be under 127 feet of water.

I have appeared at two hearings of the Army Engineers in opposition to the projects. I have nothing to gain or lose personally in this matter, but I do feel someone should represent the thousands of people throughout the country who will suffer a serious loss should the project be adopted.

There has been but little said, even by the local people, on the bison range angle, for the reason that the general public does not realize to what extent the area will be affected. Examination of the project map means but little to most people and does not look serious unless the whole story is told and understood. Thank you.

Senator GRUENING. I would like to ask you one or two questions. How much land of the buffalo range would be taken by the Paradise project? About what would be the acreage that would be taken from the 18,000 now in the range?

Mr. MUSHBACH. Well, as I say, the flooding would be 2,292 acres. In addition to that, the land that would be taken out of production would amount to probably more than double that amount, or in the neighborhood of 6,000 acres.

Senator GRUENING. In other words, you would leave only 12,000 acres for the range?

Mr. MUSHBACH. Well, a little more than that.

Senator GRUENING. You don't think that would be sufficient?

Mr. MUSHBACH. Oh, no, due to the fact that it isn't suitable land. It would be all the high country, you see, where the animals would be all right for summer grazing, but would be out of the question for a year-round proposition.

Senator GRUENING. Thank you.

Mr. LOMAN. I thank you, Senator Gruening and Senator Martin, for your courtesy in coming to us in Montana for this hearing on Senate bill 1226.

Now I have here filed statements, individual statements and group statements, organizational statements, also some petitions from various organizations, which I would like to file for the record. Also there are several people still remaining even at this late hour in the crowd, that I think perhaps have statements. Would any of those please bring their statements forward, if they have statements that aren't filed?

Senator GRUENING. I would say, Mr. Loman, I think you have presented a very full battery of testimony. I think that every point of view has been well expressed and well heard, and all these additional statements will qualify as part of the record and will be carefully studied by the committee, so no one need feel he has been excluded from testimony.

(The statements referred to by the witness are printed in the appendix.)

Mr. LOMAN. Thank you, Senator. I am glad for your assurance that the record will be held as important as the spoken testimony.

Senator GRUENING. The record will be held open until the end of the month, also.

Mr. LOMAN. Thank you for that assurance. Is there any other time left?

Senator GRUENING. I think in view of the fact that Judge Erickson went over 2 minutes, you should have 2 minutes more; then at that point I would like to ask you a question, which I won't charge to you.

STATEMENT OF RAY LOMAN, UPPER COLUMBIA DEVELOPMENT COUNCIL

Mr. LOMAN. It has been mentioned during this discussion that the Corps of Engineers in the cursory survey indicated 60,000 acres as being available, I believe it was 68,000 at the time, was available for irrigation. Senate bill 1226 indicates a sort of a retraction from that previous position in that 1226 provides for a study of irrigation possibilities, and this in the face of the proponents of the Columbia Basin account, in which those people suggest that any money accruing to Montana from the Columbia Basin account, if it were established, would be spent in the eastern Montana, which is not in the Columbia Basin, because there are no feasible irrigation areas in western Montana.

I did wonder about Judge Erickson's statement about fiscal policies in the things that a county could do. I wonder if he would advise

parents to apply the same formula to their families. The idea, if the family wants more there is only one thing to do, go out and make more, which is what he said as far as the county or the State is concerned. If they require more money, the only thing to do is add tax bases. There also could be a conservative fiscal policy.

Again, Senator, I would like to thank you for your consideration, and Senator Martin.

Senator GRUENING. Let me ask you this question, which will not be charged to your time: Judge Erickson indicated that the Upper Columbia Development Council had never sponsored any project, and merely opposed. Is that, in your view, a fair summary of the history?

Mr. LOMAN. Not a bit, sir. We have proposed and continue to propose the idea of small dam storage, upstream storage, as being more valuable in flood control, more valuable to your existing industry, more valuable to our existing life in western Montana, in that it would help the stretches of the streams in western Montana, whereas the valley storage wouldn't. We also urge range management, management of the hills, in such a manner as to provide for better retention of soil or better retention of water in the soil mantle, and this we consider to be important not only just in the matter of water but in the matter of helping our existing economy, and the manner in which it would help agriculture, would help timber and recreation.

We further have the constant contention that development in the United States can far better be done through the method of free enterprise and through the individual enterprise of people without the direction and constant organization, and as one person mentioned, zoning, by government. We feel that the development of this country to the greatest nation on earth, the greatest nation with the longest and greatest history that has been known in the history of man was done under free enterprise where the rights of the individual were supreme and at all times seriously considered.

Senator GRUENING. Is that the total record of the Upper Columbia Development Council you just cited?

Mr. LOMAN. That you asked me for. I wouldn't say that is the total record; no. I didn't intend to recap it.

Senator GRUENING. Well, so far it seems to consist in the espousal of some general ideas, small dams, better range management, and the free enterprise system.

Mr. LOMAN. That is right, sir.

Senator GRUENING. Now the question arises whether this wasn't an organization created artificially for the purpose of combating these particular Government projects rather than one that had constructive purposes of its own.

Mr. LOMAN. This is bad? Is it wrong for citizens to band together to do and to—

Senator GRUENING. No. I am not saying it is wrong; I am merely asking whether that is a fact.

Mr. LOMAN. I don't think I could deny that in saying that perhaps the actions of people who propose such things as Paradise Dam probably caused us to draw together these people who have these viewpoints, and I would like to defend that position as being simply the position of an individual in the United States, and I don't think I

would care to live here if the Government got to the place where I couldn't espouse my ideas.

Senator GRUENING. The only thought that occurs to me in connection with that is that under those circumstances the word "development" is somewhat of a misnomer. You are really an antidevelopment organization, are you not?

Mr. LOMAN. Senator Gruening, it seems to me that the word "development" can well be applied to the United States of America, because in the short space of this 200 years, as I said before, we have developed the greatest civilization, the greatest country, that has ever been known, and I would consider that under a free enterprise system where the rights of the individual are always considered very seriously. We have done a considerable job of development. We would like to continue that. We don't think that development is a step backward in politics and political matters, or government matters. We don't think that development can be considered as a step backward from conservation matters, and I consider such things as Paradise Dam particularly as step backward in the political and governmental matters in that it is a definite deterioration of the rights of the individual, particularly the deterioration of the rights and duties of the legislative bodies.

Senator GRUENING. You oppose Government dams in general, don't you?

Mr. LOMAN. Yes.

Senator GRUENING. In other words, you take the position of the private power companies; is that your position?

Mr. LOMAN. If it is their position, we happen to take the same position, not because they have that position.

Senator GRUENING. But you have. That is the position that you have taken.

Mr. LOMAN. You said that. I don't know.

Senator GRUENING. Well, I am asking you.

Mr. LOMAN. My position and the position of the Upper Columbia Development Council is that we oppose Federal dams.

Senator GRUENING. Thank you very much. We have 10 minutes for the proponents.

Mr. MAHONEY. Like to call Mr. Kermit Welch.

STATEMENT OF KERMIT WELCH

Mr. WELCH. Senator Gruening and Senator Martin, I am a lumber worker at the town of St. Regis, which will be flooded when they build Paradise Dam.

I have taken a survey of the town, circulating both petitions, and I find the town is about 2½ to 1 in favor of Paradise Dam. I didn't try to miss anyone while circulating these petitions. It consisted of people that get their mail and trade at St. Regis. It seems like people who are living as far away as 150 miles have tried to dispute this, as well as a few at St. Regis.

That petition was turned over to the Army engineers. I would volunteer to take anyone down the canyon from St. Regis to Highway 10-A. There is nothing down there but two rocky walls. About three or four families live there, and they don't make a living on their property.

I think our chief export here in Montana is our educated children. I hate to see our children leave this State because they have to go to find jobs elsewhere. It costs a lot of money to educate our children.

I feel the Missoula Chamber of Commerce has let us people down, as it seems it doesn't want industry to come in here. We as workers have traded with these people for years and it seems like they are trying to dim our future.

We have a good little sawmill at St. Regis, but if it closed down we would all have to leave. Our homes would be of no value. If we had a little more industry here we would sure have more security. It seems to me that our companies and corporations here in America right now are spending more of their money in foreign countries and I think Paradise would be great for Montana, as well as the country.

Senator GRUENING. Thank you very much.

Mr. MAHONEY. Mr. Leon Hurtt.

STATEMENT OF LEON C. HURTT

Mr. HURTT. Senator Gruening and Senator Martin, I will not take time at this late hour to read my statement. I merely want to call attention to the fact that Montana has been a hinterland with a colonial type economy, these many years. We want Paradise Dam in order to help correct that situation.

Now I have made an analysis of some 300 dams, small dams, now existing, in this region. And I find that it would take about 1,436 of those average small size dams to equal the storage of Paradise Dam.

Now there are some other ideas in here but I will present them without further comment.

Senator GRUENING. Thank you very much. They will be included in the record at this point.

(The statement referred to follows:)

STATEMENT OF LEON C. HURTT, MISSOULA, MONT.

I am Leon C. Hurtt, retired 8 years ago after 38 years with the U.S. Forest Service devoted mainly to range and watershed management work. I now operate and largely own a Montana cattle ranch. I live in Missoula.

I urge early construction of a multiple purpose dam near Paradise as proposed by S. 1226. Montanans are sick and tired of our semi-Colonial-type economy. For years we have been low on the totem pole—a hinterland of economic development with high transportation rates on our basic products that we ship to be fashioned into finished goods by eastern labor and capital. After the cream is taken off there the skim milk is left for Montana producers of cattle, wool, some minerals, wheat, forest products, etc. We bring back trainloads of flour and breakfast foods processed in Minnesota, Chicago, and Michigan made from Montana wheat and oats. This situation must be modified by a major dam near Paradise. More cheap power is the key to both economic and social progress in this hinterland where electric power for home use is 50 percent or more higher than in Washington, according to a recent FPC report.

Little dams alone will not fill our needs for cheaper power or flood control. Persistent local publicity to the contrary is nonsense. My analysis of data in Forest Service files on some 300 small dams in western Montana ranging up to 34,000 acre-feet shows the fallacy of this unprovable notion. One large group of these dams for which data on size is available, average 162 surface acres and 2,841 acre-feet of capacity when full. Only one of these generates electric power. Thus it would take 1,436 of such toy dams to equal the 4,080,000-acre-feet of the Paradise Reservoir, and they would occupy 232,630 acres or 3¼ times the area of Paradise Lake.

Even if 1,436 small headwaters dams were built at an excessive cost, they would be of little help in flood control because headgates must be opened and closed at precisely the right time to be effective on the Columbia in critical spring floods. Furthermore such a futile program would seriously complicate good management of recreation, fish and game and would wreck wilderness values. Neither would any sensible program of small dams prevent another disastrous loss of life and property such as happened at Vanport 12 years ago. A similar conclusion is stated by John H. Wetzel, Chief, Watershed Branch, SCS, in a careful analysis. He also wrote: "There is no question that usually the larger the reservoir the cheaper an acre-foot of water is stored." This is why qualified engineers do not advocate small single purpose dams to substitute for multipurpose dams such as Paradise. Of course, in certain special situations a small dam may be justified and useful.

Senator Douglas is quoted in the Sunday Missoulian, December 6, 1959, as being in agreement with recognized authorities who advocate keeping a good plant cover or mulch and other good land management practices to retard surface runoff. Senator Douglas is a distinguished economist and statesman. But one part of this quotation clearly takes his astray if it means that he endorses small dams alone to control floods on the Columbia, as this is in direct conflict with qualified authorities who disagree with this fallacious theory.

Half a century ago Theodore Roosevelt promulgated sound basic policies for comprehensive river developments with Federal participation where needed. Private utilities and some others now selfishly try to block these policies by the overworked hobgoblin—socialism—though Theodore Roosevelt was not a Socialist, but a Republican. So was Senator George Norris, who fathered the Tennessee Valley Authority.

Montana lags badly in both population and economic growth. This lag is in dangerous contrast with a very aggressive dam building program in Russia and China. Recent statements by Allen Dulles and by a joint congressional party just returned from Russia, agree that both Russia and China are feverishly building big dams while we argue and procrastinate for several years without resuming a Federal dam building program.

In a recent radio report, Dr. Chambers of the Montana State University, stated that Montana would need 44,000 additional jobs for our slowly growing population by 1970—only 10 years hence. More cheap power is essential for providing these additional jobs for processing more of our forest products and for developing our gigantic rock phosphates deposits in southwestern Montana and on into Utah. Our farmers are now forced to pay high freight on superphosphate fertilizer shipped in from Tennessee and Florida. We need more of it for our phosphate deficient soils. An abundance of cheap electric power is needed desperately for this development which would provide hundreds of jobs.

For these and many other reasons we can be satisfied with nothing less than a major multipurpose dam near Paradise as proposed in S. 1226. Though the cost is great, the cost-benefit ratio is favorable on a 50-year life span and even more favorable on a longer life span. I therefore urge early building of Paradise Dam as a major contribution to our State, regional, and national welfare and safety in the near as well as a more distant future.

STATEMENT OF EUGENE MAHONEY, THOMPSON FALLS, MONT.

Mr. MAHONEY. Mr. Chairman, members of the committee, my name is Eugene Mahoney. I have previously testified at the beginning of this hearing. I would like to state that I have an individual statement which has been concurred in by the members of the Paradise Dam Committee.

I also have here for the record a brief which is substantiated by numerous exhibits and documents which we would like to have become a part of the record; and in addition, we have here numerous expressions of opinion, pro, from individuals in our area and throughout western Montana.

I would like to correct the record. I didn't vote against the bill that Governor Bonner referred to because I was not in the legislature.

However, I defeated the man who voted for it and last election I defeated the Senator who voted for it at the time it was in the Senate of the State of Montana.

We have heard a great deal here today and I believe that we have had a pretty fair cross section of the feeling of the people in the area. And earlier in this hearing, Senator, you asked what the feeling of the people was, and I would like to tell this committee that early in this Paradise Dam hearings before the Corps of Engineers, that the newspapers, the county newspapers in Sanders County conducted a survey; the one in Plains, the one in Thompson Falls, and the one in Hot Springs, and they just asked the people to return their views pro or con on the question of Paradise Dam and the results were over 2 to 1 in favor of the construction of Paradise Dam by the people who subscribed to those papers in our county. We certainly think that this was an independent survey as could possibly be made. The editors asked as a matter of information of their subscribers to send in their views and their views were certainly in favor of Paradise Dam.

Senator GRUENING. Could we get those surveys, those newspaper accounts, for the use of the committee?

Mr. MAHONEY. I shall be glad to get them for the Senator.

Senator GRUENING. Thank you very much.

Mr. MAHONEY. I would like to also refer to a statement made by Senator Mike Mansfield in regard to the power situation in Montana, and this statement was published in the Great Falls Tribune in April of 1949, in which the Senator said on the floor that—

The Montana power lobby is bent upon the destruction of the public power program—a program that means the difference between economic vassalage and economic freedom of the people of Montana.

We face a situation in western Montana where unless we do bring in new industry, we are going to face a difficult situation. We are told repeatedly that we must conserve our timber resources, and unless we do that it will not be very long before we will be out of timber. Now, the big part of the economy of our particular area, the town in which I live, comes from ranching and from the wages paid by the lumbering people and the lumber industry, and if we should lose this valuable timber resource, then there would be very little if anything other than our agricultural program to sustain the economy of the county.

We believe that the construction of a dam such as Paradise would and could certainly tend to develop the economic benefits which can and will cause the growth of not only western Sanders County but western Montana and the entire Northwest as well. We believe that it would be to our advantage to conserve the tremendous billions of gallons of water a year that are washed to the sea without being utilized by the people of the State of Montana, and I think the best way to protect our water is to conserve it before it gets to the ocean, because once it gets there we have no opportunity of reclaiming it.

I wish on behalf of the Committee for Paradise Dam to thank this committee for their courteous and kind attention. We have tried to give the committee the factual information, and before the closing date we will submit the additional testimony and the results of the survey as requested by the Senator.

(The statement referred to by the witness, together with a statement of the Committee for Paradise Dam, follow:)

PREPARED STATEMENT OF EUGENE H. MAHONEY, THOMPSON FALLS, MONT.

My name is Eugene H. Mahoney. I was born and reared in western Montana. I have resided in Thompson Falls since 1947 and since that time I have served the people of Sanders County as county attorney for two terms, State representative for three terms, and I am in my first term as State senator from Sanders County. I have been an active member of the Committee for Paradise Dam since its inception.

The views I express here are not only mine but are concurred in by the membership of the committee.

I would like to discuss the provisions of S. 1226 which we believe make it a very desirable, equitable, and advantageous piece of legislation for the State of Montana and the Nation as a whole.

Provisions for location at best site within a 10-mile stretch.

Section 2 of S. 1226 sets forth the purpose of the act and provides for the construction of a dam in accordance with the Columbia River Review Report of the Corps of Engineers. The Secretary of the Interior is authorized, should subsequent investigation warrant prior to the commencement of construction, to remove the project location to any site between 2 miles upstream and 8 miles downstream from the site recommended in the Corps of Engineers Review Report. This provision is very important for the reason that full, comprehensive, and economical development of the river may best be served by selecting a site other than Knowles as recommended. We believe that the Paradise site would be the best site to accomplish the above ends. I will not go into specific reasons at this time since other witnesses have or will present the advantages of the Paradise site over the Knowles site.

AREA PLANNING BOARD AND FUND

This particular provision in the proposed legislation is a forward step in handling the problem of relocating communities, facilities, and people through a board which represents National, State, local, and specialized agencies and will assure a harmonious and comprehensive development of the area. Those who will be displaced because of the project will have someone in their immediate locality with whom they can discuss their problems. Such an approach to the protection of the rights of the individuals involved is a commendable and the American way of developing our vast resources. We all know that in any large project requiring the acquisition of land and displacement of communities and individuals there is a tendency to overlook the rights of individuals, perhaps not intentionally but the end result sometimes is believed to be the most important consideration. This provision would assure the people that in the construction of this project their individual rights would be safeguarded at all times. They would have assistance in relocating under opportunities at least equal to their previous homes and conditions and would have assistance during the period of readjustment.

The provision for the establishment of a fund not to exceed \$5 million to facilitate and promote the readjustment and development of the project area for the maximum benefit and enjoyment of the people of the State of Montana and the Nation and particularly for the benefit of the people of the project area is a commendable forward step in handling the problems which arise under such projects.

FAIR VALUE FOR LANDS TAKEN

We all have heard it said that the individual landowner would not receive just compensation for his or her land should this project be authorized. To substantiate such a general statement, which is oftentimes made to engender fear and increase opposition to such a project, many specific examples are cited, many of which cannot be verified or the details of the difficulty obtained. We all realize that in the past a number of displaced persons expressed dissatisfaction with the land acquisition methods of the Bureau of Reclamation and Corps of Engineers. In the construction of the TVA it was recognized that the standard of fair value based upon the rule of what a willing buyer would pay a willing seller is not as desirable as the policy of determining fair value on the basis that the owner of any such property shall be at least as well off economically after such transaction as before it (sec. 13 of S. 1226). In the TVA acquisition only 3 percent of the landowners took their cases to court. Therefore, we feel that the policy set forth in section 13 of S. 1226 is a just and adequate method of determining fair value.

It is also specifically provided that those who are required to move will be reimbursed the costs incurred by them in such moving (sec. 8(d)). This cost will not be determined by an estimate made by some group but will be based on an actual statement of costs incurred. It may be said that there is no precedent for paying such costs. However, I would like to remind you that a precedent has already been made in the acquisition of lands for military uses. Therefore, it would be only just and proper that the same standards should apply to a project such as this for the reason that the purpose of the acquisition should not control but rather the rights of individuals affected should be paramount. To recognize individual rights in one instance and not another because the purpose of the acquisition was different would make a mockery of the principle that all men stand equal before the law. We recognize the need for adequate military defense, but who will say that this project cannot be of tremendous importance to the defense of our country?

In addition, this bill has specific provisions regarding the lands owned by the Confederated Salish and Kootenai Tribes of the Flathead Indian Reservation and authorizes the Secretary of the Interior to negotiate a contract providing for the conveyance to the United States of all interest in tribal, allotted, and inherited lands, the payment of just compensation, and final settlement of all claims. We feel that in such negotiations the fact that there are two desirable power sites in the area to be inundated should certainly be taken into consideration in determining the value of these lands. Such a contract could certainly be made flexible enough in its provisions that payment could be made in cash or in the form of blocks of power or both. In this way an opportunity for development of tribal industry could be fostered as well as providing a substantial income over an extended period to act as a cushion against inflation. It is realized that many problems are involved in such negotiations and therefore urge a speedy enactment of this legislation in order that such negotiations may commence at the earliest possible date. The Confederated Tribes, those owning allotments and restricted patents, certainly should be justly compensated.

RESERVATION OF POWER FOR MONTANA

The provision for reservation of the full amount of atsite firm power attributable to the project for use within the State of Montana is of great importance to this State and particularly to western Montana. Such a reservation in the legislation authorizing the construction of Hungry Horse Dam made possible the construction of the Anaconda aluminum plant at Columbia Falls with the resulting economic benefits to Flathead County. This is the only way that Montana can be assured of getting the benefits of our waters. We hear much about protecting Montana waters for Montana people. I know of no single instance nor do I think it possible to place a reservation-of-power clause in the license of a private utility for the construction of a hydroelectric plant. Therefore, it would logically appear that the only way to protect Montana water for Montana people would be by the construction of this project by the Federal Government with a reservation-of-power clause such as is contained in S. 1226. In my own county we have two privately owned dams and have the impoundment of a third, Cabinet Gorge. There is no assurance that any of the power generated at those plants will or need be used in the State of Montana. The power from the Noxon Dam is all transported out of the State.

EXTENSION OF ATSITE RATE TO 35-MILE RADIUS

The provision for the extension of the atsite rate for power to a 35-mile radius rather than a 15-mile radius is necessary, for under this project at least two and perhaps three counties could be involved. Such an extension would assure cheap power to industrial development in all the counties concerned and not just the county in which the dam itself was located.

PAYMENTS IN LIEU OF TAXES

One of the big arguments against the construction of a multipurpose dam in Sanders County has been that the loss of taxes on the inundated land would bankrupt the counties involved. Therefore, I am most happy to note that S. 1226 contains a specific proposal for payments in lieu of taxes for such period that is necessary to bring the assessed valuation to 125 percent of what it was prior to acquisition of lands for the project. Such a provision

is most fair since all the benefits to be derived from such a project are not restricted to Montana alone.

PUBLIC ACCESS

The provisions for public access to the impoundment area is of utmost importance from the recreational standpoint. Such recreation as boating and fishing which will be afforded by such a reservoir can only be enjoyed if provisions can be assured that the people can use them. We in western Sanders County are now experiencing what could happen where no provision is made for public access. Tremendous public pressure was necessary in order to obtain temporary public access areas to the Noxon Dam Reservoir. Had such a provision been made a requirement for a license, no problem would have arisen. The provision in S. 1226 will assure the people of the right and enjoyment of the reservoir and surrounding area.

STATEMENT OF THE COMMITTEE FOR PARADISE DAM

My name is Frances Dummer Logan. I am a ranch wife living near Charlo on land my husband homesteaded. As secretary of the committee for Paradise Dam, I am presenting this testimony on its behalf, pursuant to instructions by the executive committee which met December 10 to review it.

The committee consists of 1,075 individual paid members, as of December 14. Organizations with far larger membership are testifying with us or have supported our stand by resolution. In addition some have contributed financially.

They are: the Montana AFL-CIO, several statewide union councils, city trades and labor councils, and individual unions;

The Union of Mine, Mill, and Smeltersmen.

The Montana Farmers Union.

The Montana REA Association.

Although for duplications we represent a large proportion of the population of the State of Montana.

To save your time we are stating our conclusions at the beginning. The more detailed testimony which follows is to show you that we have done a lot of homework, that we have tried to base our judgments on the most reliable evidence we could find, and that we have arrived at our conclusions a result of our own independent study. It is on the basis of such information that we have solicited membership.

CONCLUSIONS

We respectfully urge:

1. Passage of S. 1226,
2. Study by the Bureau of Reclamation and location of the dam where it will provide "the greatest good to the largest number for the longest time,"
3. Start of construction at the earliest possible time for the following reasons:

There is a national water problem. Water now wasting could be regulated for multiple-purpose use.

The world situation demands that we step up our rate of economic productivity. A dam here, at high elevation, would assist materially in providing power for needed industrial growth, because its upstream storage would be usable through more feet of developed head than storage at any other acceptable site in the Columbia Basin.

Montana's lagging economy would benefit tremendously, first through large-scale employment during the construction period, and more lastingly through probable industrial expansion made possible by the availability of the combination of abundant water and low-cost power.

Our rapidly increasing population and annual withdrawal of over 1 million acres from agricultural production will require more land to be brought under irrigation. Land suitable for irrigation is available in larger amount than irrigated land to be flooded, and could be irrigated either by gravity or pumping by low-cost power.

With increased leisure and greater mobility the Nation's need for recreational areas is increasing. The project proposed would create a fine mountain lake with public access for recreational use.

The stockholders of the utility whose officials are fighting the dam would benefit more through purchase of low-cost power from the public dam than through construction of the small dam they propose which would seriously underdevelop even the power potential of the river and preclude multipurpose use.

Competition by Federal wholesale power would be more effective in lowering rates than regulation by utility commission. The standard of living is directly related to use of electricity. Therefore an abundant supply of low cost power is essential to maintain and improve our American standard of living.

Competition resulting from Federal wholesale power prevents the abuses and dangers inherent in monopoly by private utilities.

The example of Hungry Horse indicates we have every right to expect the construction of a Federal dam in our area would provide similar multiple benefits.

I. A FEDERAL MULTIPURPOSE DAM IN THE CLARK FORK BASIN ESSENTIAL

The committee for Paradise Dam urges passage of S. 1226.

The dam authorized by this bill would help solve a number of different kinds of problems, problems some of which are national in scope, some of particular importance to Montana. It frequently happens that action to solve one kind of problem aggravates another. That is not the case with S. 1226. It is most fortunate that the effects of this one project would be beneficial in a number of different fields. It is truly a multipurpose project.

The principal problem is water.

Water for human consumption

We support S. 1226 because its passage will help to alleviate the Nation's water problem.

"One-fourth the population today is troubled with water shortage, poor water, or both. And the prospects are for even more difficulty in the future."¹

Excessive pumping is causing sea water to seep into wells in coastal States. Some areas are using all available water: no further industries using large amounts of water can be supplied. Senator Murray, in introducing his natural resources bill, S. 2549, made the statement that \$50 billion will have to be spent to provide water fit for human consumption and for industrial use by 1975.

The same bulletin, "Water Facts," states:

"From 1900 to 1950, while U.S. population doubled, total water use, other than for power, increased fourfold. By 1955 it was up another 21 percent from 1950.

"Water needs are expected to double again by 1975, while population increases 40 percent."²

Figures from the National Voter, October 15, 1956, published by the League of Women Voters of the United States, also indicate that water use will rise sharply, "the increase being equal to the additional supply of 145 New York cities, by 1975."

With one-fourth of the Nation's present population suffering from water problems, where will the additional millions find a place to live where there is sufficient good water?

Montana, ranking 43d among the States with a population density of 4.1 per square mile,³ has plenty of room for some of these additional U.S. citizens.

Montana, particularly western Montana, has an abundant supply of water. Though pollution exists in some places, the quality of Montana's water is far better than in most of the east. Much pollution control is in process or planned, so that the quality of our water supply should improve.

A large proportion of this water is at present running to waste. In 1957 Perry F. Roys, then director of the State's planning bureau, stated that 5 billion gallons a day are used by industry—36 billion gallons leave the State daily.⁴

Municipalities and industry that use surface water are limited by the amount available at low flow. In the Columbia, where 73 percent of the runoff occurs

¹ "Water Facts," U.S. Department of Agriculture; Soil Conservation Service PA-337, August 1957, p. 2.

² *Ibid.*, p. 5.

³ Statistical Abstract of the United States, 1959, pp. 12 and 13.

⁴ "High Dams and Upstream Storage; Montana's Industrial, Population, and Employment Problems and Their Relation to Water," Perry F. Roys, p. 96.

during 6 months of the year it is obvious that unregulated streamflow will be low during the other 6.

"A case in point, the Clark Fork River at one point had an average annual flow of 5,500 cubic feet per second for the 25-year period from 1930 through 1955. Yet the minimum flow of record was less than 400 cubic feet per second."⁴

A major storage dam, such as that proposed in S. 1226 would maintain a more nearly equal flow throughout the year, thus rendering a long stretch of the river far more useful. Montana would be better prepared to take care of more people.

Water for industry

Water is industry's No. 1 raw material. More water is used by industry than all other raw materials together. Industry needs water.

Montana needs industry.

The two needs could be made to satisfy each other, provided Montana's water is regulated to make it useful the year round. S. 1226 would accomplish this for one of the State's major river basins. Not that industry would automatically arrive. Too many communities all over the Nation are putting on organized campaigns to attract new industry for that to happen. However, a water supply, plus low cost power, plus our many resources—timber, phosphates, etc.—would give Montanans something to bargain with. In the past we have been at a disadvantage because of distance from markets and high transportation costs. Passage of S. 1226 would be of increasing importance as years go by and water use continues to mount.

Our need for industry, for more manufacturing, has been described by Dr. Chambers, associate director of the Bureau of Business and Economic Research Montana State University. In talks given recently (exhibits A and B) he has stated that the population increase anticipated in the next decade in Montana is 85,000. Forty percent of the population normally being in the labor force, the addition of 85,000 people means that 34,000 additional jobs must be found. However the number employed in agriculture has been declining. If the present rate continues, as seems likely, 10,000 additional jobs will be required for those no longer in agriculture, or a total of 44,000 new jobs. Dr. Chambers goes on that, as a rule, for every job in basic industry, there is a job in secondary employment, services and trades. That means 22,000 of the new jobs must be in basic industry.

Another indication of Montana's need for new industry is the fact that employment in mining, for years Montana's largest industry, has been declining.

For several weeks during the 1958 recession, Montana had the highest rate of unemployment in the Nation (exhibit C). A recent report of the Montana Unemployment Compensation Commission states that unemployment in Montana at the end of October was more than twice the normal number. It is now 3,000 above the comparable period a year ago.

On November 1 a Great Falls Tribune story said that "business recovery in Montana and elsewhere in the Ninth Federal Reserve Bank District is pictured as lagging behind the national trend (exhibit B-2).

On November 10 the same paper quotes Dr. Chambers, cited above, as saying in a public address, "Between 1950 and 1958 * * * Montana's rate of increase in per capita income was the lowest of any State in the Union" (exhibit B-1).

Lowest rate of income increase is bad enough, but that is not all. On November 30 the Daily Missoulian, using figures from Business Week, said total personal income for September, 1959, had declined 7.6 percent from the comparable figure last year (exhibit B-3).

Montana needs new industry. It is essential for long range growth. It also needs employment now, employment such as would come from construction of a large multipurpose project, to keep the economy of the state from dropping further. Passage of S. 1226 and an early start on construction would be effective both in alleviating the present unemployment situation and in providing water for industrial growth.

Need to stimulate national growth

It is not only in Montana that there is need to increase the rate of economic growth. The United States, engaged in economic war which has been declared by the Communists, is lagging. Of many comparisons of the growth rates of the United States and Russia the one selected for quotation is conservative; other reports paint an even gloomier picture. Allen Dulles, Director of Central Intel-

⁴ *Ibid.*, p. 95.

ligence is reported by the Great Falls Tribune of November 14 to have told a Senate-House subcommittee that the Soviet economic drive "must be taken seriously." The paper continues:

"He said the U.S. lead, while still substantial, will be narrowed dangerously by 1970 unless this country pushes ahead its industrial expansion at a faster pace.

"* * * The CIA, he told the subcommittee, expects the Soviets to continue to grow industrially by about 8 or 9 percent a year—the growth rate he said they have kept up for the past decade" (exhibit E-1).

The rate Dulles gave for our recent average annual expansion was 4½ percent. Even that figure may be too high. Many economists place it at 3 percent (exhibit E-2). In 1958 it dropped to 1.5 percent. Though we have a tremendous head start, knowing that our rate of growth, according to our Government's own intelligence service, is but half that of the Soviets, is a cause for concern, not complacency.

Our Nation needs new industry, expansion of present industry, and full employment.

"* * * the goal of the American economy has never been static. It is, and will continue to be, dynamic. We have achieved, and expect to achieve in the future, a constantly rising standard of living for a growing population.

"* * * The wise development and conservation of our key resource, water, is essential to further economic progress.

"* * * Even more important is the fact that on the strength and dynamism of the American economy rests the main hope of achieving world peace and freedom.

"We are committed to a titanic contest in which proper utilization of our resources may prove the ultimate determinant of our strength. All our skill, enterprise, and political wisdom will be needed to meet that challenge, not only for ourselves, but in defense of human freedom everywhere."*

Water and power

A prerequisite for industrial expansion and stepped up economic growth is sufficient power. We support S. 1226 because one of the many benefits of its multipurpose dam would be a large block of cheap power.

How much power is needed in this area?

Colin Raff, a vice president of Montana Power Co. said at the hearing of the Senate Select Committee on Water Resources at Billings on October 9, that Montana is in a surplus power position and has adequate power for present customers and future growth (exhibit F). Similar statements have been made by Montana Power Company officials at recent hearings of the Corps of Engineers.

Senator Mansfield disagrees. In a speech in the Senate on March 16 of this year he said:

"Insufficient supplies of electric power now restrict western areas, rich in raw materials, to what are, essentially, exploited economies whose potentials for serving the people of these areas and the entire Nation are scarcely tapped.

"My home State of Montana is an example. It is, in an economic sense, a nation within a nation, with a great future. Its growth is dependent on the equitable and proper exploitation of its abundance of resources. That, in turn, depends on an adequate supply of hydroelectric power. Industry and commerce follow the transmission lines; they come after, not before, the power that they need.

"Montana, today, does not have adequate electric power. The inadequacy is reflected in the small number of manufacturing and processing industries. And, today, it is also reflected in Montana's high rate of unemployment."

Dr. Roland R. Renne, president of Montana State College, and a member of the President's Water Resources Policy Commission, said in a recent speech:

"* * * As was indicated in the hearing this morning, about 850,000 kilowatts have been developed so far, but we have got a potential of 6¼ million kilowatts, or roughly eight times as much. We are using, at the present time, about 13 percent of our potential.

"Now here is an area where we have barely scratched the surface, in terms of water power—low cost hydroelectric power."†

* "A Water Policy for the American People: Summary of Recommendations," from the report of the President's Water Resources Policy Commission, p. 7.

† Dr. R. R. Renne, "Green Gold: Montana's Undeveloped Water Resources," speech at Missoula, Oct. 12, 1959.

Estimates of the future need for power for the Nation as a whole do not reflect Mr. Raff's complacency. Palmer Putnam, employed by the Atomic Energy Commission in 1949 to estimate demands for energy in the next 50 to 100 years concluded, among other things, that man will never have quite enough energy, and that, while by the year 2000 60 percent of all energy will come from atomic sources, the demand will be so great that every hydropower site that is economically feasible will have to be harnessed.⁸

General Electric estimated the need for electric energy will be 10 trillion kilowatt-hours by the year 2000, 20 times the amount used in the year 1955.⁹

Gus Norwood, executive secretary of NPPA has stated: "For the Pacific Northwest this GE rate of growth is highly conservative. It represents about 7 percent compounded whereas during 1954 the electric loads of the smaller Northwest cities increased 23.8 percent, the rural electric cooperatives experienced a 19-percent growth, and the PUD's had a 15.4-percent load growth."¹⁰

These forecasts make the Corps of Engineers' estimate of load growth for the Pacific Northwest from 41 billion kilowatt-hours in 1956 to 490 kilowatt-hours by the year 2010 look extremely conservative.¹¹ But even this conservative estimate shows Montana Power Co.'s statement that it has "adequate power for present customers and future growth" to be unrealistic.

In spite of the fact that there will be demand for all the power that both public and private projects can produce, electric utilities have made strenuous efforts to prevent construction of public dams which generate electric power from the days of Muscle Shoals to Hungry Horse. One of their stock arguments has been that there would be no market for the power from these dams. For example, in a speech in the House reported in the Great Falls Tribune of April 14, 1949, Senator (then Representative) Mansfield said:

"The Montana Power Co., for the sixth year in a row, is still opposing the building of the Hungry Horse Dam. * * * Its emissaries have been back in Washington almost continuously since the first of the year seeking to influence legislation against the best interests of Montant * * *"

A letter to the advocates of Grand Coulee Dam from Mark Woodruff, secretary of the Columbia Basin Irrigation League, an organization opposed to Grand Coulee, to which the Washington Water Power contributed generously, stated:

"We are against the pumping plan, for to operate the dam and pumping plant at Grand Coulee a large amount of power has to be sold—power that cannot be sold except in competition with existing power companies which have ample facilities to take care of all the Northwest for many years to come, if not for centuries."¹² [Emphasis added.]

In contrast no reference has been found anywhere indicating opposition by electric utilities to Government construction of dams on the Ohio, dams which do not generate power but do permit the utilities to obtain coal for their steamplants at low water barge freight rates.

It is to be expected that this sort of opposition will continue, and this in spite of the fact that competition from low-cost power from public dams has not been harmful to investor-owned utilities.

"From 1937 to 1939, when the Federal Power Commission first published financial data, until 1957, annual common stock earnings of the Nation's privately owned utilities were multiplied about 3¼ times, while their total outstanding common stock increased around 80 percent. Over the same period, for the nine companies bordering TVA, common stock earnings multiplied eight times and their outstanding common stock increased about 110 percent."¹³

Though utilities are obtaining large amounts of power from Bonneville Power Administration at rates as low as, if not lower than, those at which they could generate it themselves, they continue to fight the full comprehensive river development from which their stockholders could benefit. Among them is Montana Power Co., which in the fiscal year ending June 30, 1958, purchased 350,400,000 kilowatt-hours from Bonneville Power Administration at 2.5 mills for firm power.¹⁴ Now that the cheap sites like Kerr Dam have already been constructed

⁸ "Upper Columbia River Development," joint hearing before the Committee on Interior and Insular Affairs and a Special Subcommittee on Foreign Relations, Mar. 22-May 23, 1956. Reference to "Energy for the Future," Van Nostrand, 1953, by Gus Norwood, p. 280.

⁹ *Ibid.*, reference by Gus Norwood to a speech by Chairman Phillip D. Reed, of G.E., and studies by "other General Electric executives."

¹⁰ Corps of Engineers, "Water Resource Development," Columbia River Basin, p. 49.

¹¹ Sundborg, George, "Hall Columbia," p. 124.

¹² "TVA's Influence on Electric Rates," Tennessee Valley Authority, May 1959, p. 12.

¹³ Bonneville Power Administration, 1958 report, p. 29.

they will not be able to construct future plants which generate power for themselves at this rate.

It is estimated that the cost of power at a private Buffalo Rapids Dam which they say they would like to build, would be 8.9 mills per kilowatt-hour.¹⁴ The company would be better off financially to buy power from Paradise or Knowles than to generate it at Buffalo Rapids.

We support S. 1226 because the dam it authorizes would, we believe, supply power that would benefit many and harm none. It would generate power at a rate low enough to attract industry. Even the utility whose officials have fought all public power so bitterly for years, and who are still doing so, would be in a position to earn more for its stockholders by purchase of cheap Paradise power than by blocking its construction.

S. 1226 would create the most valuable storage

The value of water storage for power is measured by the volume stored and its elevation above sea level. The Clark Fork contains the highest major storage site remaining in the U.S. portion of the entire Columbia Basin. Libby is at elevation 2,459 and Nez Perce at only 1,490. It is also considerably higher than the major Canadian sites at Mica Creek, Downie Creek, and Revelstoke Canyon. Furthermore, except for the proposed Boundary project, a potential small project at Eddy Creek, and a gap between Boundary and Weta, power-generating facilities have already been constructed in the Clark Fork to its junctions with the Kootenai and Columbia.¹⁵ Therefore, the full benefit of storage at Paradise would be realized immediately. In contrast, projects to utilize storage below Libby are listed for future systems studies, as are those in Canada. Upstream storage benefits from either Libby or Mica Creek would not be fully utilized until such future projects are built. If what we seek is full use through the most feet of developed head, then Paradise will produce more downstream benefits in relation to the amount stored immediately upon its completion.

Ben Torpen, an engineer who worked on the Columbia for a year in the employ of the corps, testified: "Increased power on the Columbia depends upon storage. Without vastly increased storage the power output of the Columbia Basin will be cut in half."¹⁶

Strong objections to Ninemile, Glacier View, and Spruce Park mean that Paradise is the highest practicable site in the entire basin. This should give it priority in a basinwide construction program and is a cogent reason for passage of S. 1226 at the earliest possible time.

There is another reason for immediate action. The more storage we have the less important Canadian storage becomes. The United States will, of course, pay Canada for the benefits we derive from storage above the boundary. But the more storage we have the better our bargaining position becomes. Since construction of Libby is blocked until settlement with Canada is reached, this makes immediate construction of Paradise all the more urgent.

Power and people

"Throughout the world there is a close identity between use of electricity and living standards."

The per capita use of electric power in the United States is high compared with that in most other countries, a fact for which we are justly proud and thankful. But within our country use has varied and still varies widely from State to State. In 1930 the Congress passed the REA bill, offering loans on equal terms to existing utilities and yet-to-be-formed cooperatives. The utilities did not avail themselves of the opportunity to secure the low interest loans. The rural people who were without electricity formed cooperatives, borrowed from the REA, and provided themselves with electric power. Most people now have electricity but use still varies widely, and with it living standards.

¹⁴ Statement of Roy F. Bessey, p. 7.

¹⁵ "Water Resource Development, U.S. Army Engineers, 1958: Plate 2 Condensed Profile—Major Dam and Reservoir Development."

¹⁶ "Upper Columbia River Development," hearings, Mar. 22, 23, 1956, p. 240.

Average annual kilowatt-hour consumption, residential consumers 1947-57¹

	Annual kilowatt-hour use	
	1947	1957
Montana:		
Billings.....	1,369	2,923
Butte.....	1,079	2,321
Great Falls.....	1,494	3,125
Tennessee: Chattanooga.....	3,015	9,798
Washington:		
Seattle.....	4,539	7,961
Spokane.....	4,411	7,938
Tacoma.....	5,220	9,040
U.S. average.....	1,373	2,776

¹ Federal Power Commission, "Typical Electric Bills," 1959, pp. 100-102.

Average consumption in the United States is 2,776 kilowatt-hours per year. The average in three of Montana's larger cities is close to it. To the west in Washington consumption is 2½ times as great. Montana has hydro potential just as Washington has. But Washington has competition between Federal and power company generation and wholesaling; Montana has such competition in only one corner. Unfortunately the Federal Power Commission booklet from which the consumption figures are taken does not list consumption for Columbia Falls, Kalispell, or Whitefish where power rates dropped as soon as Bonneville Power Administration power became available.

"* * * Where natural monopolies exist, therefore, it is in accordance with the American system that the Government should itself provide competition, if this is deemed necessary to insure its benefits, as for example by providing low cost and abundant power. But it is not in accordance with the American system, nor is it any part of the purpose of the plans for water development proposed in this report, that the Federal Government should itself become a great monopolist."²⁷

S. 1226 would provide for the Clark Fork Basin the competition which is essential to bring low cost, wholesale power to the people of the area, and make possible a higher standard of living.

It is not in accord with our American belief in equality of opportunity to permit a monopoly to depress the standard of living of the people in its territory.

Flood control

Passage of S. 1226 is required for still another reason.

"Floods of damaging proportions occur year after year, and every year in one portion of the basin or another. * * * The valley lands most subject to flooding are the most fertile and productive agricultural lands in the basin. Moreover, transportation and communication lines, port facilities, commercial and industrial establishments, cities and towns are frequently within the flood plain. * * *

"* * * In 1948, damages were estimated to average \$26 million annually based on conditions then prevailing. It was also estimated that damages would average about \$35½ million based on economic developments forecast for 1975. * * *"²⁸

More important than dollar loss is the human suffering caused by serious floods. As a result of the flood of 1948 " * * * Vanport, Oreg. * * * with a population of 18,000, was completely destroyed. Total loss of life throughout the basin was some 38 persons. Approximately 120,000 persons were evacuated and 38,000 lost their homes."²⁹

The Corps of Engineers has stated that only a combination of downstream levees and upstream storage can control floods to the minimum degree required, 800,000 cubic feet per second at The Dalles. The upstream storage must be distributed between the tributaries and headwaters of the main stem in proportion to the amount that each contributes to floods. Table 41 at page 345 of volume 1 of the 1958 review of the 308 report gives this rational distribution of

²⁷ "A Water Policy for the American People," summary of recommendations, p. 8.²⁸ "High Dams and Upstream Storage: How Much Upstream Storage Is Needed for Flood Control Requirements." Mr. John D. Walker, Planning and Reports Branch, U.S. Army Corps of Engineers, pp. 2, 3.²⁹ *Ibid.*, p. 4.

upstream storage needs. Of the 6.5 million acre-feet required on the Clark Fork-Pend Oreille, 2.2 million is already in existence.

S. 1226 would provide practically all of the additional amount required, if the dam is built at a site below the confluence of the Clark Fork and Flathead Rivers. This would reduce pressure to build any of the dams on the headwaters of these rivers: Ninemile, Spruce Park, and Glacier View to which there is strong objection. It would also remove the necessity of dredging the outlet of Flathead Lake, a project violently opposed by residents of the lake shore and vicinity.

Water and food

With the Nation's population increasing at the rate of 1.6 percent year year²⁰ our present food surplus will change to a deficit in the not too distant future. This is true particularly of the kinds of food grown in areas of plentiful rainfall and on irrigated lands, foods of which there is little or no surplus today. These foods are requisite to a balanced diet.

Furthermore, 1 million acres of land are being withdrawn from agriculture each year by urban and suburban growth, highway programs, airport construction, and industry. Most of this land is flat farmland, much of it of high quality. In the year 1958 the withdrawal reached 2 million acres according to Reclamation Commissioner Dominy.²¹

These two trends, one requiring production of more food, the other taking land out of food production, mean that in addition to improving methods to increase production per acre, new land will inevitably have to be brought under cultivation. Since most agricultural land in the humid East is being farmed at the present time, the new lands will have to be in the West, and in those parts of the mostly arid West where water is available for irrigation. Western Montana is one of these favored areas.

Though S. 1226 would remove some 9,000 acres of irrigated land if built at either the Knowles or the Paradise site,²² a study by the Reclamation Bureau states:

"* * * Investigations have been started to determine the location and extent of potentially irrigable lands in the basin. These irrigable lands will not only compensate for agricultural lands which may be inundated by storage reservoirs but will provide opportunities for additional settlement."²³

A publication of the Bureau of Reclamation, Clark Fork River Basin (above Idaho State boundary) Special Report-Water Resources Development, Boise, May 1956, states at page 15 that there are 321,400 acres of "arable area now dry," "worthy of consideration for possible irrigation development at this time."

In addition to new land, it is probable that land, presently dry, within the boundary of the Flathead irrigation project could be irrigated by pumping with low cost power from the reservoir created by S. 1226, and also that land now irrigated would benefit from application of additional water.

That increased irrigation is important not only to the Nation as a whole but to Montana as a State was shown by Reclamation Commissioner Dominy, who spoke at the annual meeting of the Montana Reclamation Association at Butte on November 10. He stated that the irrigated 17 percent of harvested area produces on the average 23 percent of all crops, but that in dry years 30 percent comes from irrigated land, and "it has accounted for more than 60 percent of the crops produced in a drought year."

Recreation

While recreation is not one of the urgent major reasons for construction of a dam on the Clark Fork-Flathead, recreational benefits most certainly will result from such construction. Reservoirs at dams built by the Corps of Engineers and the Bureau of Reclamation have become major recreational centers for fishing, boating, and swimming. In 1957 U.S. News & World Report carried an article stating that the manmade lakes attracted more vacationers than either the national parks or national forests. In 1959 the engineers stated 94 million people visited their 130 recreation areas (exhibit I).

²⁰ Life magazine, December 1959, essay on world population growth.

²¹ Newspaper article filed as exhibit with committee for Paradise Dam testimony at hearing of Senate Select Committee on Water Resources, Oct. 12, 1959.

²² 1958 review of 308 report, vol. 1, pp. 177 and 184.

²³ Report to Commissioner, Bureau of Reclamation, from regional director, region 1: An exhibit appearing at p. 286 of upper Columbia development hearing.

Improvements are to be installed at recreation areas of Tiber Dam and Canyon Ferry Dam. State Parks Director Roberts said:

"The skyrocketing increase of persons who visited the Canyon Ferry area this summer is one of the reasons for the project."

He estimated the number of visitors increased 10,000 this year over 1958—totaling more than 50,000 (exhibit J).

Those who attended the Army Engineers' hearing of October 21, 1957, will recall the impassioned testimony of one witness, who held up Canyon Ferry as an example of a reservoir which would never attract visitors because of mud flats. These figures indicate he was egregiously mistaken.

Tiber Dam, too, has become popular. The Fish and Game Commission sent scouts to count the cars parked at the dam on the opening day of the 1959 fishing season. The number was 1,056. There were also seven airplanes parked on the landing strip.

It is odd that Governor Aronson, who praised the recreational features of Canyon Ferry when he spoke at the road dedication ceremonies in July of this year, and who is planning a State tourist film entitled "Waterways of Montana" (exhibit K), thinks the winding mountain lake created by a dam on the Clark Fork-Flathead would not be a tourist attraction.

While the chief values of recreation are human values, not measurable in dollars and cents, the tourist trade has economic values as well. The tourist business ranks high among Montana's gainful occupations. The Montana Almanac for 1959-60 estimates that 3,676,760 tourists visited the State, 85 percent of whom arrived by automobile, and that they spent \$92,727,000. It is difficult to see how a lake winding more than 100 miles from near Polson to Superior with public access to shorelines, with water maintained at full pool level throughout the tourist season, would fail to attract tourists.

S. 1226 and water rights

Fear has been expressed by opponents of the project that other uses of water would reduce streamflow to an extent detrimental to irrigation within the State. The water supply diagram appearing as plate 7 of the Engineers' 1958 report shows that this fear is unfounded. The amounts now withdrawn from the Clark Fork and Flathead, plus the "added depletion by consumptive use for irrigation development anticipated between 1960 and 2010" are so small in comparison with streamflow as to be negligible.

A more strenuous and widely voiced objection, i.e., that the project would destroy existing water rights, is equally unfounded. First, water rights are fully protected under the basic Reclamation Act of 1902, as specifically provided in section 14 of S. 1226. This law states:

"That nothing in this Act shall be construed as affecting or intended to affect or to in any way interfere with the laws of any State or Territory relating to the control, appropriation, use, or distribution of water used in irrigation, or any vested right acquired thereunder, and the Secretary of the Interior, in carrying out the provisions of this Act, shall proceed in conformity with such laws, and nothing therein shall in any way affect any right of any State or of the Federal Government or of any landowner, appropriator, or user of water in, to, or from any interstate stream or the waters thereof: *Provided*, That the right to the uses of water acquired under the provisions of this Act shall be appurtenant to the land irrigated and beneficial use shall be the basis, the measure, and the limit of the right" (32 Stat. 390).

Further, a water right for beneficial use is of value in establishing priority of claim in the event of scarcity. When there is plenty of water for everyone the water right remains in force, but is unneeded. Reference to the same water supply diagram at plate 7 shows that the abundance of water in the Clark Fork-Flathead makes it extremely unlikely that owners of water rights would ever have to exercise their prior claims over others because of scarcity in this reach of the river.

The claim that the project would interfere with State jurisdiction over water rights is unfounded. The Federal Government has jurisdiction over all navigable streams and principal tributaries thereto. If this were not so the Federal Government could not require dams built by private utilities on such streams to be licensed by the Federal Power Commission.

In this connection an Upper Columbia Development Council press release appearing in several papers on December 3 says, in part: "* * * attempts by the

pro-Paradise groups to impose this project and other schemes to Federalize our water resources on our people * * *."

Since the attention of the president of this organization has repeatedly been called to the fact that the waters of navigable streams and their tributaries have always been under Federal jurisdiction, such assertions appear to be an effort to confuse and mislead the public.

Fifty years ago Theodore Roosevelt said:

"We should make it our duty to see that hereafter power sites are kept under control of the General Government for the use of the people as a whole in a way which shall encourage development of the water power, but which shall not create a monopoly. * * *

"The Nation alone has the power to do this effectively, and it is for this reason that you will find those corporations which wish to gain improper advantage and to be freed from official control on the part of the public, doing all that they can to secure the substitution of State for National action.

"There is something fairly comic about the appeal made by many of these men in favor of State control, when you consider that the great corporations seeking these waterpower privileges in any given State are at least as apt to be owned outside the State as within.

"I have been genuinely amused during the past 2 months at having arguments presented to me on behalf of certain rich men in New York and Ohio, for instance, as to why Colorado and other Western States should manage their own waterpower sites" (Denver speech, 1910).

Spokesmen for the same interests which in Theodore Roosevelt's day wanted power sites under State jurisdiction are now trying to get water right owners into their camp by scaring them into believing Federal dams threaten their water rights.

Summary, section I

The Corps of Engineers proposed three alternatives of varying degrees of effectiveness to alleviate the problems of water and provide other benefits. The Upper Columbia Development Council has proposed a fantastic plan which it insists will solve the water question but which has no foundation in reality. The Montana Power Co. opposes a Federal dam solely on the score of power, utterly ignoring water, as though no water problem existed. This attitude we believe is unrealistic and irresponsible.

The Committee for Paradise Dam supports the statement of Dr. Renne: " * * * water, in Montana, is a multiple-use resource, and for that reason, its value is multiplied in proportion to its number of uses."

We believe no project should be permitted in the Clark River Basin which would interfere with optimum, multipurpose development.

II. PARADISE, "THE BEST SITE IN THE CLARK FORK BASIN"

"The Paradise site presents the best opportunity, all things considered, for obtaining in the Clark Fork River Basin multiple-purpose storage required for power and flood control purposes in the Columbia Basin."

This statement occurs in a report to the Commissioner of the Bureau of Reclamation from the regional director of region 1: "Special report—Multiple-Purpose Storage Possibilities—Clark Fork River Basin." Unfortunately the report is not dated. It appears at pages 286-296 of "Upper Columbia River Development, Joint Hearings Before the Committee on Interior and Insular Affairs and a Special Subcommittee of the Committee on Foreign Relations, of the United States Senate, March 22-May 23, 1956."

No. 4 of the report's conclusions states:

"No substitute for a large-scale storage development at or near the Paradise site is available. The total storable flow during the critical period at the Glacier View and Ninemile Prairie sites and at all other nonduplicating sites recognized as storage possibilities is little more than 3 million acre-feet, or roughly only three-quarters of that at the Paradise site alone. Moreover, the average unit cost of storage at sites other than Paradise would be far greater, and proposals for its development would be attended, in many instances, with equal or greater economic displacement and objection."

The report ends with two conclusions, one of which is for further investigation of Glacier View and other smaller storage sites. The other states: "It is recommended that—

"1. The Paradise site be reconsidered with a view to early resolutions of problems involved in use of the site and its development at the earliest practicable time."

It is interesting to note that though Paradise was deleted in the Engineers 1948 review of the 308 report, because—

"Opposition to the project outweighed the support in volume of testimony presented, *although probably not in numbers of people represented.*"²⁴ [Emphasis added.]

This report states that an agreement signed by the Secretaries of the Army and Interior in April of 1949, singles out Paradise as one of the two superior sites in the Clark Fork Basin.

Comparison of Paradise and Knowles sites

The provision in section 2(a) of S. 1226 permitting location of the dam authorized by the bill at the site found most desirable within a 10-mile stretch of the river, calls for comparison of the benefits created by a dam which would control one river—Knowles—with those of Paradise, recommended by the Bureau of Reclamation, where one dam would control two rivers.

Basic data for such a comparison are found in a memorandum prepared for the chairman of the Senate Interior Committee by its special counsel, which it is needless to call to this committee's attention. But deductions drawn from this memorandum are in order.

Flood control

Paradise will store 4 million acre-feet of usable flood-control storage—Knowles only 3 million. Paradise would furnish 4 million of the 6.5 million acre-feet of storage required for the Clark Fork Basin's share of rational distribution of the minimum upstream storage to reduce flood stage at The Dalles to 800,000 cubic feet per second. With the 2.2 million acre-feet already in existence, the remainder required is only 3 million. This would obviate the necessity for building Ninemile Prairie, a project so unpopular that not one witness testified in favor of it at the Engineers' hearing here in March of 1959. Since members of the Montana congressional delegation have expressed opposition to Ninemile, it is doubtful that it could be authorized. Owners of Flathead Lakeshore property are even more vehemently opposed to the dredging of the lake outlet channel. Therefore the Knowles alternative plan is likely to fall more than a million feet short of the minimum flood storage goal. Paradise will come closer to achieving it.

Power

From the point of view of conservation Paradise is the better dam. It makes full use of both rivers in the stretch from 2,459 to 2,700 elevation. Knowles wastes 71 feet of head of the Clark Fork even assuming that both Superior and Quinn Springs run-of-river dams are built by private utilities. Without them the full 241 feet of head in the Clark Fork would be wasted.

Only Paradise will develop the full power potential of this stretch of the river, 2.02 billion kilowatt-hours as against 1.32 billion kilowatt-hours at site for Knowles. The contrast in downstream benefits is even greater: 2.49 billion kilowatt-hours for Paradise as against 1.20 for Knowles. The memorandum referred to above points out the fact that at the rate of 3 mills per kilowatt-hour Paradise would earn \$6 million more than Knowles annually.

Future earnings

The earnings of either dam would be used during the 50-year payoff for payments of operating costs and replacements, principal and interest. But great dams are not built to last only 50 years. After the 50-year-payoff period the dam—whichever one is built—will continue to earn income for the people of the United States. But Paradise would earn \$6 million a year more than Knowles, an income for future generations, which should not be disregarded.

Restudy of costs essential

The committee for Paradise believes that true conservation is use of our resources for the greatest good for the longest time. We strongly urge upon your committee the passage of S. 1226, to be followed immediately by careful study of the relative merits of the two sites.

²⁴ Review report on Columbia River and tributaries, app. C, Clark Fork Pend Orelle River Basin, p. C-225.

Because we are not engineers, we have employed an engineer who knows the river, who has served in several departments of the U.S. Government, in private engineering practice, and as a consultant for the United Nations. He knows the Northwest and its problems, having been regional officer for the National Resources Planning Board. Mr. Bessey will submit a written analysis comparing the two proposed projects and ways in which such investigation might be pursued.

However, even to laymen a number of comments and questions occur. It would appear that the first part of volume 1 of the 1958 review by the Corps of Engineers builds up an excellent case for full development. But the section of the major water plan dealing with the Clark Fork appears to have been written by a different person, with a different point of view, who even writes in a recognizably different style.

Was a determined attempt made to seek ways to make full development feasible? Certainly at least two logical courses were not pursued:

(a) Relocation cost figures were accepted from the railroad whose facility was to be relocated. Would not a railroad seek to get all it could under such conditions? For example, is not a double-track tunnel superior to its present single-track installation? Is the Government under obligation to provide more than equal, or only equal facilities? Many miles of double track are being ripped up in various parts of the country with installation of block signaling. Is the second tunnel necessary? Why should double track of the most expensive stretch of the entire relocation route be required when alternate track is available in case of emergency?

(b) The report stated that an alternative relocation route appeared to be worthy of investigation. It was not investigated.

It would appear that the relocation cost for highways includes cost of a highway of interstate standard through the reservoir area. The existing highway is not of that class. Why should the project be saddled with the additional cost of the more expensive highway? Should it not pay only the amount required to replace roads to existing standards?

Hungry Horse cost \$6 million less than the amount estimated. The Dalles was built for an amount which we understand was in the neighborhood of 75 percent of estimated cost. The engineers' estimate for Paradise for considerable contingency fund. May it not be possible to build Paradise for considerably less than the amount anticipated by the engineers?

The decision of the engineers in 1948 was based on political, not engineering, facts. The decision in 1958 appears to have been an attempt to decide how much Congress would be willing to invest, rather than presenting engineering data on which Congress would make its own decision.

We urgently request such study be authorized and that it begin at the earliest practicable date.

Competent as the Corps of Engineers is, it has been known to make mistakes. We understand that the corps did not recommend Hungry Horse for construction in 1943 because they were thinking of it as an isolated project. In 1944, the Bureau looking at it as part of an integrated basinwide power system, saw the value of its upstream storage and recommended it. It has proved to be a model of the benefits to be derived from upstream storage.

"The Montana reservation has been established by the Department of the Interior as 208,000 average kilowatts of prime power. The reservation of 208,000 kilowatts is the at-site prime power at Hungry Horse as part of the integrated Federal system. This compares with prime power of 90,000 kilowatts, considering Hungry Horse as an isolated plant."²⁵

The corps has made other decisions the wisdom of which may be questioned. President Hoover's veto of the Muscle Shoals bill contains an estimate of 9.1 mills per kilowatt-hour for generation and transmission costs. This appears to have been a figure based on "political engineering" because a report signed by the corps' chief had placed the figure at 4.16 mills.²⁶

The abrupt retreat from full development without first making every effort to reduce relocation costs of the Paradise Dam which alone could achieve full development, is an example of making policy decisions rather than leaving policy-making to Congress.

"* * * It is not enough, from the point of view of the Federal Government, that a project be good; it must, in order to justify itself, be the best among

²⁵ Letter from Kallispell District Office, Bonneville Power Administration, Dec. 8, 1959.

²⁶ Judson King: "The Conservation Fight," Public Affairs, V, p. 242.

alternatives. Consideration of each project from the point of view of the total national interest may involve factors which at first sight seem remote from comparison of dollar costs and benefits for any one project."⁷⁷

Paradise and recreation

From a recreational standpoint Paradise is also a better project than Knowles. Not only would the lake be larger, the steep gorge of the Clark Fork just above the confluence of the two rivers is perhaps the most spectacular part of the whole area. This would not be a part of the Knowles project. Dr. Renne believes the need for recreational facilities will grow at an even more rapid rate than other kinds of needs.

"The recreational needs of the country have quadrupled between 1900 and 1958," Dr. Renne said, "and in the next 40 years the rate of increase will be even faster than in the past approximately 50 years. By the year 2000, using the recreational needs in 1900 as an approximation, nine times as many recreational services will be needed," he said (exhibit K-1).

With these increasing needs in mind the larger recreational area of the Paradise project should be given due consideration in making the decision between the two sites.

One large dam more efficient and economical

The engineers' third alternative plan, Buffalo Rapids No. 4, plus Ninemile, Quartz Creek, Spruce Park, and Smoky Range dams, seems to be out of the picture. The engineers did not recommend it. The people, aroused by the Hells Canyon scandal will not tolerate such underdevelopment of the river's potential.

There is another so-called plan which is still being urged by the Upper Columbia Development Council. The committee for Paradise Dam has long contended that this is not a real plan, but a publicity stunt to fool the uninformed. No engineering data has been published on a single one of the many dams proposed. Though from the amount spent on publicity the UCDC seems to have had ample funds, it apparently did not use any for factual study.

Had the Upper Columbia Development Council cared to make even preliminary inquiry they could have found out a good deal about the infeasibility of their "many small upstream dams" as a substitute for a multipurpose project from one of the sources we have used, the Bureau of Reclamation study⁷⁸ mentioned above, and the report of the Director of Region 1 to the Commissioner.⁷⁹

The number of such dams required to impound storage equal to that of Paradise, based on the size of such dams now in existence, would be 1,436;⁸⁰ they would inundate many times more acres. If built for irrigation, release would not coincide with flood control schedule. They would ruin much winter game range. They would be too small for power generation. The cost of construction and operation would be prohibitive. As a substitute for a multipurpose dam they have no reputable engineering support. Evaporation from the many shallow ponds would render them inefficient. There is no suggestion as to who might build them or how they could be financed. In fact it is difficult to believe that the proponents of such a patently unworkable proposal really believe in it themselves.

Small headwater dams serve the purpose of watershed management. Each such dam should be considered on its own merits. The committee for Paradise Dam is certainly in favor of such conservation practices where they are needed. However, the "shotgun method" of locating many small check dams for watershed management is no substitute for a multipurpose dam.

"I happen to be one of those who think that there is a place for small dams, of course—in terms of upstream watershed conservation, or conservation of watershed lands, and for stock supply, small reservoirs. But * * * in terms of effective flood control, or in terms of generating anything like our potential of hydroelectric power, why, small dams, of course, just don't do the job. They don't fit the need."⁸¹

⁷⁷ Summary of Recommendations: A Water Policy for the American People, p. 8.

⁷⁸ Bureau of Reclamation, "Clark Fork River Basin, Special Report," Water Resources Development.

⁷⁹ Senate hearing: "Upper Columbia River Development."

⁸⁰ Leon C. Hurtt: Testimony submitted at hearing of Corps of Engineers, Oct. 21, 1957, at Missoula.

⁸¹ Dr. E. R. Renne, "Green Gold: Montana's Undeveloped Water Resources," p. 8.

III. FEDERAL CONSTRUCTION IS ESSENTIAL

Only the Federal Government can and should build large, multipurpose river development projects. An investor-owned utility is by nature a single-purpose organization, and that purpose is to earn profits for its investors. Flood control, benefits of which are measured in dollars not lost rather than dollars earned, is not an activity which it can properly undertake. Its stockholders would have every right to object. The same is true for irrigation projects in which the cost of bringing land under irrigation is more than the landowner can repay, and part of that cost is allocated to return from sale of power. Stockholders would rightfully protest diversion of profits for such use.

Other functions of Federal multipurpose dams are equally incompatible with the profitmaking objectives of power companies, because they do not bring returns in dollars and cents—functions such as recreation³²—the benefits of which are intangible human values.

"I think that the Federal Government should build this type of multiple-purpose project because it involves public benefits that are difficult to measure accurately * * *. I don't think that private power companies or private utilities should expect to construct such multiple-purpose dams * * *. These multiple-purpose damsites are so scarce that to not develop these sites to their maximum is certainly a tremendous waste of our basic resources, and that, of course, any good American and any good conservationist could not condone."³³

"When multiple-purpose dams are built with Federal funds, the Federal Government enters the field of economic enterprise. The justification for this is beyond question. No other agency can command sufficient capital resources or provide the coordination necessary for the construction of these great programs. But Government enterprise does not in any way supplant private enterprise. Rather its purpose is to create the overall conditions, the framework, in order to provide the opportunity for the further expansion and healthy functioning of a free, competitive economy."³⁴

Only the Government can build in advance of known market

A utility must be assured that it can sell the current if it invests heavily in a hydroplan. The Government has undertaken projects in advance of known need, in the face of dire warnings by utilities that it would not find buyers, such as that, "they have ample facilities to take care of all the need of the Northwest for many years to come, if not for centuries."³⁵ Each time the Government has done so the power has been contracted before construction of the project was completed. Mr. Dittmer, power manager of the Bonneville Power Administration, testifying at a hearing on the Hungry Horse project in February 1944, said:

"* * * the very presence of large blocks of low-cost hydroelectric power is itself a very important factor in attracting industries to the area. Therefore we have constantly emphasized the need of building in advance of waiting until specific industries or specific uses for the power are necessarily right there. But the presence of power to a large extent itself creates such needs and brings industry into the area, and for this reason we feel that the development of power in the upper stream reaches of the river will contribute very materially, in addition to the irrigation and other features, to the development of that area" (p. 23).

The necessity for construction of power facilities in advance of industry was also stated by State Engineer Fred Buck at the same hearing (p. 46).

Only the Federal Government can reserve power generated at the dam for use in the area

A utility has the constitutional right to market its power wherever it wishes. Senator (then Congressman) Mansfield stated the purpose of such a reservation at the hearing cited above:

"We have no objection to sharing our water with the other States in that region, but we do insist that Montana be given priority for irrigation, reclamation, and hydroelectric purposes. It is our water" (p. 6).

³² The statement made by a Washington Water Power official at a meeting on December 9 that "all people fishing and boating on Noxon Lake are now trespassing," is an example of one utility's attitude toward public recreation.

³³ R. R. Renne, president of Montana State College, excerpts from speech at Missoula, Oct. 12, 1959.

³⁴ "A Water Policy for the American People: Summary of Recommendation," p. 8.

³⁵ Sundborg, George: "Hall Columbia," Macmillan, p. 125.

"We feel that we should have the primary benefit of the water, and then when we get through with it the other States can use it, because it has to go downstream anyway" (p. 9).

What may happen when private utilities are licensed to use the water of our river is illustrated at Thompson Falls and Noxon Rapids. Not a kilowatt of energy from either dam is used in the State. Not a permanent job has been created beyond the small staffs of the power companies themselves. In contrast to that is the example of the remarkable growth of Flathead County's economy, already cited, because Senator Mansfield insisted upon reserving the prime power for use in Montana.

Decentralization

Only the Federal Government can plan for decentralization of industry for defense purposes, by locating multipurpose powerplants far from concentrations of population.

Only the Federal Government, by harnessing water with multipurpose projects where it is plentiful but not fully used, thereby making the water itself, new land and new jobs available, can relieve the pressure of population in areas where water has already become a limiting factor on further growth.

Power from Federal dams is cheaper

It is therefore a greater stimulus to private business and industry, particularly to the kinds of industry using large amounts of power, such as the electroprocess industries. This is so because fixed costs, interest and amortization, comprise from 80 to 90 percent of total annual costs. It is our understanding that the Federal Power Commission estimates the cost of money for private financing to be about three times the cost of money for public financing. An example is its finding that power from the three low dams of Idaho Power Co. would cost 7.6 mills, while power from the far larger, more expensive, multipurpose high government dam would cost only 2.7 mills.³⁵ While the cost of money to the Government has gone up since then due to the present administration's "tight money" policy, the cost of money to private borrowers has also risen, so that the relationship remains about the same.

Federal Government distributes at wholesale

Wholesale distribution is only one end of the yardstick of Government competition; public distribution to the consumer is the other. However, the mere possibility of public retail distribution may be partially effective in reducing rates. When power from Hungry Horse became available in Montana there was talk of municipal distribution at Kalispell.³⁶ Pacific Power and Light immediately lowered its rate, so that the residents of Kalispell and Whitefish now enjoy a substantially lower rate than residents of other Montana cities thanks to the mere existence of Hungry Horse Dam.

Typical electric bills—residential, Jan. 1, 1959

	100 kilowatts	250 kilowatts	500 kilowatts	Utility
Anaconda and all other cities served by Montana Power Co.	4.28	7.53	10.78	Montana Power Co.
Kalispell and Whitefish.....	3.50	6.00	8.10	Pacific Power & Light.

A Federal dam on the Clark Fork producing substantially more power than Hungry Horse is very likely to have a similar effect on rates for an even larger part of western Montana, even if no cities undertake their own distribution systems. If they do, the rates may well drop closer to those in the State of Washington.

That this will not spell doom to Montana Power Co., it should know. The demand for power is elastic, varying inversely with the rate. The utilities in the TVA area have profited handsomely from the low rate-high volume policy they have adopted as a result of TVA's competition in wholesale distribution.

³⁵ Cost figures used by Senator Murray in Hells Canyon debate, May 16, 1957.

³⁶ The committee sponsoring this movement became inactive after only two meetings, leaving Montana one of the two States with no municipal distribution, according to McGraw Hill's Directory of Electric Utilities, 1958.

Federal wholesale power: A yardstick

The cheap power from a Government dam, sold at wholesale, acts as a yardstick by which rates of power companies can be measured. That it is an effective yardstick is shown by two maps, one published by the TVA, the other by the Federal Power Commission, showing average rates in different areas of the country. Those closest to TVA and the large Government hydro installations of the Pacific Northwest are markedly lower than in other parts of the country.

Competition more effective than regulation

Competition is thus shown to be much more effective than State regulation in lowering rates. Montana Power Co. exercises a monopoly over an area serving 70 percent of the State of Montana.³⁷

The Committee for Paradise Dam believes with the President's Water Resources Policy Commission that " * * * where natural monopolies exist, therefore, it is in accordance with the American system that the Government should itself provide competition, if this is deemed necessary to insure its benefits, as for example by providing low-cost and abundant power."

Monopoly and its effects, social, political, and economic, are so important that our committee is submitting a supplementary statement devoted entirely to it.

Federal dams not a threat to private utilities

The fact that only the Federal Government should build the multipurpose projects does not threaten the power companies. There are now 17 Federal and 65 privately owned hydroplants in the Columbia Basin.³⁸ Obviously, the existence of Federal generating plants is not putting private utilities out of existence. Nor do their earnings seem jeopardized. Financial statements are not available to members of our committee. However, news releases appearing from time to time do not sound as though the companies are hurting; for example:

"MONTANA POWER DIRECTORS APPROVE 3 TO 1 STOCK SPLIT

"They also announced plans to increase annual dividends on outstanding stock to \$2.40 a share beginning with the July payment. The dividend has been \$2 a share per year since July 1957" (exhibit M).

There are relatively few large storage sites. The engineers' major water plan proposes that the Government build 12. The Federal Power Commission says there are 392 sites in the Columbia Basin, with over 31 million kilowatts capacity.³⁹ There is ample room for both public and private dams. As mentioned before, the Nation's demand for power, increasing at an accelerating rate, means that all feasible hydropower plants, where alternative uses are not even more overriding, should be built.

Utilities benefit from Federal storage

Actually upstream storage at Federal multipurpose plants is of great benefit to private power companies. Hungry Horse is the outstanding example. Montana Power Co. has installed a third generator at Kerr Dam. Prime power without Hungry Horse was 66 megawatts; with Hungry Horse storage it is 153 megawatts, a benefit of more than 100 percent.⁴⁰ Nowhere could MPCo have constructed a facility to produce this additional block of power for the price of one generator.

Hungry Horse adds to the capacity of each of the dams downstream, public and private alike. At present five non-Federal dams enjoy these benefits.

Nor is this the only benefit power companies derive from Federal dams in the Columbia Basin. In fiscal 1958, 11 privately owned utilities purchased 6.5 billion kilowatt-hours of energy from the Bonneville Power Administration at an average rate of 2.15 mills per kilowatt-hour. Montana Power Co. alone purchased 350 million of this amount at 2.5 mills,⁴¹ a cost it could not equal at any new facility. Benefits from Paradise will be even greater because it will have even more storage for regulating river flow.

³⁷ Bonneville Project Act Amendments of 1958, hearings, May 21-June 5, 1958, testimony of J. E. Corrette, p. 566.

³⁸ Federal Power Commission, "Hydroelectric Power Resources of the United States, Developed and Undeveloped, 1957," pp. 57-59.

³⁹ Federal Power Commission, "Hydroelectric Power Resources of the United States, Developed and Undeveloped, 1957," p. 20.

⁴⁰ Letter from Bonneville Power Administration, Dec. 8, 1959.

⁴¹ Bonneville Power Administration, "Generation and Sales Statistics, 1958," p. 7.

IV. PROVISIONS FOR LOCAL BENEFITS IN S. 1226

During the early months of 1957 small groups of people who favored a Federal dam in the basic, in Sanders, Lake, and Mineral Counties, met to talk over provisions they would like to see included in authorizing legislation. After sessions in each county, representatives of the three groups met in Missoula. They recognized that a major project, undertaken for the good of the greatest number, may affect a minority adversely unless special measures are taken to insure their protection. They drew up several suggestions which were sent to Senator Murray and which are included in S. 1226.

Reservation of power for use in Montana, section 3(a)

Reservation of power for use in Montana has been mentioned before. Because of its importance it is stressed again. Senator Mansfield's innovation in the Hungry Horse legislation has been eminently successful. It must be repeated in legislation for the Clark Fork Basin. Only in this way can Montana be assured of getting the benefits of our waters. Without this reservation the greater pull of markets and cheaper freight rates would attract industry to the east or west. A reservation of power is Montana's best chance to escape from its present "colonial status" into full economic equality with our industrialized sister States.

As has been mentioned before, as an isolated plant Hungry Horse prime power would be 90,000 kilowatts. As part of the integrated Federal system it is 208,000 kilowatts. This amount has been reserved by the Department of the Interior with beneficial results to Flathead County, as shown elsewhere.

Paradise would develop 80 percent more power than Knowles. A reservation of "the full amount of at-site firm power production attributable to the project" for use as needed in Montana should prove stimulating to the vicinity of the project only in greater degree because of the larger block of power produced.

Thirty-five-mile radius for at-site rate, section 3(b)

Land will be flooded in two counties if the dam authorized by S. 1226 is located at the Knowles site; in three if it is at Paradise. The usual provision for the low at-site power rate of \$14.50 per kilowatt-year within a 15-mile radius would give greater inducement to industry to locate in Sanders County, meaning that Lake and Mineral might not experience equal economic advantage. The 35-mile radius for the at-site rate was suggested to give the three counties equal opportunity. It is recognized that this is an innovation. Our committee believes it is required by local geography. We urge that it be retained. It would put the towns of Superior, St. Regis, Thompson Falls, Hot Springs, Polson, and Ronan on an equal footing so far as cheap power is concerned in attracting industry.

Area planning board and fund, section 4 (a) and (b)

Provisions in the bill for which the local study groups can claim no credit, but to which the Committee for Paradise Dam gives unanimous, wholehearted support, are those for creation of an area planning board and a fund to enable it to carry out the duties assigned to it. We wish to commend Senator Murray for his recognition that the greatest resource of our Nation is its citizens. Our river resource is being developed for the benefit of the greatest number. Of the minority who are displaced, some may welcome the opportunity to leave unproductive areas or areas where employment is low. Some may oppose the project because they have been advised that by so doing they will be able to get more for their land. Some will be greatly distressed at having to leave their homes and the farms on which they have worked, come blizzard or blistering summer sun. Senator Murray has recognized it is the duty of the Government not only to protect the rights of this minority and provide opportunities for resettlement at least equal to their previous homes, for those who wish to remain in the vicinity, but also to assist them in every way it can in making the readjustment.

A second purpose of the area planning board is to bring together representatives of all levels of government—county, State, and National—and of the specialized agencies working in the area so that their programs may be harmonized.

We believe this is new in the field of project planning. It exemplifies the basic principle of our American democracy that government exists for the individual citizen, not that the citizen exists for the state as in Communist countries. This provision recognizes the dignity and worth of each individual.

Payment for Indian lands and powersites, section 7

A special consideration is the fact that some of the land to be inundated belongs to the Confederated Salish and Kootenai Tribes. Included in this land are two potential powersites.

The Committee for Paradise Dam feels very strongly that whatever plan is adopted for the development of the river, the tribes should be justly and generously compensated. This should include payment for the potential powersites as such, not as grazing lands the use for which they are presently employed.

Various methods of payment were discussed by the committee's study groups. The one which appeared to be most advantageous to the tribes was an annual payment, at least part of which might be in the form of a block of power. This has two advantages: (1) The tribes would have the power with which to set up their own industries or to attract other industry thus furnishing employment to their members; (2) the price level has risen gradually in the United States; there have been "booms and busts," but over the years the trend has been consistently upward. There is no reason to think this trend will change. If the tribes receive payment in power they will share the benefits of this rise. If they take it in dollars they will not.

We urge that this method of payment be given consideration.

Study of land suitable for irrigation, section 8(a)

In view of the need for increasing amounts of food and feedstuffs produced on irrigated land to supply the needs of our expanding population in the coming decades, we approve authorization of study of lands suitable for new irrigation, and also of existing projects which would benefit from supplementary water.

Section 8(b)

We also approve the use of surplus revenue from sale of power for payment of construction costs beyond the ability of irrigators to repay. This system is working well in the Flathead irrigation project.

Forms for displaced families, section 8(c)

The instruction to the Secretary that work on preparation of new farms so that they will be ready at the time displaced families must leave their homes, and the instruction that displaced farm families be given first choice for newly irrigated land, section 8(d), are also desirable provisions of the bill.

Moving expenses, section 8(d)

Since people are required to move, not moving of their own free choice, it is also eminently fair they be reimbursed for moving expenses. Precedent for this exists in recent law pertaining to acquisition of land for military purposes.⁴²

Payments in lieu of taxes

Members of the local study groups knew at firsthand of difficulties experienced in Flathead County during the readjustment period, between removal of property from the tax rolls and the creation of new taxable wealth. It was felt only just that local governmental units should receive help during this period. This was reported to Senator Murray. His solution, the making of in-lieu payments until the assessed valuation has reached 125 percent of its original level, seems fair and generous, section 10.

If the experience of Flathead County is repeated this period will be belief. If on the other hand the dire predictions of opponents should materialize and new growth be slow, local governments will not suffer.

Provisions for public access, section 12

Most of the shoreline of some of our most beautiful lakes is held by private property owners, making it difficult for the public to gain access. Provision for initial public ownership of sufficient shoreline to provide for public access will insure enjoyment of the reservoir by many more people than could possibly use it were the land in private hands.

Cooperation between the State of Montana and the Bureau is working well, at Canyon Ferry and Tiber Dams where the State is installing facilities at State parks for the thousands who use the Bureau reservoirs. Similar developments can be anticipated at the Paradise (Knowles) Reservoir.

⁴² Ben Torpen in upper Columbia development hearing, p. 240.

Standard of fair value for lands purchased, section 13

Because displaced persons were known to have been dissatisfied with land acquisition methods at both Bureau of Reclamation and Corps of Engineers projects, our committee group sent for and studied material from TVA. It was decided TVA's experience that only 3 percent of owners whose lands were required took cases to court, indicated its policy " * * that the owner of any such property shall be at least as well off economically after such transaction as before it" was preferable to the policy of "willing buyer, willing seller."

Accordingly this policy was recommended to Senator Murray for inclusion in the bill. We are gratified that he saw fit to include it, and hope it will meet with the committee's approval.

Section 14

Protection of water rights has been treated elsewhere.

V. HUNGRY HORSE—A CASE STUDY

Anyone who wants to learn how a Federal, multipurpose dam affects the surrounding area has only to look at what has happened in Flathead County as a result of Hungry Horse.

Assessed valuation

1946.....	\$35,072,959
1956.....	84,805,068
1959.....	89,000,000

This rise in assessed valuation is largely, but not entirely due to the fact that Anaconda Aluminum located in Flathead County to take advantage of the low at-site rate. The plant is now valued at more than \$20 million, an amount equal to the entire city of Kalispell.

Anaconda Aluminum employs more than 600 men the year around. This steady payroll, amounting to \$3,500,000 has given a tremendous boost to local business. As each job in basic industry is commonly believed to create another job in secondary employment—trades and services—Hungry Horse probably accounts for around 1,200 new jobs. This has been a stabilizing factor in a county which formerly suffered from the seasonal character of its chief occupations, agriculture and lumbering.

Most of the employees have built their own homes, or are living in homes built and rented to them. This also adds to the county's property valuation.

There has been some expansion in the lumber industry.

Columbia Falls has a new \$6 million high school.

Five REA co-ops which had been buying their power from a private utility at about 9 mills per kilowatt-hour, now get it from Bonneville Power Administration at around 3.5 mills. As a result sprinkler irrigation by pumping has become feasible and power use has increased generally.

The residential rate charged by the private utility dropped at the mere suggestion of municipal distribution by the city of Kalispell. A comparison with rates at a neighboring city shows—

	250 kilo-watt-hours	500 kilo-watt-hours	Utility
Kalispell.....	6.00	8.10	P.P. & L. M.P. Co. ¹
Missoula.....	7.53	10.78	

¹ Federal Power Commission: "Typical Electric Bills, 1959," p. 36.

Many benefits

Hungry Horse Reservoir has become a fine fishing lake which draws both tourists and Montana sportsmen.

When the first drawing for cabin sites on the lakeshore was held, twice as many people wanted cabins as there were sites available.

The dam itself is of such interest that many thousands of tourists stop to see it every year.

Storage of spring runoff has averted floods in flat valley land above the upper end of Flathead Lake.

In fact the dam continues to be news, good news. Articles about it appear frequently in local papers. Even the Spokesman Review, usually no friend of public power, printed a feature story listing its many benefits (exhibit N). A transcontinental railroad used a drawing of the dam in an ad run in magazines of national circulation. A paper in Great Falls used a full page picture of it in an ad of its own to illustrate the pulling power of "a giant."

Local reaction is shown by a sampling of clippings attached.

Hungry Horse—private utility dams and taxes

Because opponents of a Federal project in the Clark Fork try to make much of the fact that Hungry Horse does not pay property taxes, and loudly assert that private utility companies do, the facts deserve examination.

In the first place power companies are not part of the free enterprise system. They are regulated monopolies, freed from risk by a rate guaranteeing a fixed profit on all expenses, including taxes. It is not the utilities but the ratepayers who pay the taxes.

"* * * A utility receives its fair return free and clear of all taxes. Customers are specifically required to carry such tax burden under the scheme of regulation in this country. In substance and in equity, the customers of the utility are the taxpayers even though the utility files the tax return and issues the check to the taxing authority. The utility is merely a conduit for the collection of taxes from its customers."

Disregarding this fact for the moment, it is interesting to compare the records of counties where there are utility company plants with those of Flathead County where Hungry Horse is located.

Lake County : Kerr Dam.....	\$373, 474
No new industry due to Kerr Dam. Polson Plywood and Plum Creek Lumber Co. use Flathead irrigation project power.	
Sanders County :	
Thompson Falls ¹	128, 654
Noxon Rapids.....	235, 919
Cabinet Gorge (reservoir area only).....	5, 471
No new industry. All power transmitted out of State.	
Total.....	370, 044
Flathead County :	
Hungry Horse.....	0
Anaconda Aluminum.....	702, 380

¹ All property including transmission lines from Kerr Dam to Idaho.

It is obvious that the public dams, with low cost power and a reservation for use in Montana, is responsible for putting far more dollars into the county's treasury, though it pays no taxes itself, than do utility company dams with their higher cost power and their ability to transmit all power outside the State.

If stimulation of private enterprise and the consequent increase in county revenue are desirable, then the public dam provides greater benefits. The "public dams don't pay taxes" argument is thus seen to be utility propaganda, not founded on fact.

Paradise far larger than Hungry Horse

In measuring the benefits of Hungry Horse Dam it must be remembered that Silver Bow County shares them. Victor Chemical is located there in spite of the fact that its phosphate beds are in Idaho, because of the availability of low cost Hungry Horse power. Montana Power also got 350,400,000 kilowatt-hours delivered at Kerr and in Anaconda in 1958.⁴³

Hungry Horse is a good case study. Paradise would be equal to nearly two Hungry Horses.

"In general, the large, multiple purpose dams will be built by the Federal Government. I think this is as it should be * * *

"If we were to try to develop these dams strictly within our own State and by our own resources, in the last analysis we could not get as much firm power * * * as we could get by this Interstate, basinwide development through the grid plan—in which at one time of the year, when we are at our peak, we are

⁴³ Bonneville Power Administration, "Generation and Sales Statistics, Calendar Year 1958," p. 7.

sharing our waterpower with States downstream, and later on when we would be very low, we reap the benefit of that hookup by having a greater amount of power available from them at that time. "So by sharing we all have more." "

EXHIBIT A

A MONTANAN'S WASHINGTON NOTEBOOK

(By Vic Reinemer)

Once again the rate of unemployment is higher in Montana than in any other State.

Statistics compiled by the Department of Labor show that for the week ending February 14 unemployment in insurance-covered jobs averaged 5.9 percent in the United States. Almost one out of eight insured workers in Montana—12.3 percent—were jobless. North Dakota was next—10.7 percent.

For several weeks last winter Montana also led the Nation in unemployment in covered industries.

EXHIBIT B-1

[From the Great Falls Tribune, Nov. 10, 1959]

ECONOMY EXPERT WARNS OF TROUBLE—MONTANANS CAUTIONED TO FACE FACTS CONCERNING ECONOMIC FUTURE OF STATE

MISSOULA (UPI).—An expert on Montana's economy bluntly warned Monday that the State will be in serious trouble in another decade if it doesn't "face facts" about its economic future.

The speaker, Dr. Edwin Chambers, associate director of the bureau of business and economic research at Montana State University, gave the gloomy outlook to the Missoula Advertising Club.

"It's time for the State of Montana to do some hard thinking about its economic future," Chambers said.

He said Montana had "a very poor growth record during the 1950's, and unless the people take inventory and start working, the State is going to be in trouble in the 1960's."

Between 1950 and 1958, Chambers said, Montana's rate of increase in per capita income was the lowest of any State in the Union. He said the State faces a real employment problem in the 1960's.

Projecting Census Bureau population figures, Chambers estimated Montana's population would be 775,000 in 1970. He said that would mean 34,000 jobs to be filled, and he added that would probably mean 44,000 jobs because it is expected that 10,000 fewer will be employed in agriculture.

"At least half of these 44,000 would have to be absorbed by manufacturing industries," he said.

"In simple language, this means we must find jobs for a doubled labor force in manufacturing," the economist said.

Montanans, he said, "must inventory our situation. We must know our resources and what can be done with them."

Chambers said this has not been done in the past, adding that "many of the so-called treasures of the Treasure State are probably second, third, or fourth rate."

He urged Montanans to determine what resources they have that would be of real value in encouraging industry to come into the State instead of trying to sell prospective industry on assets which have little value.

He called for a "realistic determination of what we have and what to do with it."

"R. R. Renne, president of Montana State College, excerpts from speech at Missoula, Oct. 12, 1959.

EXHIBIT B-2

[From the Great Falls Tribune, Nov. 1, 1959]

STATE BUSINESS RECOVERY LAGS BEHIND NATION

HELENA (AP).—Business recovery in Montana and elsewhere in the ninth Federal Reserve bank district is pictured as lagging behind the national trend. Drought and mining shutdowns were given as the reasons for the district's lag.

The bank's business publication noted that economic indicators such as employment in nonagricultural establishments, department store sales, and residential construction have registered smaller advances. Farm income showed a 19 percent decline in July and August in comparison with the comparable period a year ago.

EXHIBIT B-3

[From the Missoulian, Nov. 30, 1959]

PERSONAL INCOME SHOWS LARGE DROP IN MONTANA

HELENA (AP).—Personal income in Montana has shown one of the Nation's largest drops over the past year, a national magazine reported Sunday.

Total personal income for the Treasure State in September, adjusted for seasonal variations, was \$102.8 million, or 7.6 percent lower than the comparable month last year, according to figures released by Business Week.

The only State with a larger decline was North Dakota, down 10.5 percent. South Dakota, Wyoming, Maryland, Kentucky, and Oklahoma had similar losses. The other 43 States and the District of Columbia had higher personal income.

Both the Montana and North Dakota losses reflect depressed prices in wheat-growing and an overall 23 percent falloff in net farm income, say the magazine's economists.

EXHIBIT C-D

[From the Great Falls Tribune, Nov. 21, 1959]

STATE REPORTS HIGH LEVEL OF UNEMPLOYED

HELENA (UPI).—The usual winter labor market cycle coupled this year with the crippling copper strike has raised unemployment to its highest levels in Montana in many years.

Unemployment Compensation Commission Chairman Chadwick H. Smith said 10,166 Montanans, twice the normal number, were looking for jobs at the end of October. He set the number of employed at 155,800, down 2,700 from the previous month, down 6,200 from a year ago and the lowest number of employed since 1954.

Smith said 5,000 more persons were unemployed in October than the average for the preceding 9 years.

"The October estimates reflect the seasonal effects and the impact of the metals strike on employment totals," Smith said.

"This is a historically set pattern which varies only slightly from year to year."

He said as October began, the copper strike was still on, the tourist season was over, farm employment had passed its peak and weather was affecting construction, oilfield, and logging and lumbering activities.

Half the State's jobseekers, he said, were concentrated in the strike-blighted Butte-Anaconda and Great Falls areas. He said more than half of the \$573,395 in benefit payments went to persons affected by secondary unemployment in the Butte-Anaconda area.

[From the Great Falls Tribune, Dec. 9, 1959]

STATE UNEMPLOYMENT LIST UP AGAIN, TOTALS 12,523

HELENA (AP).—Montana's list of jobless has gone up again. A total of 12,523 Montanans are claiming unemployment compensation benefits.

Chairman Chadwick H. Smith, of the unemployment compensation commission Tuesday said this was 654 more than the prior week and 3,000 above the comparable period a year ago.

The weekly claim hike last week was about half of the 1,219 rise for the same week last year and clearly shows the effect of weather conditions on employment in most outside industries. The same week last year was one of severe cold.

The statewide labor picture last week was one of mixed trends.

Construction workers were recalled to employment in Helena, Bozeman, Glasgow, and Great Falls, while there were layoffs in Billings, Anaconda, Kalispell, Miles City, and Wolf Point.

The situation in lumbering and logging was much the same. Logging held steady in Libby, Thompson Falls, and Bozeman while layoffs were prevalent in the Kalispell and Missoula areas.

Sawmills were active in Livingston, Bozeman, Polson, and Thompson Falls. But layoffs at a mill in Missoula caused most of the 117 weekly claim increase there last week. There was limited hiring of sales personnel for the holiday season in a few of the larger cities, but not in the force of former years.

There were more layoffs of sales and service personnel in Butte with some firms providing only half-time employment for their regular workers.

The Christmas tree harvest was completed. Demand for livestock feeders and other agricultural workers began to dwindle with the warmer weather.

Claims were higher at 19 local employment offices in this order: Missoula, up 117 to 861; Billings, up 87 to 1,294; Kalispell, up 86 to 968; Wolf Point, up 78 to 305; Hamilton, up 55 to 302.

Shelby, up 46 to 215; Glasgow, up 37 to 482; Butte, up 35 to 2,360; Sidney, up 26 to 135.

Miles City, up 23 to 210; Lewistown, up 22 to 178; Thompson Falls, up 21 to 217; Bozeman, up 20 to 169; Havre, up 17 to 344.

Great Falls, up 16 to 1,535; Glendive, up 14 to 133; Anaconda, 1,177, and Dillon, 140, up 7 each; Livingston, up 5 to 250.

Claim declines were found at Polson, down 24 to 255; Helena, down 22 to 566; Cut Bank, down 13 to 218; and Libby, down 6 to 209.

EXHIBIT E-1

[From the Great Falls Tribune, Nov. 14, 1959]

BOASTING OF KHRUSHCHEV DOWNRATED BY CIA CHIEF

WASHINGTON.—The top U.S. Intelligence specialist, Allen W. Dulles, downrated Friday as propaganda distortions some of Soviet Premier Nikita Khrushchev's boasts of giant economic strides.

What's more, Dulles told a Senate-House Economic Subcommittee, evidence indicates Khrushchev's firsthand look at the United States shattered his illusions about overtaking U.S. industrial production in the next 10 years.

But Dulles, Director of the Central Intelligence Agency, testified the Soviet economic drive must be taken seriously. He said the U.S. lead, while still substantial, will be narrowed dangerously by 1970 unless this country pushes ahead its industrial expansion at a faster pace.

While there is a considerable gap between the overall United States and Soviet economies, Dulles said, "their military effort, in terms of value, is roughly comparable to our own—a little less in terms of hardware produced but substantially more in terms of manpower under arms."

Dulles dismissed as a "gross exaggeration" a Khrushchev prediction that the Russian people will enjoy the world's highest living standard by 1970. Dulles said the Soviet public "still fares very badly in comparison with ours."

Noting the Kremlin has announced steps to increase production of some consumer goods, Dulles said these amount only to "a trickle of further benefits."

Also in the exaggeration class, Dulles said, was Khrushchev's claim that Soviet industrial production will surpass U.S. output by 1970.

Dulles pegged current Soviet industrial production at about 40 percent of U.S. output. The CIA, he told the subcommittee, expects the Soviets to continue to grow industrially by about 8 to 9 percent a year—the growth rate he said they have kept up for the past decade.

If this rate continues, Dulles estimated, the Soviet Union's industrial production will climb to about 60 percent of the U.S. level in 1970 unless the United States spurts ahead of its recent average annual expansion rate of 4½ percent.

EXHIBIT E-2

[From the Great Falls Tribune, Dec. 6, 1959]

FASTER GROWTH IN ECONOMY PREDICTED IN NEXT DECADE

NEW YORK (AP).—The American economy will grow faster in the 1960's than in the 1950's.

That is the view of 20 distinguished economists whose forecasts were assembled by the business management magazine *Dun's Review*.

To achieve the predicted gain, the economists said, industry will pay higher prices for materials and help support the most expensive government in history.

The experts—assuming there is no major war, no radical disarmament, and no disturbance in the economy by outside forces—estimate that by 1970 the Federal Reserve Board's index of industrial production will rise from the current 150 to about 215.

This would be a compound rate of growth of a little less than 4 percent a year, compared with the 3 percent the economy has achieved in the last few decades.

To provide the production facilities for that mounting flood of goods, the economists predict that expenditures for new plant and equipment will increase to \$55 billion in 1970, an 80-percent gain over 1958.

Business sales are forecast at slightly more than a trillion dollars by 1970—about 60 percent more than the 1958 total.

The predictions point to creeping inflation. Nineteen of the economists believe the Department of Labor's index of wholesale prices will be higher in 1970 than today's 119. Most of them feel it will be in the area of 130 to 135. This would be a compound rate of increase in prices of about 1 percent a year.

None of the economists foresees a 1929-style depression in the next 10 years but most feel business dips will occur at about the same intervals as in the past—every 3 or 4 years.

EXHIBIT F

[From the Great Falls Tribune, July 26, 1959]

UTILITY STOCK—BIG FINANCIAL TRANSACTION COMPLETED

BUTTE (AP).—The last of \$125,053,600 in securities, the largest financial transaction recalled in Montana history, went into the mails Saturday. The Montana Power Co. completed issuing two shares of common stock for every one now held by 22,112 shareholders in the 50 States and several foreign countries. More than a third are Montana residents.

Montana Power recently authorized a 3-for-1 split of its common stock, which went on the market at \$17.50 in 1950 and has been selling at \$75. At the time of the split, Board Chairman F. W. Bird said it was recommended to enable wider ownership of the stock.

The 5,002,144 shares were represented by 70,000 certificates, weighing 4,500 pounds and requiring \$1,977 in postage. The report of the stockholders annual meeting and a letter from President J. E. Corette accompanied the new stock.

[From the Great Falls Tribune, Oct. 10, 1959]

MORE POWER, CONSERVATION IN STATE URGED AT HEARING

BILLINGS (UPI).—A select Senate Committee on Water Resources Friday heard witnesses call for more hydroelectric projects, more water conservation in Montana, and less release of water to the downstream Missouri Basin.

The committee next travels to Missoula for another hearing Monday. The two are the only hearings in Montana in a series of 20 in 17 States scheduled before completion of the study.

Representative LeRoy Anderson (Democrat, Montana) and Leonard Kenfield, Great Falls, president of the Montana Farmers Union, called for immediate construction of Yellowtail Dam to supply irrigation water, and power to eastern Montana. Kenfield also asked for construction of Libby and Paradise Dams in western Montana.

The committee heard conflicting testimony on whether present power supplies in Montana are adequate or whether Montana has sufficient groundwater reserves.

Colin Raff, Butte, a vice president of Montana Power Co., said Montana is in a surplus power position and has adequate power for present customers and future growth.

But State Senator Charles Mahoney (Republican, Garfield), representing the Upper Missouri Generation and Transmission Cooperative, said extreme eastern Montana is deficient in power.

"Our only ground water problem is in eastern Montana in that we have never found any," Anderson said.

This was disputed by Frank A. Swenson, Billings, district geologist of the U.S. Geological Survey's ground-water branch, who said his department's studies showed vast ground-water resources particularly in the Gallatin Valley.

EXHIBIT G

[From the Great Falls Tribune, Apr. 14, 1949]

MANSFIELD'S POWER VIEWS—MONTANA SOLON EXPLAINS DISTRIBUTION

In a recent congressional debate of proposed plans for distribution of public power from Hungry Horse Dam in Montana, Representative Mike Mansfield spoke in favor of distribution lines in Montana and also of a coordination and hookup with other dams on the Columbia River system in Washington. Mansfield's remarks, as carried in the Congressional Record, are in part as follows:

Mr. Chairman, during the past 2 weeks, the pressures on me have been tremendous. I have been subjected to false and malicious slanders because I have appeared before the Subcommittee on Interior Appropriations and have worked my hardest to get transmission lines from Kerr Dam to Hungry Horse, to Spokane, and to Anaconda. I have received inspired letters demanding that I oppose these transmission lines on the pretext that power from Montana should not go out of the State to build up industry in Oregon and Washington. I have received letters and personal visits asking that I do everything in my power to allow the Montana Power Co. to build the power facilities at Canyon Ferry, and to oppose the building of much-needed transmission lines from Havre to Shelby and from Hungry Horse to Spokane and Anaconda.

All of these factors—the transmission lines in western Montana, the Government building and operating of the power facilities at Canyon Ferry, and the Havre-Shelby transmission line—have been strenuously opposed by the Montana Power Co. The Montana Power Co., for the sixth year in a row, is still opposing the building of the Hungry Horse Dam and in a recent booklet distributed by it, is asking that the authorization for this great project be reconsidered; in effect, withdrawn. Its emissaries have been back in Washington almost continually since the first of the year seeking to influence legislation against the best interests of Montana. Hardly a Member of Congress has been missed as the representatives of the private utilities make their rounds.

Washington, for the past 3 months, has been seething with utility lobbyists. They have appeared before the Subcommittee on Interior Appropriations to kill off the transmission lines for western Montana. They have proclaimed

that there is no shortage of power in Montana and that the Montana Power Co. is at the present time shipping power out of the State to Washington, Idaho, and Utah. This is true, but the surplus is so small that it will be gone by 1961 or before. Furthermore, why isn't this surplus power being used to attract industry to Montana?

Every argument that the Montana Power Co. has ever put forth in opposition to Hungry Horse has been answered in full over the past 6 years. Yet its lobbyists are continuing their attempts to cripple and destroy this great project which benefits them as well as the people of Montana. The Montana power lobby is bent upon the destruction of the public power program—a program that means the difference between economic vassalage and economic freedom of the people of Montana. The people of my State are interested in the development and completion of such vitally needed public power projects as the Canyon Ferry, the Hungry Horse Dam, and the transmission lines contained in this bill. They are entitled to know who is opposing the program and the real reasons for that opposition.

There is no competition between the transmission lines proposed in this bill and the lines of the Montana Power Co. The line to Kalispell in northwest Montana will be used to develop our resources there and to supply much needed power to REA's in that part of the State; the line to Anaconda will be used to develop our phosphate, manganese, and other mineral resources in that area; and the line to Spokane will connect with the Bonneville grid at Grand Coulee. This will result in a firm power output the year around for western Montana to the extent of 187,000 kilowatts whereas, if Hungry Horse was to operate alone, Montana would have a firm power output from Hungry Horse of only 77,000 kilowatts a year.

Appropriations for the Interior Department now awaiting action by this House, include an item for the Bonneville Power Administration totaling \$3,750,000.

These funds will be used to begin work on a high-voltage transmission line which will interconnect the present Bonneville power system in the States of Oregon and Washington with the Hungry Horse Dam in western Montana, and with power-consuming areas in the southwestern corner of our State.

I am convinced that my State will greatly benefit from the construction of these transmission facilities, and I urge the Members of the House to approve funds for this purpose.

Construction of these lines will benefit the national economy generally by making possible a further decentralization and expansion of our electrochemical and electrometallurgical industries which are required both for peace and for preparedness.

As matters now stand, there will be no way in which the State of Montana can benefit from this 88,000 kilowatts of power produced outside its borders with Montana water.

But if these transmission lines proposed by the Bonneville Power Administration are built, and if operation of the Hungry Horse Dam is coordinated with operation of other dams on the Columbia River system, the total power production made possible by Hungry Horse will reach the huge sum of 596,000 kilowatts.

EXHIBIT H

[From the Great Falls Tribune, Sept. 17, 1957]

MANSFIELD DEFENDS RECLAMATION WORK

WASHINGTON (A.P.).—Senator Mansfield, Democrat, of Montana, said Monday that Federal reclamation projects are sound investments which "make a solid foundation on which liberty, private initiative, and free enterprise can take root and grow."

Mansfield's statement was in reply to criticism of the reclamation program placed in the Congressional Record by Representative Gwinn, Republican, of New York.

The criticism was contained in an article entitled "Adverse Effects of Expanding Government," taken from Nation's Business magazine.

Gwinn said the article was based on a report prepared by the Library of Congress' Legislative Reference Bureau which he and 16 other Congressmen had asked to be prepared.

The article said in part :

"Reclamation does not pay for itself and has no general and regularly observed rule of repayment nor any contractual term which cannot be changed at any time.

"On many of its projects there is only a remote possibility of repayment, and the most will ultimately be written off by the taxpayers. * * *

"Water resources have not been developed when they are needed, for we are spending millions irrigating land for additional crops at a time of agricultural surplus."

Mansfield contended "reclamation does pay for itself, not only on a contractual loan basis with interest, but because it is an investment in America's natural resources of land and water.

"In contrast to the \$56 million in grant aid originally proposed by this administration to build a power and reclamation project at Aswan in Egypt we find that all America's reclamation projects are on a fully repayable basis. * * *

"As a matter of fact these projects make a solid foundation on which liberty, private initiative and free enterprise can take root and grow."

EXHIBIT I

[Editorial from the Great Falls Tribune, May 22, 1959]

AGENCIES BID FOR VACATIONERS

Two of the Government's multi-million-dollar public works agencies have just issued vacation brochures in a kind of glorified competition to provide the taxpayers with more free recreation facilities. They are Army Corps of Engineers and Bureau of Reclamation in Department of Interior.

Both of them are in the primary business of making dams. The dams make lakes. The lakes provide sporting and vacation grounds. And that's where the fun comes in.

As NEA's Peter Edson writes, there are also two other Government agencies in this business of providing adult and family-type playgrounds. They are National Park Service which also runs the national monuments under Department of Interior and the Forest Service in Department of Agriculture.

But the Army's report says 94 million admissions were recorded at the 130 Corps of Engineers recreation areas last year. National forests drew only 61 million. National parks and monuments drew 56 million.

The Bureau of Reclamation says there were just under 10 million admissions at its 140 recreation areas last year. So it's very definitely low man on the totem pole. And the Army eagle screams at the top.

When Corps of Engineers got into this dam-building business it was primarily interested in flood control and harbor development. The old War Department was given control over all navigable streams. That's how it began.

Public power development was originally a baby of Bureau of Reclamation, founded in 1902. Bureau of Reclamation is still limited to the 17 Western States, however, and Corps of Engineers is building dams all over the country.

With both outfits now putting out lures for tourists in the coming season, it looks as though total admissions at all Government recreation areas will be way in excess of last year's 223 million total.

[From the Great Falls Tribune, May 25, 1959]

TIBER DRAWS HUGE NUMBER OF FISHERMEN

Fish and game men scouting Tiber Reservoir, Duck Lake, and Mission Lake got some indication of how fishermen in the area did on opening day of fishing Sunday.

Dick Munroe, local information and education head, said he counted 1,056 cars parked around Tiber Reservoir. The departmental figures 3.5 to 4 persons per car which would mean from 3,500 to 4,000 fishermen hit Tiber Sunday.

Munroe said the first check by air was made at 8 a.m. After 4 hours of fishing the average catch was eight or nine fish measuring 14 to 15 inches long. Worms were the favorite bait.

Seven airplanes also were counted at the Tiber landing strip.

At Duck Lake where giant rainbows have been hitting for weeks, some 300 fishermen were counted. Catches were not as good as Tiber.

Saturday three Mahnstrom men, Lawrence Sparks, Sgt. Jim Mayfield and a Sergeant Perrault, brought back 8, 9, and 10-pounders. Sgt. J. M. Orr put 8½- and 9¼-pound rainbows on display at the Great Falls Sporting Goods Co. Saturday.

High winds over both bodies of water hindered boat fishermen and when they took to the banks they did about as well as from their boats.

Mission Lake, between Browning and Cut Bank, had about 30 cars around it but catch figures were unavailable.

EXHIBIT J

[From the Great Falls Tribune, Nov. 18, 1959]

WORK ON \$73,875 IN IMPROVEMENTS AT TIBER DAM, CANYON FERRY RECREATION AREAS SCHEDULED TO START

HELENA.—Work on \$73,875 worth of improvements and facilities for the Canyon Ferry and Tiber Reservoir recreation areas will start soon after the State signs an agreement with the Bureau of Reclamation, it was announced Tuesday.

The State highway commission authorized Ashley C. Roberts, State parks director, to draft an agreement with the Bureau which has offered to finance the projects.

In the nearby Canyon Ferry area, this means 70 more picnic tables, 41 more fireplaces, 3 boat launchers, 11 latrines, 6 incinerators, 3 shelter buildings, and other improvements, including wells.

The money spent on the Canyon Ferry area will be approximately half of the total financed by the Bureau, Roberts said.

"The skyrocketing increase of persons who visited the Canyon Ferry area this summer is one of the reasons for the project," Roberts said.

He estimated the number of visitors increased 10,000 this year over 1958, totaling more than 50,000. One of the reasons for the increase, he said, was the completion of a paved road off U.S. Highway 10 to the area.

Roberts explained the Bureau is giving the State credit for about \$20,500 worth of improvements in the two areas as its part of a Federal-State participation program.

The parks division will have to maintain the facilities when completed.

Tiber's share is about the same as Canyon Ferry's except for about four times as many shelters. Roberts explained the Tiber area has few trees and needs the shelters more than the timbered Canyon Ferry area.

The Tiber Reservoir is on the Marias River, 20 miles southwest of Chester. Canyon Ferry is about 20 miles southeast of Helena.

[Editorial from the Great Falls Tribune, Nov. 19, 1959]

OUR RESERVOIR AREAS SHOULD RATE HIGH IN RECREATION PLANS

In any listing of Montana's extensive and varied recreation assets, the manmade lakes of our water storage areas rate important billing. They also merit a higher priority than they have so far been given in our resource development planning and programing.

There is reason to rejoice that projected plans for some \$74,000 worth of new improvements and facilities for Canyon Ferry and Tiber recreation areas are now nearing contract status.

Because of natural surroundings and location with reference to larger population centers, the number of visitors to the Canyon Ferry area has skyrocketed in recent years.

The growing use of the Tiber Reservoir by fishing and boating enthusiasts has also been substantial, and the need there for shelters, camping, and other improvement facilities is the more urgent.

We have barely scratched the surface in this important Montana resource development field.

EXHIBIT K-1

[From the Great Falls Tribune, Nov. 28, 1958]

RENNE PREDICTS RECREATION TO LEAD FLATHEAD GROWTH

KALISPELL.—Taking for his theme, "Toward a Finer Future," Dr. R. B. Renne, president of Montana State College was speaker at the annual banquet of the Kalispell Chamber of Commerce at the Temple Tea Room.

Dr. Renne pictured the next 30 to 50 years in Kalispell, the Flathead Valley and northwestern Montana to be one of great growth in the area due to the tremendous demand for recreational service which is available in this area and throughout the northwest corner of Montana.

He said agriculture forests, power, and water are all-important assets but recreational services and allied activities probably will be the major growth factors. He based the expected growth for the area on the great increase in leisure time available to the average person plus the increase in population.

The recreational needs of the country have quadrupled between 1900 and 1958, Dr. Renne said, and in the next 40 years the rate of increase will be even faster than in the past approximately 50 years. By the year 2000, using the recreational needs in 1900 as an approximation, nine times as many recreational services will be needed, he said.

Dr. Renne said the development of the area should be toward a continuing and increasing beauty, friendliness, and efficiency, with adequate stores, service centers, tourist information, and facilities.

He said water is an important part of the recreational resources of the Flathead area and every care should be taken to protect the upstream watershed values for recreational, irrigational, and related purposes. "Camping and picnic areas, fishing, swimming, boating, trail riding and winter sports are important recreational resources which will increase greatly in value during the next few decades," Dr. Renne said.

Through Federal agencies cooperating with State and local agencies these important recreational resources, through proper development and cooperation, can be major factors in the increased taxable wealth and income of Montana, the Flathead Valley and northwestern area of the State, Dr. Renne concluded.

EXHIBIT K-2

[From the Great Falls Tribune, Aug. 28, 1959]

STATE PLANS TOURIST FILM ON WATERWAYS

GLASGOW.—A State tourist film, tentatively planned, on "Waterways of Montana" will feature Fort Peck Dam and Reservoir, as well as the Missouri.

This was the report of Gordon Platts, Helena, State highway department advertising director. Platts is in eastern Montana on a get-acquainted tour. He was appointed to his present post last winter.

"Plans are still tentative, but chances are excellent that the film will be produced," Platts said. He reported a strong demand for Montana films for TV and other uses at out-of-State points.

Platts said an unofficial survey among motel owners and service station operators indicates Montana tourist travel this season is up 10 to 20 percent.

From a tourist standpoint, southwestern Montana earthquakes may not be beneficial, he said. The west Yellowstone entrance from the park to Montana carried the heaviest traffic into the Treasure State of any of the three park entrances opening into Montana.

EXHIBIT L

[From the Sanders County Ledger, Feb. 10, 1959]

LONG DELAY FORECAST FOR CAMPERS, BOATS

Designation and development of State parks and approved boat-launching sites on the new Noxon Lake is not possible in time for use during the summer of 1960, James Irwin of the Washington Water Power Co. told Federal,

State, county, and Thompson Falls-Noxon Chamber of Commerce representatives Wednesday noon.

Irwin said Washington Water Power Co. could do nothing toward allocating land for parks or boat-launching sites until the exact conditions of the lake's shorelines are known through operation of the Noxon Rapids powerplant for a long period of time. He indicated as much as a year of operation of the completed powerplant will be required to enable Washington Water Power Co. officials to learn the exact reactions of banks and shorelines to the drawdown and heavy runoff periods in the reservoir.

Irwin spoke to a group of 18 persons meeting yesterday noon at the home of Mrs. C. H. Weismandel, chamber secretary-manager, to explore the possibilities of obtaining some camping and boating facilities for use during the coming summer.

Attending the meeting were Ashley C. Roberts, Helena, State parks director; Tim Vaughan, Washington Water Power Co. biologist; County Commissioners Jesse W. Lee, H. E. Smith, and Jack Harwood; State Representative Henry L. Gill; Walter Allen, State superintendent of fisheries; J. J. Gaffney; R. T. Auclair, chamber president; Dr. Richard Thiels, Irwin Puphal, John Brinkerhoff, Dave Hale, S. D. Babcock, J. Cooper, A. H. Cheney, and K. A. Egensperger.

The local group particularly sought semiofficial sanction of an area upstream from Birdland and a spot at Trout Creek that could be designated eventually as a State park, but that could be used on a temporary basis this coming summer.

Irwin explained that the utility could not permit picnic tables or other campground equipment to be located on its land until a formal agreement has been signed with the State releasing Washington Water Power Co. of all legal responsibility in the event of an accident. He said Washington Water Power Co. could not sign an agreement with the State until its project boundaries are definitely established and accepted by the Federal Government, which will be sometime in the future.

Irwin pointed out that all people fishing and boating on Noxon Lake now are trespassing without Washington Water Power Co.'s knowledge and that trespassing presented different legal aspects than did extending an invitation to the public to use the lake through designation of certain areas for State parks and boat-launching sites.

He said that eventually Washington Water Power Co. will be able to authorize use of the lake, and that then any boat docks erected will have to be of a standardized design and meet certain restrictions.

He reiterated the desire of the Washington Water Power Co. to cooperate with the State, County, and residents of this area in securing State parks and suitable boat-launching sites, but that "at present, we are just too premature."

The demand for boating and camping facilities is expected to rise sharply next summer as word spreads of the excellent fishing available in the lake.

EXHIBIT M

[From the Great Falls Tribune, Mar. 27, 1959]

MONTANA POWER DIRECTORS APPROVE THREE FOR ONE STOCK SPLIT

BUTTE.—Directors of the Montana Power Co. Tuesday approved a three-for-one split of the utility's common stock.

"They also announced plans to increase annual dividends on outstanding stock to \$2.40 a share beginning with the July payment. The dividend has been \$2 a share per year since July 1757."

Bids for \$15 million in first-mortgage bonds were accepted and regular quarterly dividends were declared.

F. W. Bird, chairman of the board, said stockholders will vote on the stock split at the annual meeting June 17. If approved, each stockowner will receive two additional shares for every one owned on the date of record. The annual dividend per share on common stock after the split would be 80 cents.

The 30-year, first-mortgage bonds were sold to a syndicate headed by Halsey, Stuart & Co. on a bid of \$100.38 for bonds bearing 4.5 percent interest. The bonds will be resold to the public at \$101.15 to yield 4.43 percent.

Proceeds will repay borrowed money which was used largely for construction in Montana and to carry on the company's expansion program in 1959 and early 1960.

The quarterly dividend of 50 cents a share on outstanding common stock was declared payable April 27 to owners of record at the close of business April 6.

Preferred stock dividends of \$1.50 on the \$6 series and \$1.05 on the \$4.20 series will be payable May 1 to stockholders of record at the close of business April 10.

EXHIBIT N

[From the Spokane Spokesman-Review, Mar. 3, 1957]

FLATHEAD CLIMBS RUNG, EYES SECOND

(By Kathy Harvey)

KALISPELL, MONT., March 2.—A few years ago, hot stove league economists were predicting the decline of the economic health of the Flathead Valley. At that time the area was bristling with vitality as a result of a real shot in the arm—construction of giant Hungry Horse Dam on the South Fork of the Flathead River.

"Just wait," said the diagnosticians, "till the shot wears off. The relapse will be awful." Fortunately, the Flathead seems to have passed the crisis and is making a fine recovery.

Employment is probably one of the best symptoms of the health of an area. From this point of view Ralph Jackson of the State employment service Kalispell office sums up the picture this way :

NEW POPULATION ARRIVES

Flathead county has enjoyed growth in the last 10 years. Spurred by the construction of Hungry Horse Dam and the Anaconda Aluminum Co., reduction plant, a new population penetrated the valley, bringing new skills and trades. As construction was completed, many of the families stayed and became a part of the growing labor force.

Prior to 1948 the principal industries consisted of logging, lumbering and agriculture. Figures of the unemployment compensation commission for fiscal 1948 before Hungry Horse work started show the average number of wage earners was 4,259 and gross wages of \$9,222,517.

Following completion of the 285,000-Kilowatt Hungry Horse project in 1952 most of the transient labor force of 2,500 migrated to other construction jobs.

NEW WAVE ATTRACTED

This was the time of crisis, but a quick result of the available electric power from the dam was construction of the aluminum plant at Columbia Falls. This attracted a new wave of workers.

Production at the new plant beginning in August 1955, has provided steady employment for 687 employees. This many year-round jobs in a "hard winter" area of 34,100 population has had an understandably favorable effect on trade.

A stabilization period followed aluminum plant construction days; against the transient labor force moved on. But the net result of these two big construction jobs was an increase to 5,759 permanent wage earners and to \$22,013,041 in wages. In addition employment not covered by unemployment compensation commission, such as railroads, agriculture, and governmental service, provide steady employment for hundred more.

The Flathead is fortunate in not having all of its economic eggs in one basket, for there is some security in diversification. Lumbering accounted for a \$16 million income during 1956.

NEW CROPS EYED

Agriculture, second leading industry, brought in \$6,655,689. To combat the increasing difficulty of making farming profitable, farmers are turning to new crops and methods. Certified seed peas, potatoes, and grass seed are among the newer ventures. Sprinkler irrigation is being used more and more to

increase farm output. Another developing specialty are the Flathead Lake orchards that are becoming known as producers of fine fruit, particularly sweet cherries.

Christmas tree harvest, though short seasoned, is of importance to the valley. There were 236 railroad carloads alone of trees shipped out all over the Nation from Kalispell in 1956, in addition to many truckloads.

Perhaps the greatest natural wealth for the valley lies in its scenic surroundings. Glacier National Park, Flathead Lake, and vast preserved primitive areas make this a mecca for increasing numbers of tourists. Kalispell Chamber of Commerce Secretary-Manager Clark Mason figures the Flathead gets a \$15 million chunk of Montana's \$90 million annual tourist business.

REPORT IS KEY

What is in the future for the valley? More progress? Part of the answer lies in the findings of the Bureau of Reclamation chief engineer's office in Denver on the feasibility of a proposed dam on the Flathead River's Middle Fork. The Bureau's planning office in Missoula is assembling information from core drilling and field studies and will send it to Denver early this spring.

Being considered are the cost and benefit factors. Expected is 21,000 kilowatts and 87,000 kilowatts downstream power benefits with generators at Hungry Horse Dam more productive from water from the dam and diversion tunnel. Increased industrial activity would be the natural result of more power in the area.

Meanwhile, new ways to make finished products of natural resources have already been started. Recent developments started or planned include a small plant to make filler for plywood, a plywood plant, a box plant, press board plant and a meat processing plant. The Flathead is eyeing possibilities in the proposed pulp plant to be established at Libby, which may provide an outlet for waste wood from here.

Part of the increasing contact with the "outside world" will be through a radar control center, which the Government has announced will be built near Flathead Lake. About 250 men will be stationed at the center, adding from 75 to 100 family units to the valley.

One problem it seems certain the Flathead will never have to face is that of attracting workers or residents. The climate, scenic location, and outdoor sports opportunities lure people as fast as there are ways to support them.

EXHIBIT O

[From the Great Falls Tribune, May 3, 1959]

HUNGRY HORSE DAM BEGINS TO CURB WATER DISCHARGE

HUNGRY HORSE.—The 564-foot-high Hungry Dam has started holding back water to help curb the anticipated spring flood. Snowpack in the back country of the Flathead is above normal.

Rapid drawdown of the 34-miles long Hungry Horse Reservoir started in mid-March when storage totaled 2,660,000 acre-feet. Thursday saw storage down to 1,935,600 acre-feet and level of the lake down 82 feet from the top. When full, each summer, Hungry Horse Reservoir contains 3,468,000 acre-feet.

E. L. Gochmayer, Hungry Horse project superintendent, said water discharge was reduced from 16,000 cubic feet per second to 13,000 cubic feet per second, and now to 1,500 cubic feet. Power production was being curtailed from 200,000 kilowatts to 70,000 kilowatts at peak periods.

Farthest upstream of major storage facilities on the Columbia River system, Hungry Horse operation is coordinated with other Pacific Northwest dams. Bonneville Power Administration markets the power. Hungry Horse pattern is to hold back the spring flood, as is presently underway, then release water, starting in late fall months and through the winter after downstream reservoirs have been depleted.

Hungry Horse was completed in 1952. Had the dam been holding back water in 1948, it could have lowered the level of the Columbia by 9 inches at the time Vanport on the edge of Portland was destroyed.

[From the Great Falls Tribune, Nov. 1, 1959]

SCHOOL CENSUS SHOWS GROWTH OF COLUMBIA FALLS POPULATION

COLUMBIA FALLS.—Continued population growth in Columbia Falls is indicated by the annual school census.

The census, taken each October by F. P. Fleming, school district 6 clerk, assisted by Mrs. Fleming, saw a total of 1,572 persons under 21 years old in Columbia Falls and vicinity.

Columbia Falls has continued to grow since the completion of Hungry Horse Dam and the Anaconda Aluminum Co. plant. Current figure of 1,572 persons under 21 compares to 1,554 in 1958, 1,558 in 1957, 1,517 in 1956, 1,422 in 1955, 1,365 in 1954 and 1,123 in 1953.

The neighboring Bad Rock farming community has 140 persons under 21 compared to 143 last year and 98 in 1955.

Hungry Horse has 213 under 21 compared with 222 last year and 282 in 1953. Martin City has 235 under 21 compared to 183 last year and 252 in 1953. Coram and vicinity has 155 boys and girls under 21 compared to 156 last year and 185 in 1953. West Glacier Apgar and Lake Five have 122 under 21 compared to 121 last year and 167 in 1953, and Nyack, Essex to the Summit has 81 compared to 71 a year ago and 100 in 1953.

District 6 has 1,254 boys and, 1,264 girls under 21 compared to 1,234 boys and 1,216 girls under 21 a year ago.

EXHIBIT P

[From the Great Falls Tribune, June 17, 1957]

HUNGEY HORSE RESEVOIR NEARS FULL MARK FOURTH YEAR

HUNGEY HORSE.—Hungry Horse Reservoir is nearing the full mark for the fourth summer in a row.

E. L. Gochnauer, Hungry Horse project superintendent, said water behind the 564-foot-high concrete dam, the Nation's fourth largest of concrete, Thursday was within 7½ feet of the top with storage now totaling 3,292,350 acre-feet. Total storage when full is 3,468,000 acre-feet.

Gochnauer expects the reservoir will be full early in July depending on Bonneville Power Administration power commitments.

Spring flood that ordinarily has high water in the Flathead May 22 this year saw the streams peak May 4 and 5.

Hungry Horse last year was full from June 20 until October. In 1955 it was from June 29 until December 8, and in 1954 from July 9 until December 8.

The winter drawdown saw the 34-mile-long lake down 85 feet from the top of the dam March 8 with storage 1,829,160 acre-feet. This compares with minimum water storage of 1,861,000 acre-feet April 18, 1956, down 83 feet and of 2,143,740 acre-feet April 29, 1955, 65 feet below the top.

Hungry Horse pattern of operation sees the reservoir remain full each summer. As downstream storage facilities become depleted Hungry Horse generators increase activity in the fall turning out more power for the Bonneville grid and releasing needed water to downstream installations.

Water stored at Hungry Horse in May and June formerly passed over the spillways at Kerr Dam, Grand Coulee and other downstream projects. Now this water is held back to develop power and benefit irrigation projects downstream as needed.

Power generation at Hungry Horse this week was running 143,000 kilowatts compared to the 285,000 capacity.

[From the Great Falls Tribune, Sept. 21, 1958]

PUBLIC DRAWING OCTOBER 5 FOR HUNGEY HORSE SITES

COLUMBIA FALLS.—First leasing of half-acre summer homesites along 34-mile-long Hungry Horse Lake is scheduled next month.

The lots, which measure approximately 150 by 200 feet, are near Helnrude Creek along the lake's west side in Flathead National Forest, and are 40 miles from Hungry Horse Dam and 50 miles by road from Columbia Falls.

Superintendent F. J. Neitzling commented that in view of there being just 36 tracts for leasing and about 350 inquiries and applications, there would be a public drawing by Hungry Horse District Ranger Robert Damon Sunday, October 5, at 1 p.m., at the Heinrude location to determine those who will have leases.

The 36 lots are from 300 to 1,000 feet back from the lakeshore, and the yearly lease fee will be \$45.

After September 25, the lots will be clearly staked and numbered for inspection. On Saturday, October 4, from 9 a.m. until noon, and again Sunday morning, Ranger Damon and members of his staff will be at the Heinrude location to answer questions.

Applications for the lots should be submitted in writing to the U.S. Forest Service at Hungry Horse by October 2.

A check, money order, or draft (not cash) made out to the "Forest Service, U.S. Department of Agriculture" or to "Forest Service, U.S.D.A." totaling \$52.50 should accompany the application. This \$52.50 pays the lease fee through December 31, 1959. Unsuccessful applicants will have their \$52.50 returned.

The applicant need not be present at the October 5 drawing.

The Government will somewhat regulate the type of construction and where buildings will be placed at the sites. The main residence may not exceed 24 by 30 feet, and the garage not more than 440 square feet.

No further summer homesite leaseings along Hungry Horse Lake are planned until 1960 or later, and these are to be near Clark Creek.

The man-made lake generally is full from June until October.

Further information may be obtained from Ranger Damon.

EXHIBIT Q

[From the Sanders County Ledger, May 9, 1957]

We took a lesson in the benefits that Hungry Horse Dam have brought to the Flathead Valley Saturday afternoon. In Columbia Falls to attend a meeting of western Montana publishers, we were treated to a tour of the new Anaconda Aluminum Co. plant at the conclusion of the press gabfest.

What we saw and were told impressed us.

AAC provides 691 jobs week in and week out for the Flathead, half of whom live in Columbia Falls. The plant operates around the clock, 7 days a week. Christmas and other holidays are just another day for Anaconda employees. In other words, the plant has provided an economic stability not found in lumbering, tourism, or other industries of the Flathead.

The Anaconda plant pays more taxes to Flathead county than the entire city of Kalispell brings in.

Of the total 691 jobs, only 80 had to be filled by specially trained personnel brought in from outside the Flathead. The plant produces more aluminum per kilowatt and per man-hour than any other plant in the United States.

Physically the plant is attractive with well-kept lawns and flowerbeds. From the sportsman's standpoint, no waste chemicals are returned to the Flathead River and actually the water returned is cleaner than the water that comes out of the river originally.

With a thought that the construction of the Paradise Dam in Sanders County might bring a similar industrial development to this county, we asked Ruder and G. M. Moss, retired publishers of the Whitefish Pilot, if they had any inkling in advance of construction of Hungry Horse Dam that AAC or any other plant wanted to locate there. They said there was no indication whatsoever in advance of Hungry Horse's construction that industrial development would follow.

The reason AAC chose the Flathead is, of course, because of the preferential power rate given for use of electricity within 15 miles of the dam. In addition, Ruder said, the law authorizing Hungry Horse's construction had reserved a portion of power for use in Montana only.

The one disappointing feature of the AAC plant tour was that two fellow publishers and directors of the Upper Columbia Development Council, the organization that is fighting Paradise Dam, were unable to accompany us. One did not get to the meeting. Another was unable to take the time for the tour.

[From the Great Falls Tribune, Sept. 8, 1957]

DOWNSTREAM PLANTS DRAW ON HUNGRY HORSE WATER

HUNGRY HORSE.—Drawdown of 34-mile-long Hungry Horse Lake, the manmade reservoir that does not have mud flats during the tourist season, has started as a result of critical water and power conditions developing in the Pacific Northwest.

Thursday saw the big lake down just over a half foot. Water storage totals 3,455,350 acre-feet compared to 3,468,000 acre-feet when filled.

Hungry Horse was completed in 1953, and each summer has been full during the months of July, August, September, and October with drawdown usually starting in November. The lake filled this year to capacity on June 30.

Lack of rainfall in the Pacific Northwest has resulted in the Bonneville Power Administration, selling agent for power produced at Hungry Horse and other Federal dams, withdrawing all sales of interruptible power.

Customers—in many cases the big aluminum manufacturers—are permitted to use provisional power from Hungry Horse. This involves purchasing power now, and if the water shortage in the Pacific Northwest continues, these firms will have to replace this power with higher priced electricity from steam generation plants. If heavy rains come, the companies will have gambled and won. They won't have to replace the power used now. All they'll do is pay for it.

At overload capacity during months of December, January, and February, Hungry Horse produces up to 328,000 kilowatts. During summer and early fall months, Hungry Horse usually is called on for peaking. This involves power generation during the morning and evening twilight hours when there is increased demand for power. Hungry Horse is presently producing 150,000 kilowatts.

Anaconda Aluminum Co. is operating entirely on firm power purchased from Bonneville. The Flathead plant has used up to 130,000 kilowatts, but is presently operating within the 111,000 kilowatts of firm power that it has under contract.

EXHIBIT R

[From the Hungry Horse News, Sept. 19, 1957]

HUNGRY HORSE DAM MAJOR VISITOR ATTRACTION

Just 12 miles from Montana's principal visitor attraction, Glacier National Park, is one of the State's outstanding manmade visitor attractions. Hungry Horse Dam.

The Nation's fourth largest, third highest concrete dam is just west of Glacier and 4 miles by surfaced road from U.S. Highway No. 2.

The July 8 to 14 week saw an estimated 8,000 visitors at the dam. Of this total 2,489 took the 35-minute guided tour that starts at the top of the dam. There is a drop by elevator for 452 feet to powerhouse level. Visitors walk through a gallery within the concrete mass (its a constant 65 degrees for temperature) out into the seven-story high powerhouse to see the four 71,250 kilowatt generators. Below are the four 105,000 horsepower turbines.

It is a self-supporting program with a charge of 30 cents being made for all persons over 12 except men in uniform.

Guides are four Columbia Falls High School teachers. W. E. Bruey, Douglas Follett, Ed Gilk, and Carl Launer.

E. L. Gochnauer is project superintendent for the Bureau of Reclamation-built dam.

Last summer an estimated 115,000 persons saw the big dam and 31,792 persons took the powerhouse tours. Hungry Horse which is 564 feet high and contains nearly 3 million cubic yards of concrete, is higher than Grand Coulee, but lower than Hoover and Shasta Dams. These three dams are larger.

EXHIBIT S

[From the Missoulian, Mar. 5, 1959]

CHAMBER ENDORSES HYDROELECTRIC DEVELOPMENTS

COLUMBIA FALLS.—Columbia Falls Chamber of Commerce officers and directors have endorsed additional hydroelectric developments for the Flathead whether they are Federal or private utility company dams.

The Columbia Falls view is being forwarded to Missoula for the Monday public hearing on Columbia River Basin developments called by the U.S. Army Corps of Engineers.

Columbia Falls chamber directors point out that Hungary Horse Dam is the principal cause for the Anaconda Aluminum Co. locating an industrial plant in the Flathead. This federally built dam erected from 1948 to 1953 was strongly opposed by many Montana interests, directors said.

The Anaconda Aluminum Co. presently employs 556 persons. The company started aluminum production in the Flathead in 1955, and presently employs 10 percent of all persons in Flathead County who are covered by unemployment compensation, the chamber said.

"The Columbia Falls chamber supports the proposed Glacier View Dam on the Flathead's North Fork as the most feasible new project in this county, and supports the project whether it would be built by a private power company or by the Federal Government.

"The Columbia Falls chamber also endorses the proposed Spruce Park Dam and diversion tunnel, if it is termed economically feasible by the Bureau of Reclamation.

"Noted here has been the tendency of groups to label Spruce Park as costly and unfeasible before the Bureau of Reclamation report has been published. Columbia Falls chamber members feel this has been done by wildlife groups and by others who oppose any further Federal projects."

In response to a request by Tom Pennington, president of the Kalispell Chamber of Commerce, the Columbia Falls officers and directors reviewed the water resources policy of the Kalispell chamber.

The Columbia Falls directors endorsed the Kalispell policy with the stipulation that in no way does this endorsement mean that the Columbia Falls chamber is against projects because they happen to be Federal or private power company sponsored.

The Kalispell points of the policy approved by the Columbia Falls chamber directors were as follows: Favoring the development of all feasible water resource projects, to the end that maximum benefits will be realized, not only in Montana but also in the downstream area.

The Columbia Falls chamber directors agree with the Kalispell chamber on the following points: A. Reservation of the at-site power for sale in Montana. B. Reservation of a reasonable share of the power generated at downstream installations by use of the water stored in Montana. C. Sale of such power downstream until needed in Montana, at which time it could be recalled for sale in Montana. D. Payments in lieu of taxes for property removed from local tax rolls for use in connection with any project. E. Protection of beneficial use of Montana's waters in Montana. F. Protection and enhancement of recreational areas. G. Reasonable protection of fish and wildlife, with the requirement that the feasibility study of any project includes a study of and recommendation on protection of fish and wildlife features. H. Prohibition against diversion of water or power outside the Columbia River Basin.

There was endorsement of all points A through H expressed by the Columbia Falls representatives.

EXHIBIT T

[From the Independent Record, Helena, Mont., Nov. 30, 1959]

MORE MULTIPURPOSE DAMS DUE IN MONTANA

Building of multipurpose dams in Montana and neighboring States over a period of four decades or a little more finds only one major stream in this State that might be said to be under control. The Missouri River with a series of private and Federal dams is under fairly close control. The menace of floods

downstream is at a minimum. Dams in Montana, North and South Dakota now are functioning well.

But the Yellowstone is not under control, neither are some western Montana streams. A hearing will be held in Missoula in December to gain more information and to explain intentions to residents affected on the Knowles or Paradise sites. A dam at Paradise would cost around half a billion dollars and eventually would generate a million kilowatts of prime power. It would be part of the Northwest States, complex of dams and reservoirs that continue to be built on the Columbia River and tributaries.

The Columbia watershed is far from under control from the standpoint of floods. Only a short time ago an unexpected thaw and heavy rains brought floods to Northwest States. More dams such as Knowles or Paradise will be needed to give that vast watershed as much control as the upper Missouri River Basin.

EXHIBIT U

[Editorial from the Western News, Hamilton, Mont., Nov. 19, 1959]

WHY OR WHY?

It is noteworthy that the Anaconda Aluminum Co. has a tax bill in Flathead County totaling \$702,380.80 which shows an increase from a total of \$637,959.91 in 1958.

That tax bill is one of the results accruing from the construction of Hungry Horse Dam.

Similar increases in taxes from numerous new industries have helped the economy in the TVA area, in the Columbia River area served by the Bonneville Power Administration, and elsewhere that giant power has been born as the result of big Federal dam developments.

Everywhere that Uncle Sam has built his big hydroelectric installations new industry has been established to use the cheap electrical power. This has brought prosperity to such locations.

If a big Federal dam were built at Paradise in Sanders County, with the resulting huge amount of power becoming available, industry would flock into western Montana. Some big corporation, like Kaiser, or Reynolds or Alcoa, or the Anaconda would gobble up the electrical energy provided like a hungry brown trout taking a fly.

Would an aluminum plant like that at Hungry Horse feel good to the people of Missoula, or Sanders or Lake Counties? Could not these localities stand the additional tax collections?

It is astonishing that some business people in Missoula, as well as elsewhere in western Montana, permit themselves to be led around by the nose for the benefit of owners of a private power outfit like Montana Power Co. of which the majority ownership resides without the boundaries of Montana.

Why, for example, should the Missoula Chamber of Commerce, or any other business organization in western Montana, work against a development which is for the good of all Montanans and particularly for western Montanans?

EXHIBIT V

[Editorial from the Western News, Hamilton, Mont., Oct. 15, 1959]

NATURAL RESOURCES SHOULD HAVE COMPLETE DEVELOPMENT

The hearing of the Select Senate Water Resources Committee held at the University at Missoula Monday was more significant of what transpired before and after than that which developed in testimony. Most of the latter had been adduced before.

The testimony covered a wide field involving water resources, both in form of rainfall, floodwaters, impounded waters, underground waters, and combinations thereof. Considerable testimony was advanced by proponents of construction of a few huge Federal dams which would impound sufficient water to care for foreseeable needs of the entire Northwest. Persons adhering to such a viewpoint also demonstrated the inadequacy of numerous small dams in achieving the same purpose.

But for some reason the Montana Power Co. crowd, which had been so vocal at previous hearings, boycotted any testimony although some statements and briefs in support of their contentions may have been filed with the Senate committee.

But the day following the hearing Ray Loman, Lake County publisher and legislator who serves as president of the Upper Columbia Development Council, charged that "witnesses who disagreed with the Senate committee members were not allowed to present their testimony."

This declaration would no doubt prove surprising to Senator Robert S. Kerr, of Oklahoma, who conducted the hearing as chairman of the subcommittee.

Actually the Montana Power Co.'s upper Columbia Development Council, or any other proponents of mud puddles for solving the water problems of the Northwest had the same opportunity to present their views as anyone else. Actually when the name of the Secretary of the Upper Columbia Development Council was called to present his outfit's testimony he failed to respond. Although present Mr. Loman likewise failed to grasp the opportunity to present testimony. He could have done so as did Senator Eugene Mahoney in lieu of Leif Erikson when the latter's name was called.

Actually the meeting was adjourned three-quarters of an hour prior to the time fixed by Senator Kerr because the Upper Columbiates failed to take advantage of their opportunities.

Were the Upper Columbia Development Council-Montana Power Co. tribe afraid to place their goods in open competition? Knowing their goods to be shoddy they hid in the shadows until the hearing ended and then began claiming foul. In the words of the street they proved "chicken." To misrepresent the true situation is to impose upon Montanans who, not being present, were in no position to know the facts.

As a matter of fact nobody should be surprised at such a followup tactic upon the part of the UCDC folks for their propaganda just prior to the meeting was equally as unprincipled.

Just before the meeting the UCDC or the Montana Power Co. induced that new free tribune of the people, The Missoulian, to publish a large map, apparently for free, on which was dotted some 200 marks indicating dam sites that could be used in western Montana in place of Paradise Dam. There were so many dam marks on the map that it looked as though it had the measles.

Study of the map disclosed, however, that so far as the Bitter Root was concerned, there was already a dam in nearly every place that the map indicated. It is possible that a few dams could be constructed and a few existing dams raised, but certainly the amount of stored water would not be more than doubled in the Bitter Root even by the wildest imaginative effort. If this same condition prevailed over the entire area on the map in question, it constitutes a gigantic joke, because the amount of such water impounded would prove utterly inadequate for the purposes needed. At the same time the cost would be staggering in proportion to that of building Paradise Dam. But Paradise would pay for itself; the little dams would never pay for themselves.

Doubtless some little dams are badly needed, and should be built to aid the agricultural economy of our area, but not to preserve the flood waters for the use of mankind.

Certainly the time will come when Montanans, and all Americans, will insist on complete use of the waters of the land, for the good of everyone, and not permit a partial use just because a few people can thereby profit financially by milking the rest of the population.

EXHIBIT W

[Editorial from the Western News, Oct. 17, 1957]

DOES MONTANA POWER WANT NEW BUSINESS?

The Montana Power Co. fought the building of Hungry Horse Dam tooth and toenail. It fought establishment of an aluminum plant until its twin the Anaconda Co. ended up getting such a plant within a stone throw of the Hungry Horse powerplant at bargain price electric energy rates. Montana Power ended

up with the privilege to buy a huge block of power which it resells to the public at a gigantic profit.

The Montana Power Co. did not favor powerplants in the Fort Peck Dam. Despite its opposition to such power generation, power was developed at Fort Peck and Montana Power ended up with a vested right to buy a good share of the power generated there at a rate of $2\frac{1}{2}$ mills per kilowatt and sells them back to the airbase there for $5\frac{1}{2}$ mills and to the public at the higher rate you pay.

The Montana Power Co. looked with displeasure upon construction of Canyon Ferry Dam near Helena. But when the dam was finished Montana Power Co.—through control of the transmission lines—had a virtual monopoly upon sale of electrical energy generated there. Like a dog in the manger Montana Power put a roadblock in the way of the Yellowstone Cooperative in using power for sale in Yellowstone Park. It seems that the big national park is like the colony of Montana, a private hunting ground of the Montana Power Co.—that Montana corporation, incorporated in New Jersey, the controlling ownership of which rests in the hands of New York investment firms.

The Montana Power Co. is opposed to building Paradise Dam.

Upon the basis of past performances it is plain the Montana Power Co. does not know what is good for it. Everything it has opposed has redounded to its benefit. It appears the best policy for citizens to pursue is to ascertain what the Montana Power Co. opposes and work like blazes to see that it is realized. Then not only will the colony of Montana flourish, but so will the Montana Power Co. If it doesn't know what is good for it, perhaps Montana citizens will have to establish themselves as guardians for it.

Hungry Horse meant the making of more than 600 jobs in the Flathead at the Anaconda aluminum plant. It has resulted in valuation of Flathead County growing until today it exceeds that of Missoula County.

The Great Northern Railway Co., in a full page advertisement in U.S. News & World Report says: "Why don't you pick yourself a dam site? * * * Read the roster of mammoth dams, on or near our line: Garrison, Fort Peck, Grand Coulee, Chief Joseph, Bonneville, McNary * * *. That's why, for the past 10 years, a new business has located along our route on an average of once a day."

The Montana Power Co. apparently does not want new business in Montana? Do people who support Montana Power Co.'s anti-new-business policy know what they are doing?

EXHIBIT X

[Editorial from the Great Falls Tribune, Oct. 31, 1959]

YESTERDAY'S WATER USE PATTERN NOT GOOD ENOUGH FOR TOMORROW

Keynoting the objectives of the National Reclamation Association meeting in Denver this week, Commissioner of Reclamation Floyd E. Dominy said that present irrigation agriculture will not be able to supply food and fiber needed in the years to come.

He pointed out that projection of population increase in this country should serve to jar us into the realization of the inadequacy of today's water use development program. He placed particular stress on the need for better utilization of water throughout the West.

The reason for that is pretty obvious. The vast region stretching from the Rocky Mountains to the west coast is the only place left with ample room for agricultural expansion.

As Dominy pertinently remarked, the fact that the reclamation program over the years has proved successful does not mean that the pattern of yesterday is good enough for tomorrow. He thinks the old formula of determining project feasibility should be reexamined—that "we must find ways and means for all beneficiaries to bear their full share of the costs of a project." He mentioned flood control, recreation, and pollution abatement (other than irrigation and water power) as benefits that must be given full appraisal.

When and if such reappraisals become an implemented part of the national water development program, Montana will stand to benefit very substantially from the results.

EXHIBIT Y

[Editorial from the Hungry Horse News, Feb. 14, 1956]

PUBLIC WORKS PROGRAMS

Building the first transcontinental railroads was federally subsidized. The Nation wanted improved transportation, to open new lands, develop new resources, and then there were thousands of men—just out of uniform and also immigrants—to put to work.

Public works programs certainly are not a New Deal idea. Even Rome had them.

We noted with interest the Wednesday morning story that President Eisenhower "moving to bolster the sagging economy" will ask Congress to approve a \$2 billion modernization program for post offices and the postal service.

We've no doubt that the Post Office Department needs improvement of buildings and equipment.

Then we wonder just how many jobs that will mean if the Flathead, Whitefish, and Columbia Falls post offices are located in new leased quarters. The Kalispell building was recently improved.

The way we would choose to bolster the sagging economy of the Mountain West, the Nation's last frontier, is to build roads and dams.

Here in the Flathead we well know the tremendous advantage of hydroelectric projects such as Hungry Horse. First there were snow waters flowing mostly unused to the sea. The spring flood is in May and June, and that's when Kerr and other downstream dams have a surplus of water going over spillways.

In its construction Hungry Horse provided 18 million man-hours of employment in Montana and jobs in a dozen States fabricating generators, turbines, and other equipment. Then came the construction of the Anaconda Aluminum Co. plant, and nowhere are 608 men presently employed in Columbia Falls directly as a result of Hungry Horse Dam being built. There are also other jobs downstream, for the water turns generators here, and develops even more electricity as it passes through other turbines on the way to the sea.

Hungry Horse Dam cost was \$101,500,000. The dam is paying for itself, and even more important, made and continues to make a lot of jobs for Americans. There's much more benefit than the \$3,500,000 annual AAC payroll in Columbia Falls.

Here in the Flathead we realize the difficulty of not having a road such as the lack of direct access to Waterton Lakes National Park and Alberta. How many thousands of dollars would such a road bring the Flathead each year?

At the same time we also know of the jobs created during construction, and the men who have jobs in our lumber mills now as a result of the Federal Government spending \$1 million for improvement of the North Fork Road in 1953-54.

Improvement of the Post Office Department and its facilities is a good idea. We also hope the Eisenhower administration will give further thought to development of resources in the last frontier.

This is part of the American tradition even from the days when Virginia settlers looked to the frontier in what became the State of Ohio.

We have need of roads, and should do more to harness the power resources of our snow waters. Let's build the Nation's wealth, the long-range employment even as we create jobs during this period of sagging economy. Building roads and dams is a good answer.

EXHIBIT Z

[Editorial from the Western News, Hamilton, Mont., July 16, 1959]

KERR DAM'S BENEFACTOR

(Mel Ruder in the Hungry Horse News, April 19, 1957)

There's hardly a week that passes when we do not see some "crack" about Hungry Horse Dam being a mistake.

It obviously originates with planned strategy to discredit Federal power projects.

Again and again the Hungry Horse News points out that the Flathead now has a year-around industrial operation, the Anaconda Aluminum Co. plant, employing 691 as a result of Hungry Horse Dam.

Then the private power company press gasps as the situation of Hungry Horse Dam having an installed capacity of 285,000 kilowatts with generators running at capacity for only about 4 months a year.

We could gasp at their automobiles with 200 horsepower, needed only when they pass and have to get back in their own lane in a hurry.

Hungry Horse has a planned high installed capacity. In this Pacific Northwest power pattern when a heavy outflow of power and water for peaking is needed from Hungry Horse, the Flathead plant delivers.

Actually the problem is that we are on the defensive when it comes to Hungry Horse Dam. We should not be. The project is proving and paying for itself beyond expectation.

In all honesty, there should be more recognition given to downstream benefits of Hungry Horse. The South Fork's snow water held back at Hungry Horse and utilized later by downstream dams and powerhouses, will soon be responsible for about 1 million kilowatts of power, about 10 times the local output.

We doubt that Cabinet Gorge Dam would have been built had it not been for Hungry Horse Dam. In a week Hungry Horse can discharge more water than the whole Cabinet Gorge Reservoir contains.

Noxon Rapids Dam is a major project. Would Noxon be under construction if Hungry Horse was not providing upstream storage?

There's a radio and newspaper bombardment about private power companies paying taxes and public dams not on tax rolls.

Our answer here is that Hungry Horse Dam is not on the tax rolls, but Anaconda Aluminum Co., as a result of Hungry Horse Dam, is paying \$478,941.24 in taxes for 1956 to Flathead County.

Then we wonder if Montana Power Co., an aggressive, efficient, and able utility, isn't benefiting from Hungry Horse Dam as much as anyone.

Kerr Dam, at the foot of Flathead Lake, is a fine Montana asset. However, the level of Flathead Lake, with its ring of summer homes, cannot be altered much without economic loss. Montana Power Co. storage production capacity at Kerr is limited to Flathead Lake storage below the cottage line and actually could use only a part of the spring floodwaters of the Flathead River forks.

In fact, Flathead Lake could fill to allowable capacity during May and June without a drop of water from the Flathead's South Fork.

Prior to 1950, the forks of the Flathead provided much more water than Kerr Dam could utilize in its powerhouse during spring months (a lot went over the spillway unused) and then there was a water shortage during fall and winter months.

Building the big dam on the South Fork has certainly changed this picture, and obviously made possible those new generators at Kerr Dam. There is now more water for Kerr Dam in winter.

Hungry Horse Dam was built with public funds. Montana Power Co. is a private business and so is the Hungry Horse News.

Just exactly how much money is Montana Power Co. paying for water stored behind Hungry Horse Dam, which if there were no dam would not be benefiting them?

You know, I think the American taxpayers are subsidizing Montana Power Co., but they won't admit it.

Senator GRUENING. I would like to express on behalf of the subcommittee our great appreciation for the very effective way in which both proponents and opponents have presented their testimony. It has been very full and varied and you have all been most helpful in condensing it and in producing the greatest number of witnesses who confined their remarks to the essential points. I think from the standpoint of presentation of evidence, it has been one of the most successful hearings I have ever attended.

Senator MARTIN. I wish to add my thanks and appreciation for the attention given here. We have had a very grand attendance all

day long. It has been a long hearing. I just hope we haven't closed it at such time as to have some of you feel that you have been overlooked. There is a limit to our working day. We try to do the best we can, and we hope we have served you to your satisfaction, and we leave this gate open for you to file statements with us up to December 31. I just don't want anyone to feel that they have been overlooked.

It has been a real pleasure to come out here to Montana and look into your problems. They are quite different than they are down in my State of Iowa, and I need to do considerable reading of the material presented here today, and I promise you I will do that. Thank you.

Senator GRUENING. The hearing will adjourn.

(Additional documents filed with the committee follow:)

U. S. SENATE,

Washington, D.C., January 19, 1960.

HON. FRED A. SEATON,
Secretary of the Interior,
Department of the Interior, Washington, D.C.

DEAR MR. SECRETARY: I want you to know that I was particularly pleased to read the speech made by your Commissioner of Reclamation Floyd Dominy before the Great Falls Chamber of Commerce on January 11. He stated the value of Canyon Ferry Dam and Reservoir to the Missouri Basin as succinctly as it has even been put. I am sending copies of his speech to some interested newsmen in the area so that more Montanans may have an opportunity to read the Commissioner's statement about Canyon Ferry.

I was also pleased that your Commissioner emphasized that Montanans "have an obligation to the State and the Nation to insure that maximum effective use is made of the water you have." I hope this full development concept is reflected in the Department's report on S. 1226 which would authorize construction of a dam in the Clark Fork-Flathead Basin of western Montana.

With warm personal regards, I am,

Sincerely yours,

JAMES E. MURRAY.

ADDRESS BY COMMISSIONER OF RECLAMATION FLOYD E. DOMINY, BEFORE CHAMBER OF COMMERCE AT GREAT FALLS, MONT., MONDAY, JANUARY 11, 1960

I am honored indeed in addressing the Great Falls Chamber of Commerce here tonight. It is always a pleasure and privilege to come to Montana, but under the circumstances of several previous visits in recent months, it is a distinct and signal honor to be invited back. I only hope I am not wearing out my welcome.

I enjoy these meetings with you folks, I consider them part of my job—a very important part—and I assure you that the business of reclamation is so broad and complex that even in four tries we are not going to get everything said on the subject.

It is possible that some of you were present at Sidney last summer when we celebrated the golden anniversary of the lower Yellowstone project and reviewed the accomplishment and far-reaching influence of that old-timer among reclamation developments.

Others among you were with me in August at Helena when we talked about the physical accomplishments of that growing teenager—the Missouri River Basin project.

The trilogy was completed at Butte in November when we talked about the impact of the entire water resource program on the people it is designed to serve.

Tonight I ask that we look at the basic ingredients of this program—water and people—and consider the future of Montana in the light of some implications which we can draw.

Montana sits astride the Continental Divide. As is the case with all the States along the backbone of the Rockies, Montana is a producer and exporter

of water. She is an importer too, primarily from Wyoming on the south and Canada on the north.

Water leaves the State principally near the two northern corners, in the Missouri and Yellowstone Rivers on the east, and the Clark Fork and Kootenai Rivers on the west. These are all very respectable streams.

It was a surprise to me, though it probably will not be to you, to learn that the Missouri, as it leaves Montana, is the smallest of the four. It discharges on the average about 6.4 million acre-feet annually. The Yellowstone contributes about 8.6 million acre-feet annually on the average. These two, combined into the Missouri River are just slightly smaller than the Clark Fork River, which has an average annual flow of 15.2 million acre-feet. The Kootenai River discharges an average of 9.9 million acre-feet annually, with much of the water originating in Canada. In total these four rivers carry about 40 million acre-feet of water away from Montana. By way of comparison that is roughly double the capacity of Fort Peck Reservoir.

It would appear to the casual observer that with this amount of water leaving the State, there should be plenty for all uses and there should be no serious competition for water within the State. As a matter of record this is not the case. Annual averages do not mean that the water will be available for any given year when and where needed and competition for water has been an integral part of Montana history. The first manifestation of this conflict was the outlaw ditch, by which water was put to use illegally in conflict with established rights.

The illegal competition was only a passing phase but soon more significant conflicts developed for which solutions were needed.

For example, in the middle thirties the Bureau of Reclamation was asked to investigate the possibility of developing a supplemental water supply for the Gallatin Valley, where serious water shortages developed. The studies were completed and showed that there was adequate water in the Gallatin River to supply the requirements, and that the water users could probably pay the cost of reservoir construction.

At this point, however, the potential development ran squarely into the established rights of the Montana Power Co. for its hydro powerplants on the Missouri. There was water enough, on an annual basis, for both uses, to be sure, but storing the spring runoff of the Gallatin for irrigation use would have made the powerplants short at certain seasons. Furthermore, this conflict was not restricted to the Gallatin Valley. It precluded any further water development on the Missouri River or its tributaries, above Fort Peck Reservoir.

As a result of the situation uncovered by this investigation, a study of the entire upper Missouri River area was commenced—particularly the area above the uppermost Missouri River plant of the Montana Power Co. The results of the investigation were incorporated into the plan for development of the Missouri River Basin, authorized in 1944 as the Missouri River Basin project.

The crux of the whole plan as far as Montana is concerned, was Canyon Ferry Dam and Reservoir, which is now a reality. To many people Canyon Ferry Reservoir is a place to boat or fish; to some, the rising waters in the spring endanger the nesting geese; to others the drawdown period in the fall creates ugly mudflats; some see the power potential created, and the flood damage abated; others, the existing agriculture changed and production insured through irrigation.

Each of these observations and attitudes has some foundation in fact. No reservoir construction can have only a single effect, good or bad; all serve multiple functions with different emphasis. Canyon Ferry Reservoir provides flood control, power, some direct irrigation and municipal water supply, fish and wildlife conservation and recreation—just about everything in the book.

But having said all this we have still missed the real point of Canyon Ferry. Its principal benefit to Montana is that it permits development of the resources of the Missouri Basin both upstream and downstream in Montana, including a potential 170,000 acres of irrigated land, and the use of water for various purposes without interfering with prior rights. It is one of the most valuable river control structures in the State, a fact which is often overlooked. The development of the east bench unit near Dillon—now an integral part of our construction program—would not be possible without Canyon Ferry.

But lest you get the impression that Canyon Ferry is a panacea for all Montana's water ills, let me assure you that it is not. In the first place it affects only the Missouri; in the second place, when one conflict is resolved another usually crops up. This is natural in a dynamic society.

Let me continue the illustration with which I started—the Gallatin Valley. The overall plan of development approved by the Congress in 1944, under which Canyon Ferry Reservoir was built, also included a proposal for providing supplemental water for the Gallatin Valley and expanding irrigation there by diverting water from the Madison River. It was a carefully thought-out plan, believed to best resolve the then evident conflicting demands on the river system.

However, when we began more detailed planning, real conflict became apparent in the Madison Basin. The Madison River is a blue ribbon fishing stream. Any suggestion of manipulating or controlling its waters met with vigorous protest. We do not object to such protests. They are one of the privileges of our democracy and one of the ways in which these conflicts are made known. We did, in this case, become concerned over some of the intemperate remarks based on inaccuracies which came into the picture. I am a fisherman myself and last summer I managed to play hookey for a day of fishing on the Madison. Several nice trout and a greyling were in the creel at the close of the day. I left the stream only a day before it was dammed by nature without consulting anyone.

As a result of the high priority given to the fishery value of the Madison River, our suggested plan for developing the Three Forks area was modified. There will be only local use of the Madison, should conditions ever warrant, and greater use of the Jefferson and Gallatin Rivers in their respective basins. So here we are back at the Gallatin Valley again.

When we made plans for storage at the Spanish Creek site in the 1930's, no question was raised about fish and wildlife conservation. When we studied the same proposition in the 1950's, these conservation values had become of such consequence as to be a major factor in the decision to place storage in a deferred category and not include it in the proposed plan of development.

The implications of this situation are serious. Where conflicts of this magnitude exist some way must be found to reconcile the conflict through compromise, or a choice must be made. Sometimes both processes are used. In the Jefferson River Basin we have been able to reach a compromise at Clark Canyon Reservoir on the Beaver Head River near Dillon, which is soon to go into construction, as a part of the east bench unit of the Missouri River Basin project and a similar course seems practicable at Reichle Reservoir, on the Big Hole River, now in the detailed investigation stage.

Not everyone is satisfied with compromise, of course, because it always involves a retreat from a preferred and established position. Nevertheless, a compromise represents an important step in the democratic process of Government and we bend our efforts to seeking the best compromise in the interests of the Government and the people it represents. In all cases, of course, the final arbitrator is the Congress, the direct representative of the people.

I have used an illustration involving a fishery problem because it is pertinent and carries through a full cycle. I don't want anyone to leave this gathering and report that the Commissioner of Reclamation is sniping at the conservation interests, because that is not the case. Conflict is represented in most of the potential purposes and benefits of multipurpose reclamation development, and it is one of our jobs to reach the most equitable solution.

Recreation in Montana is big business, and it is to a considerable extent dependent on wise use of water to maintain it. Similarly groups such as yours constantly working to bring new industry to the State, and adequate supplies of water at reasonable cost will be one criterion of site selection. Your cities and towns are growing, and water supplies must keep pace. There are still hydroelectric powersites in the State, which can be developed economically. You have thousands of acres of land which will respond to irrigation.

The fact that 40 million acre-feet of water leave the State annually will not prevent conflicts among these uses within the States. That there will be conflicting demands beyond the borders of Montana is also a foregone conclusion. So far development of the Columbia and Missouri Basins is not far enough along to create a pinch, but the next few years may see some real problems developing.

These conflicts and problems will be affected by the decisions you make in Montana as to future development. There is a potential additional consumptive use of 2 million acre-feet of water annually for irrigation in the eastern part of Montana where most of the arable land lies. To the extent that this development takes place and the water is thus used, it will reduce the 15 million acre-feet leaving the State on the east and available for downstream use, and competition will be increased.

On the other hand, the regulation required in Montana to effect use of this water will be advantageous to all users, within and without the State, because the resulting flow will be more uniform. Similarly as other uses are developed which will not reduce the total flow leaving the State, they will serve to regulate the flows and make them more useful.

This situation also exists in the western part of the State but because opportunities for consumptive use of water are less and the total volume of water is much greater the net effect will be less pronounced.

I mentioned at the outset of these remarks that I planned to talk about two of Montana's most important resources, water and people. Thus far I have dealt only with water and the problems you face in future development. Now, what about people.

I have before me, unofficial population estimates for the last decade. They show that the West as a whole is the fastest growing area in the country and that only the Pacific States—Washington, Oregon, and California—exceed the Rocky Mountain States in population gains.

The Rocky Mountain States show a gain of 32 percent, up 1.6 million from 1950. Montana participated in this increase to the extent of 96,000 people, a gain of 16 percent over 1950. With such a steady increase, should not Montana be concerned with further development of its natural resources, particularly water, for water is the key which unlocks the treasure chest for further economic development and growth?

I say you should and must tie in the planning of water resources development with your planning for population and economic growth. Just because you have experienced some solid growth in the last decade is no reason to rest on your oars.

The new census will probably show a total national population of 180 million people. Within the next 20 years, this total is expected to go to 250 million and by 2010, we can expect it to double, probably ranging around 370 million.

The wide open spaces will feel the impact of this population growth and your State will be under constant pressure to find new economic opportunities for coming generations. You can take advantage of this future growth, indeed live up to the challenge and responsibility it offers only if you maintain a steady pace in development and utilization of your natural resources.

Thus as these pressures grow, as the competition for water becomes keener, there will be new conflicts both within and beyond the State boundaries. Because of them you have an obligation to the State and the Nation to insure that maximum effective use is made of the water you have. I emphasize that word "maximum."

No longer can the status quo or personal preference or loud voices of special interest groups be the criterion of priority of development. No longer should a single purpose be permitted to block development which can be clearly demonstrated to provide greater multiple benefits. The stakes are too high in terms of Montana's total best interests.

Neither can the Bureau of Reclamation or any other Federal agency make the decision—nor do we want to. It is your problem—one to be resolved in the light of all available information—in an atmosphere of cool, considered judgment—by the best talent you have.

I urge you to create a climate of open-minded public opinion and adequate machinery in your State government to study the facts, and weigh the consequences of the several alternatives. You will then be able to present a united front in support of the wisest use of the natural resources which have been entrusted to your care. No one can do more.

DEPARTMENT OF THE INTERIOR,
OFFICE OF THE SECRETARY,
Washington, D.C., February 8, 1960.

HON. JAMES E. MURRAY,
U.S. Senate,
Washington, D.C.

DEAR SENATOR MURRAY: This will acknowledge receipt of your letter of January 19 with regard to the speech made recently by Commissioner of Reclamation Floyd E. Dominy at Great Falls, Mont. We are appreciative of your kind remarks about the views expressed by Commissioner Dominy.

We should like to inform you that the Department's comments on S. 1226, your bill to authorize the Knowles Dam and Reservoir, are now being considered. As you undoubtedly are aware, the Knowles Dam development will vitally affect the interests of several agencies of this Department. The replacement of Indian lands that would be inundated is a problem of particular importance. In addition, there are also involved such matters as irrigation, measures necessary for the conservation and development of fish and wildlife, and the possible development of recreational opportunities.

You may be assured that in our consideration of this development we will be guided by the same standards which we apply generally in the evaluation of a multiple-purpose water resources project.

Sincerely yours,

FRED A. SEATON,
Secretary of the Interior.

STATEMENT OF JOE STRNISHA, A MEMBER OF THE HOUSE OF REPRESENTATIVES
OF THE STATE OF MONTANA

My name is Joe Strnisha. I live at Hamilton, Mont. I, in company with my two brothers, operate a diversified farm, which is located south and east of Hamilton, raising mostly hay, grain, cattle, and potatoes.

I have served in the 1957 and 1959 sessions of the State legislature in behalf of Ravalli County, and the State of Montana.

I became interested in Paradise Dam many years ago, particularly so, following the construction of Hungry Horse Dam. This project proved to me, and to the countless others, what the word "multipurpose" means, when it is connected with the development of our vast resources, and the building of public dams. In the very short time that Hungry Horse has been active, one needs only to note what it has accomplished for Flathead County, and Montana, recreation-wise, tourist trade, not to mention the Anaconda aluminum plant, and the hydroelectric power produced there to be used elsewhere in Montana plus many other benefits resulting directly, from this multipurpose unit. Gentlemen, I am definitely convinced that we have no alternative, but to pass S. 1226; it is the opportunity of the ages for many reasons. I realize that the testimonials in previous hearings, concerning this multipurpose project, have been somewhat repetitious, but at each hearing, something new is added thus strengthening my belief and faith in S. 1226.

Some of the accomplishments expected of S. 1226, with full river development are first, flood control, protection of life and property damage amounting to millions of dollars annually. Some years, of course, were worse than others, take for example the year 1948, flood damage to property amounting to over \$100 million. This feature alone would be worth the money expended to build either Knowles or Paradise Dams. Secondly, we would have recreation. The area that would be inundated by either Paradise or Knowles Dams would be practically nil in comparison to the advantages we would gain in recreation. I have been through both valleys; these areas would be greatly improved if Paradise were built, and a beautiful lake created. Boating is fast becoming one of the Nation's prime recreational interests. This lake would be sensational for boating and fishing. Thirdly, we would have an attraction that would attract many tourists to our State. Tourist trade, as you know, is Montana's second largest business. Consequently, one should consider what it will do for the Nation as a whole. Everyone can enjoy a public dam, because it belongs to you, the people, and not to just the chosen few, as in the case of private-power dams. You will note that I continue to favor Paradise Dam to Knowles or any other damsite. It is my humble opinion, and it is the opinion of many others with whom I have discussed this, that Paradise is favored over Knowles two to one.

Paradise Dam, to me is all of these other small talked of dams, including Knowles, wrapped up in one large package, and I think I can say without reservation that it will be the most economical. We in Montana should feel proud and happy to have the opportunity to build a dam at a site which can store upwards of 4,080,000 acre-feet of water. This means tremendous amounts of power for Montanans, tremendous amounts of water for irrigation, both for Montanans and downstream users. There are those who will say that we are building these dams for the benefit of downstream users. However, I am thoroughly satisfied with S. 1226 as it is written. I quote this sentence from the

fore part of the bill, "to promote the agricultural and industrial development primarily for the State of Montana, but also of the downstream area." In reading the bill, section 3, subsection (a) states plainly that, "Montana has the preference of at-the-site-power. Then, and only then the downstream users have the permission to purchase power. It occurs to me that the so-called downstream users are just another group of American taxpayers trying to get along. They didn't complain too much when our Montana water played havoc with their property, washed their soil into the Pacific, killed and maimed many people in the years gone by. Yet some of us look down on them as if they didn't belong. Gentlemen, I feel that with the testimony previously presented at other hearings, and the testimony entered in today's hearing, we should have sufficient information to convince your honorable committee that the majority of the citizens of western Montana are for either Paradise Dam or Knowles Dam, with Paradise riding away out in front.

THE PEOPLE'S VOICE,
Helena, Mont., November 25, 1959.

Subject: Paradise Dam.

Senator JAMES E. MURRAY,
Chairman, Interior and Insular Affairs Committee,
Senate Office Building, Washington, D.C.

DEAR SENATOR MURRAY: As a Montanan who was raised in the vicinity of the proposed Paradise Dam; as a Montanan who had to leave that most wonderful part of the Northwest because of lack of job opportunity, may I once again urge you to use all the influence of your great office to bring about the reality of Paradise Dam.

My home area has seldom felt the hot breath of prosperity on the same scale as many other parts of Montana and the Nation. Its job base is severely limited. It has a consistently high level of unemployment winter after winter.

Hungry Horse multiple-purpose dam has brought a new industrial vigor to the Flathead; has created an estimated 2,500 new jobs; has helped to balance the economy of that area; has greatly expanded the tax base of Flathead County.

Paradise, a much larger proposal with a much larger potential than Hungry Horse, can have a similar stabilizing effect on the Sanders-Lake-Mineral County areas directly, and indirectly Missoula and Flathead Counties, to the benefit of the entire State. Its enormous amount of at-site power, reserved for Montana, can be the means whereby the young people of the area of today and tomorrow will be able to stay in the area. Cheap, abundant power will attract industry; will make it possible for that area to be revitalized.

I submit herewith two editorials I have written on the subject of recent dates which I wish you would consider for the hearing record.

Yours very truly,

HARRY L. BILLINGS.

[From the People's Voice, Helena, Mont., Oct. 9, 1959]

EDITORIAL—MONTANA CONTINUES TO LAG BEHIND

Personal income in Montana for July 1959, although up as compared with the same month of 1958, had a percentage increase of less than one-third of the national average, according to a survey by Business Week.

Montana's increase was 2.1 percent as compared with a national average increase of 7.2 percent. A similar trend—of Montana personal income failing to keep pace with the Nation as a whole—has been in evidence for a number of years past.

Prospects of some increase in industrial development, such as the recently announced steel plant for Anaconda, would be most encouraging were it not for the fact that for every job such a plant will provide Montana is losing several jobs in its nonferrous metals industry due to technological improvements in mining and metals processing. The decline of 3,200 nonferrous industry jobs over the past 3 years represents a direct annual personal income loss of approximately \$15 million. The forecast is that within the months ahead at least another thousand jobs will disappear in what once was Montana's No. 1 industry.

Another major reason for Montana lagging behind the national average personal income increase is the continuing decline in farm prices under the Eisen-

hower-Benson administration of the farm program. Support prices for wheat are off about one-fourth over the 6 years past. This year, Dame Nature has further depressed the agricultural outlook in Montana. Drought has cut the 1959 wheat crop by better than 20 percent. In dollar terms, this means an added income loss to the State of more than \$30 million for 1959.

A third major factor—one which has burdened us the entire 70 years of statehood—is the high plateau of freight rates which has made it next to impossible for much of Montana's manufacturing industry to compete in the national markets. High freight rates coupled with distance from market have consigned Montana over the years to a role of being primarily a producer of raw materials. Substantial revision toward lessening of freight rate discrimination is not something that will be achieved in the immediate future.

This trend of falling further and further behind the rest of the Nation in personal income can be reversed in the decade ahead. Montana continues as one of the Nation's treasure chests of resources. We have the necessary energy potential to exploit those resources, to transform Montana from being primarily a raw materials source to an increasingly important supplier of fabricated and finished goods. We have, also, the expanse of space and substantial supplies of water which are becoming major considerations in mid-20th century industrial planning.

Of the three factors listed above, the "key" to opening the door to new industrial horizons lies in the developing of our enormous hydroelectric potential.

Multiple-purpose development of our water resource to provide low-cost power and year-round stability of water supply is basic to attracting new industry, to providing well-paying employment for thousands of members of the work force.

With multiple-purpose development of Paradise, Yellowtail, and Libby (among other projects) kilowatts of power in the seven figures will be available at low enough cost to overcome freight rate differentials, to make Montana an attractive location for such mass industries as aluminum production and fabrication, converting Montana's huge resources of high-grade phosphate into fertilizer, etc. What Hungry Horse with its 100,000 kilowatts at-plant production has done in creating new jobs and new business opportunities, low-cost development of Montana's remaining potential of 6.6 million kilowatts can do a hundred times over.

Low-cost hydro development is basic to ending the lagging behind trend Montana continues to experience in personal income received as compared with the Nation as a whole. It's time we got at this business of development, Montana Power Co.'s massive resistance notwithstanding.—H.L.B.

[From the People's Voice, Helena, Mont., Nov. 27, 1959]

PARADISE DAM ESTIMATE "LOADED"

Several months ago when the Army Engineers released another "review" of the 308 review report wherein they recommended building Knowles rather than Paradise, this publication protested for two major reasons:

1. Knowles, even with Nine Mile Prairie which now appears a "dead duck," constituted only fractional development of a valuable water resource;

2. Engineers had "loaded" the Paradise estimate by approximately \$100 million.

At that time we also pointed out that House Document 531 covering potential Columbia Basin development had laid down a basic premise that "a project which would only partially utilize the capabilities of a site would constitute waste of a valuable national resource."

On December 15, as noted elsewhere in this issue, Senator Murray's Interior Committee will hold a hearing in Missoula on bills which would authorize the construction of either Paradise or Knowles. In the 5 months since our previous protest over the Knowles recommendation, nothing has happened to change points then set forth in that editorial.

To refresh your memory on the points raised at that time (June 19), we reprint pertinent parts of that lengthy editorial, revised only to suit Nine Mile Prairie not being included under either S. 1226, or H.R. 5144.

Although the corps' studies show that both Knowles and Paradise are economically feasible; will pay for themselves plus all interest over a 50-year amortization basis, the corps favors Knowles because its cost per kilowatt-hour will be slightly less than for Paradise.

The corps, using railroad relocation figures supplied by Northern Pacific, estimates that Paradise would cost \$492 million (as contrasted with \$234.6 million for Knowles). The larger dam's ultimate power capacity would be 864,000 kilowatts (to Knowles 512,000), and its prime power potential, 1,009,000 (to Knowles 697,000). On a kilowatt-hour basis, Paradise would account for 4,521 million kilowatt-hours per year as compared with 2,523 million kilowatt-hours for Knowles—or 80 percent more power production.

There is reason for quarreling with the \$492 million construction cost figure for Paradise estimated by the corps. There is reason enough to suggest that if that agency did not apparently have a predisposition against Paradise the estimated cost of the larger project could be cut to \$400 million or less.

This contention is based on—

1. The corps' admission they accepted relocation of railroad cost estimates prepared by the Northern Pacific instead of running their own independent relocation cost estimates.

2. The corps has charged against Paradise estimate in excess of \$50 million for highway relocation covering highways either as yet unbuilt or present highways which fall far short of present standards and must be rebuilt within the next few years.

3. The corps has tacked onto Paradise an extra \$56 million for contingencies which seems unrealistically high in view of the fact that the recently completed Dalles Federal dam cost only 75 percent as much as the corps estimated it would cost.

No. 1: Railroad relocation cost figures supplied by Northern Pacific are automatically suspect. Northern Pacific has long opposed public development of water resources. Possibly the reason lies in the extremely close financial relationship existing between the Northern Pacific, Montana Power, and Washington Water Power. Northern Pacific' estimates that to relocate its facilities would cost \$153 million. This figure includes \$88 million for twin 8-mile tunnels. Why the railroad feels a second \$44 million tunnel is necessary when the Milwaukee's main line is right at hand for use in case of possible tunnel trouble is difficult to fathom. The Northern Pacific and Milwaukee, just as the Northern Pacific and Great Northern, have arrangements for using each others track in case of emergency. This \$44 million item for a spare tunnel has all the appearance of "loading on" in order to pyramid the cost estimates on Paradise.

No. 2: Highway and bridge relocation. The corps has placed a figure of \$78.9 million for this item. Long familiarity with the highway situation in the Paradise area convinces this editor that at least two-thirds of that \$78.9 million is as ridiculous as the \$44 million item for a second tunnel for the Northern Pacific.

The corps admits that part of the highways slated for relocation have not as yet been built. This includes the proposed Paradise-St. Regis cutoff with an estimated cost of \$10 million. The two communities are now connected by a dirt road and a ferry.

The corps estimates that rebuilding 20 miles of U.S. 10 will cost \$21.6 million, and 43 miles of U.S. 10A, \$24.8 million.

Paradise Dam or no Paradise Dam, that 20 miles of U.S. 10 will be rebuilt because it is a part of the Interstate System.

As for 10A from Ravalli to Paradise, anyone familiar with that piece of highway knows that, with the exception of 3 miles, it is as outmoded as a model T Ford, with portions of it dangerous at speeds in excess of 25 miles per hour.

Much of 10A falls far short of present highway primary system standards and, like U.S. 10, must be rebuilt, Paradise Dam or no Paradise Dam, in order to safely accommodate a rapidly increasing flow of traffic. (The corps has made a similar error in figuring highway relocation costs for Knowles relative to relocating 31.5 miles of the same 10A mentioned above. Correction of this would lower the Knowles Dam cost by about \$12 million, as compared with the more than \$56 million the cost estimate for Paradise could be reduced by eliminating these erroneously included highway cost items.)

Behind this publication's continued insistence that Paradise should be built instead of the Knowles alternative lies the conviction that the region's demands for power the next 20 years are going to accelerate at an even faster pace than has been the case the past 20 years. The population of the Northwest is skyrocketing, will likely double in the next score of years. The needs of the living, as well as the heritage we leave for those who come after, make mandatory that we secure the fullest possible development of the resources we have. Anything less, as pointed out in House Document 531, "would constitute a waste of a valuable national resources." Knowles is a poor substitute and a waste as com-

pared with what can be accomplished for that region if the men in Congress are blessed with greater foresight than are those comprising the U.S. Corps of Army Engineers.—H. L. B.

A STATEMENT BY THE RAVALLI COUNTY FISH & WILDLIFE ASSOCIATION

In 1957 the Ravalli County Fish & Wildlife Association put itself on record with the U.S. Army Corps of Engineers as being in favor of the construction of Paradise and Libby Dams. At subsequent public hearings we have reaffirmed and amplified this position.

We take this opportunity to again affirm our considered conclusion in favor of these two dams. We are in favor of the objectives of S. 1226 which provide for a dam in the region of the Paradise damsite.

The basis of our stand is the known need for flood control and electric power and the collision of these needs with the vital necessity for preserving our wilderness areas.

Libby and Paradise together will provide an estimated 9 million acre-feet of flood storage and 776,000 kilowatts of electric power. Since the estimated flood control need is estimated at not more than 8.5 million acre-feet, these two projects should satisfy the requirement for flood control and also provide the electric power needed in Montana and the rest of the Northwest. The construction of Knowles as an alternative to Paradise will reduce flood storage capacity by 1 million acre-feet and the power output by 88,000 kilowatts. We therefore can support the Knowles damsite if subsequent studies indicate an overwhelming reason for choosing Knowles over Paradise.

In any case, the construction of Libby and Knowles-Paradise will largely satisfy the requirements for flood control and the present requirements for power in these regions. They should make unnecessary the construction on further dams such as Bruce's Eddy, Penny Cliffs, Ninemile, Spruce Park, and Glacier View, all of which we have opposed in the past and will continue adamantly to oppose in the future. These dams are opposed for the general reason that they are unnecessarily destructive of irreplaceable wilderness and recreational values, and that they provide no more in the way of flood control than do Libby and Knowles-Paradise. Libby and Knowles-Paradise will cause less damage to wilderness and recreational resources than any of the other dams proposed for the upper reaches of the Columbia River drainage.

We wish also at this time to take note of the statements of policy by the Wilderness Society, dated February 13, 1958, and the National Wildlife Federation, dated February 28, 1958. We agree with them and welcome their support in the effort to insure that the Columbia River drainage is managed so that its power and flood control potential are developed within an overall frame of reference which will preserve the increasingly precious and irreplaceable wilderness, wildlife, and recreational resources.

STATEMENT OF EUGENE L. PITTS, DIXON, MONT.

My name is Eugene L. Pitts. I live at Dixon, Mont., on a 330-acre farm where I raise registered Hereford cattle and feed. This has been my home nearly 9 years and is where I am raising my family. My wife and I have five children. All of them have been attending school in Dixon or will do so.

Before moving to Dixon, I operated a sawmill at Camas Prairie, and I still have 80 acres of land in that area. Western Montana is my birthplace and I always have lived in this wonderful country. I own and operate a sawmill at Ravalli.

Near Dixon, I have 14,000 acres of Indian-owned grazing land which I am leasing. This land is on Magpie Creek, west of Dixon.

Paradise Dam would flood out my home at Dixon, my sawmill at Ravalli, and my bottom lands, ruining my business.

I am part Indian, and because of this I receive a preference to buy Indian timber for my mill at Ravalli. The mature timber marked for sale is on Sepay Creek, and this timber would be cut off from access because the only road into it would be underwater.

At the March hearing last spring I pointed out that Ravalli would be underwater, flooding out my mill operations, citing as evidence a Northern Pacific

Railway Co. map. There were those who said the map was wrong, but I wish to emphasize that the Army Corps of Engineers has verified the correctness of the Northern Pacific map. The water would back up to the east end of town putting the tracks at the Northern Pacific depot under 6 feet of water. My mill would be flooded out, as I mentioned a moment ago, and I wouldn't be able to rebuild it at a new location.

The effect of the closing of the mill would be throwing 40 men out of work, both in town and in the woods. The total annual payroll of this group is more than \$150,000. At least 150 people, including the families of employees, would be affected directly.

Then there would be adverse secondary effects on employment.

We haul the products of my mill to Plum Creek Lumber Co. at Pablo and to the White Pines Sash Co. plant west of Missoula, and if Paradise Dam is not built, I plan to enlarge my Ravalli operations, adding a chipper and hiring extra men to operate it. These chips would be hauled to the Waldorf-Hoerner plant near Missoula.

At all of these three plants, an additional labor force is needed to process material brought to them from plants like mine. If my mill closes, there won't be so much work for these plants. Some men may lose their jobs at these other plants.

Even if my mill were not flooded out, construction of Paradise Dam and the rising and falling waters, up to as high as 85 feet, would make it impossible to get logs to the mill. We would have to float them from one side of the lake to the mill, and then haul them across impassible mud flats much of the time. It would not be possible to build roads across these flats that would support a truck loaded with logs.

The dam would not only force me out of the lumber business but out of the livestock business as well, as I mentioned. The reservoir would cut me off from my grazing lands. As a mill operator and rancher, I would be finished.

I believe the plight I have described is more or less typical of the experiences other residents of the area with prospering businesses would suffer. That is why I am opposed to the construction of either Paradise or Knowles Dams.

ADDITIONAL STATEMENT OF THE COMMITTEE FOR PARADISE DAM

Senator JAMES E. MURRAY,
Chairman, Senate Committee on Interior and Insular Affairs.

DEAR SENATOR MURRAY: The committee for Paradise Dam is grateful that the record of the hearing of December 15 is being kept open for 2 weeks. We are glad to take advantage of the opportunity to file further testimony, to correct certain misstatements made at the hearing, to call attention to certain inconsistencies, and to comment on statements of opinion which we believe are not supportable.

Flood control

Mr. Loman stated there were other ways to avert floods. His "many small upstream dams" proposal was not supported by any engineering studies. The Corps of Engineers 1958 report, Mr. John Walker in "High Dams and Upstream Storage" and a doctoral dissertation the title of which we cannot obtain during the university vacation but will supply immediately after the new term starts, all agree that small headwaters dams for watershed protection do not meet flood control storage needs.

Mr. Corette stated that Mica Creek, Arrowhead Lakes, Mountain Sheep, and Wanapum would furnish the required amount of storage. Mica Creek and Arrowhead Lakes are in Canada. Would Mr. Corette depend on Canada to provide flood control protection for the people of the United States? Mr. Norwood took exception to the assumption that these above-mentioned dams would provide sufficient storage to reduce floods by the required amount. In addition we would like to point out that the Corps of Engineers major water plan states at page 345, "The storage projects selected for the major water plan should be distributed throughout the basin with appropriate consideration of the flood-producing and power-producing characteristics of the various streams, and their undeveloped resource opportunities."

The Clark Ford-Pend Oreille tributary is the second worst contributor to floods, exceeded only by the main stem above the Kootenai and the Kootenai

River, as shown in diagrams by John D. Walker in "High Dams and Upstream Storage" at page 7.

If Mr. Corette's reasoning is considered valid, similar arguments by power companies whose properties are on other tributaries should be given equal weight, and we might end up with no flood control storage. Further, storage is valuable in proportion to its elevation, particularly the developed head through which it falls. All dams mentioned by Mr. Corette are at lower elevations, and so less valuable.

Mrs. Wendell Stephens stated that towns would be rendered inaccessible. Does any one believe the Engineers or the Bureau of Reclamation would leave a town inaccessible?

Mr. McDonald requested that testimony submitted by the Northern Pacific Railway at the March 1959 hearing of the Corps of Engineers be included in the record. May we call attention to the fact that the railroad said at that time that loss of revenue from stations to be flooded would be so great that they would require large payments for damages. Within a week newspapers carried notice that the Northern Pacific had made application to the railroad and public service commission to close the stations at Dixon and Perma. At the hearing held on this petition the reason given for wishing to close the two stations was that they were operating at a loss. The petitions were granted and the stations have been closed for months.

The representative of the Northern Pacific Railway also stated the railroad does not believe power would attract industry to Montana. But the railroad appears to believe water and power are influential in causing industry to locate in Washington, listing them next to "plenty of elbow room" in its ad in Washington State's special advertising supplement in the New York Sunday Times of September 27, 1959.

Incidentally a cursory glance through this supplement reveals that 15 other ads use the drawing power of "pure clean water" and "low-cost power" in their bids for new industry, headed by that of the Washington State Department of Commerce and Economic Development in which power and water top the list.

Mr. McDonald also stated the railroad does not believe a satisfactory railroad could be built in the terrain as proposed by the Corps of Engineers. We merely wish to comment that we have more confidence in the professional competence of engineers. Railroads have been built in equally difficult terrain, and have operated satisfactorily.

Economic feasibility

Mr. Corette stated that either of the proposed projects would operate at a loss. Is his unsupported, less than impartial opinion worthy of consideration, in contrast to the Engineers' figures based on careful study undertaken at the direction of the Congress?

In this connection, we wish to call attention to the fact that a booklet presented to Department of the Interior officials by five Rocky Mountain power companies, which Mr. Corette was instrumental in preparing, was found by a subcommittee of the House Committee on Government Operations to contain many inaccuracies. The subcommittee's report states, as conclusion No. 3:

"The so-called facts set out in the booklet do not furnish an honest or fair picture. The booklet is full of omissions of essential facts, the use of inaccurate or inapplicable data, oversimplification or exaggeration, comparisons of the incomparable, scaremongering, and attempts to undermine confidence in past governmental programs."¹

We request that this subcommittee report be included in these hearings by reference.

Mr. Bessey, an engineer who is acting as our consultant, and who testified on our behalf at the hearing in Missoula, finds Mr. Corette's figures insupportable. Mr. Bessey's comments follow:

"PORTLAND, OREG., December 17, 1959.

"MR. PAUL K. HARLOW,

"President, Committee for Paradise Dam,

"Thompson Falls, Mont.

"DEAR PAUL: With reference to recent conversations in Missoula:

"Inasmuch as many may be misled by the tables submitted by Mr. Corette, of the Montana Power Co., before the Senate committee on December 14, purporting

¹ "Private Electric Utilities' Organized Effort To Influence the Secretary of the Interior," third report by the Committee on Government Operations, Mar. 21, 1957, p. 5.

to show a colossal 'loss' to the United States in the operation of the proposed Paradise project, you may wish to make some presentation of the contradictory facts in your supplementary statement to the committee. If you wish, you may include this letter with your statement, as an appendix or otherwise.

"You may find it desirable in this connection also to refer to testimony of Gus Norwood, which brought out very clearly, in the brief time available to Mr. Norwood, the fallacy of the Montana Power Co. assumptions.

"For convenient reference, the benefit and cost figures submitted by Mr. Corette and the contrasting basic figures of the Corps of Engineers' report are shown in parallel in the tabulation that follows:

"[In thousands of dollars]

"MONTANA POWER CO.		"CORPS OF ENGINEERS	
Annual costs:		Annual costs:	
Interest, at 5 percent.....	19, 264	Interest and amortiza- tion (50 years, 2½ per- cent).....	19, 527
Amortization.....	9, 895	Replacement.....	242
Replacement.....	242	Operation and mainte- nance.....	802
Operation and mainte- nance.....	802	Indian rentals, at \$1.46 per kilowatt.....	---
Indian rentals, at \$1.46 per kilowatt.....	631	Recreation cost.....	14
Recreation cost.....	14	Economic costs, forests..	20
Economic costs, forests..	20		
Total costs	30, 868	Total costs	20, 605
Annual benefits:		Annual benefits:	
Local flood control.....	160	Local flood control.....	160
System flood control.....	419	System flood control.....	3, 941
Power at BPA rate.....	10, 909	Power (value).....	27, 000
Recreation.....	28	Recreation.....	28
Total benefits.....	11, 516	Total benefits.....	31, 129
Annual loss.....	-19, 352	Annual benefits.....	+10, 524

"The Montana Power Co. figures outrageously distort the whole picture by heavily loading the costs and just as heavily cutting the benefits. The very significant distortions are in the power value estimate on the benefit side and in the interest charge on the cost side. The figures are clearly improper as a basis for determining either 'feasibility' (or favorable benefit-cost ratio) or 'profit and loss' over an assumed project life or amortization period.

"In either case, the value of power as a benefit is not a sales price for the power output but an independently arrived-at standard of value of power—usually taken as that of equivalent power from an alternative source. Moreover, as pointed out by Mr. Norwood, it is not a value that applies to the present time but one that would apply to a long period ahead.

"Reference to the corps' report is desirable for the purpose of clarification of their basic assumptions as to such value of power:

"In the study of power values, it is common practice throughout the Nation to base the value on the cost of an equivalent amount of power from the cheapest alternative source. In most areas, the alternative source is steam-electric power. Previous analyses of power values in the Pacific Northwest by the Federal Power Commission have used a composite alternative source which included hydroelectric as well as steam-power projects. However, the values selected for use in this report are based on the more simplified concept of using thermal power as the cheapest alternative source. The specific values used are the estimated steam generation costs made by the Federal Power Commission. As noted in the Federal Power Commission report on "Power Values" included in part 2 of appendix C, there is little difference between values determined by the two methods, based on present cost estimates. * * *

"The analysis of steam cost is based on public non-Federal financing which results in a cost of steam generation nearly as low as with Federal financing. * * * The weighted average of the annual costs for the seven subareas

studied by the Federal Power Commission is \$15.46 per kilowatt of dependable capacity and 3.32 mills per kilowatt-hour of usable energy. * * *

"The system thermal saving is distributed between the storage projects added to the base system in direct proportion to the system contribution each would make as the last project added to the system. The resulting distributed thermal savings as used in the justification ratios are discussed in detail in part 1 of appendix C and are tabulated below:

Project:	<i>'Annual distributed thermal savings</i>	<i>Thousands</i>
Knowles-----		\$19,692
Paradise-----		27,000'

"(The excerpts are from pp. 60 and 67 of the report.)

"It will be noted further that the corps did not compute power value or benefits of its projects on a kilowatt-hour basis as did the power company in its table. The corps took into account future values of both capacity and energy in its study, as noted in the above quotation.

"On the cost side, the interest charge of 5 percent used in the company table has no basis as a Federal cost. The figure of 2½ percent used by the corps is one representing a long-term average cost of money to the Government. To quote the corps' report:

"The cost of money to electric utilities has increased considerably during the past year. In 1956 average interest rates to privately owned electric utilities were about 5.5 percent—such average rates are now estimated at 6.25 percent

"In studies of the Pacific Northwest made in late 1956, weighted average interest rates of the public non-Federal utilities were estimated at 3 percent. Presently rates of 5 percent or higher are being paid by some of the large systems. However, because of the financing methods of this group (i.e., bonds) the long-term outlook is for a lower rate than at present. Estimates herein are based on interest rates of 3.85 percent.

"Federal costs are shown for 2.5 percent interest. Although short-term loans at present are in excess of 3 percent, the Bureau of the Budget has advised that under the provisions of Bureau of the Budget Circular A-47, the interest rate for projects having an economically useful life of longer than 15 years is 2.5 percent as of June 30, 1957. Consequently, 2.5 percent was used for the studies of Federal costs presented in this report.

"(From Appendix C, Power, Part 2, Value of Power from Federal Hydroelectric Developments and Cost of Power From Steam-Electric Plants, p. 3.)'

"Present averages for Federal money cost exceed that used, 2½ percent, by a few tenths of a percentage point. However, it is not believed that we should assume that the present situation of abnormally high rates represents an enduring and well-balanced condition in the economy, or that such high rates— inimical to the development of national resources and expansion of basic social plant—will continue for an indefinite period.

"Interest and interest rate requirements to be applied to Federal development projects have been argued at some length over a considerable period of time—for example, as with reference to reclamation, rural electrification, TVA, and other multiple-purpose development programs. The payment of interest is not required in connection with Federal reclamation projects. In the case of REA the rate was held to a development fostering 2 percent. TVA has returned an interest-cost equivalent to the Treasury without specific requirement; under new revenue bond financial provisions it will return a dividend, on the outstanding Treasury investment, at the average interest rate paid by the Treasury on all of its marketable public obligations. The more general requirement for Federal power projects is for coverage of average interest costs to the Government, as already noted. In view of the bearing of interest policy upon the development of national resources and plant, it is not believed that a good case can be made for charging a higher rate than such costs, and this is not the practice in the analysis of Federal projects and programs.

"Overall then, the power company claim of a billion-dollar loss to the American taxpayer through the Paradise project operation is an absurdity. To the contrary, a very substantial excess of annual benefits over annual costs is a clear prospect. And this is true even without consideration of the very large indirect and intangible economic benefits of the project, of probable excess costs and underestimated benefits in the corps' report, and of a full and non-

wasteful use of national resources, already dwelt upon by other witnesses and myself.

"As though the distortions with reference to power value and interest were not enough, the power company table uses \$419,000 rather than \$3,941,000 as the flood control benefit. The former figure is based on the assumption that the Paradise project would be carried out subsequent to the basic flood control plan. The company similarly reduced the Knowles figure in its other table. These are unwarranted assumptions on the part of the company since Knowles was presented as a unit in the basic plan and Paradise is its alternative.

"As an ironic 'switch' it would be interesting if the Montana Power Co. would apply its BPA power-rate values in a feasibility or profit-and-loss analysis of its own Buffalo Rapids projects. The results would be certain and obvious: feasibility would not be remotely approached and the losses to the people—in excess power costs, in power unused, and in economic development and activity foregone—would be real and enormous.

"Sincerely,

"ROY F. BESSEY, *Consultant.*"

Displaced persons

Much was made of the unfairness of the way in which displaced persons have been treated by the Government. It invariably happens, when the general welfare requires condemnation of land, that some of the people who are displaced will be dissatisfied. This is true also when private utilities exercise the right of eminent domain.

"When the Government permitted the Montana Power Co. to build a dam on Flathead Lake they flooded a lot of land and caused a great deal of difficulty for the farmers, and there are a great many lawsuits pending" (Senator Burton K. Wheeler, at hearing on Hungry Horse Dam project, H.R. 3470, Feb. 1-4, 1944, at p. 12).

It is to be noted that Kerr Dam was licensed in the early thirties, so that these lawsuits had apparently dragged on for nearly a decade.

Inaccuracies in testimony and behalf of Northern Pacific

Mr. Haw, a retired Northern Pacific employee, identifying himself as speaking at the request of the railroad, said that S. 1226 would turn the project over to a department of Government which has neither investigated nor recommended the project.

Apparently Mr. Haw was ignorant of the fact that the Department of the Interior had made a study of the Columbia River, printed as House Document 473, 81st Congress, 2d session, February 1950.

Also the director of region 1 of the Bureau of Reclamation made a special report to the Secretary, "Multiple-Purpose Storage Possibilities—Clark Fork Basin," from which the following are quoted:

"In the coordinated, comprehensive plan for development of the Columbia River Basin, developed by the latter agencies (the Bureau and the corps) and embodied in the agreement signed by the Secretaries of the Interior and the Army in April 1949,² the superior storage sites singled out in the Clark Fork Basin were those known as Paradise on the Clark Fork River and Glacier View on the North Fork of the Flathead River. * * *

"The Paradise site presents the best opportunity, all things considered, for obtaining in the Clark Fork Basin multiple-purpose storage required for power and flood control purposes in the Columbia Basin.

"Of the sites listed, Paradise is outstandingly the most desirable from physical and cost standpoints.

"As in the case of the other relatively small storage possibilities, it is to be expected that, even if further exploration shows the sites to be physically satisfactory, the costs per acre-foot of storage will be high in comparison with those at the Paradise and Glacier View sites.

"Extensive investigations have revealed no site as satisfactory as that at Paradise.

"Conclusion No. 4: No substitute for large-scale storage development at or near the Paradise site is available * * *. Moreover, the average unit cost of storage at sites other than Paradise would be far greater, and proposals for its development would be attended, in many instances, with equal or greater economic displacement and objection.

² It should be noted this was the year after the Corps of Engineers had dropped the Paradise project.

"Recommendations: No. 1. The Paradise site be reconsidered with a view to early resolution of problems involved in the use of the site and its development at the earliest practicable time."

Mr. Haw mentioned a joint memorial introduced in the Montana State Legislature in 1957. He said it was defeated. The fact is that it was never put to a vote. Mr. Haw did not mention the fact that a Paradise memorial was introduced in 1959 and was passed.

Mr. Haw said, and we believe this is an accurate quotation, "We know of no area suitable for irrigated land except in the imagination of the proponents of the dams."

We wish to call attention to the fact that in a 1956 special report, the Bureau of Reclamation stated:

"* * * 321,400 acres in this category (arable land now dry) may be considered worthy of consideration for possible irrigation development at this time."

It is not necessary that such land be below the dam for gravity flow. With cheap power water can be pumped, as at Grand Coulee.

Mr. Haw stated the number of opponents of S. 1226 is increasing. His statement was unsupported. We believe we supplied evidence that he is in error.

Potential new industry

Both Mr. Corette and Mr. Haw said industry was unlikely to be attracted to a dam at Paradise or Knowles, calling attention to the fact no industry has located at Canyon Ferry. Mr. Corette should know the reason for this better than anyone else. Canyon Ferry is often referred to as Montana Power Co.'s captive dam. The company has the sole transmission line. Without competition it buys at a low rate and sells at a high rate at its established market at more distant points.

The fact that the aluminum industry now needs a 2-mill per kilowatt-hour differential to locate in the Northwest, because of distance from markets and high freight rates, was cited as a reason industry could not be expected to locate near the project. Aluminum is not the only possible industry. There are vast deposits of phosphate ores in the region. Phosphate rock mined in the Clark Fork Valley is now being shipped to Trail, British Columbia, for processing. With cheap power it could be processed here, as Victor Chemical is now doing in Silver Bow County with cheap Bonneville power.

Bonneville Power Administration's advance program for 1957-58 mentions titanium, zirconium, ferroalloys, and magnesium among potential new industries, as well as expansion in existing industry. Bernard Goldhammer, in "High Dams and Upstream Storage" goes into considerable detail as to the increases expected in various industries by 1980. With low-cost power from Paradise Dam, Montana could share in this growth.

It is to be noted that the same prediction that industry would not use the power generated at Federal dams has been made by private utilities from TVA to Hungry Horse.

We of the committee for Paradise Dam are not so pessimistic about the future. We have no doubt that our greatest resource, the brains of our people, will go on creating new machines and materials and inventing processes to produce them, and that these new techniques will continue to use low cost, labor saving power in ever larger amounts where it is available.

Use of power and rates

Mr. Corette stated that Montana Power "has and will continue to have plenty of power."

Mr. Corette made a very similar statement at hearings on Hungry Horse. At that time people in positions to know the facts did not agree with him. For example, Senator Murray said at a hearing in 1944:

"It seems to me that some development should be undertaken beneficial to our State. For some time we have found there is a shortage of power in Montana at different periods.³

"In the last 4 or 5 years we have frequently had shortages of power."⁴ Governor Sam Ford was of the same opinion.

"There is a shortage of power in northwestern Montana. * * * If there is any surplus after we get through providing the municipalities, there is irrigation, pumping, and rural electrification. I have no objection to the Montana

³ Hearing on H.R. 3570, Hungry Horse project, Feb. 1-4, 1944, at p. 16.

⁴ *Ibid.*, at p. 66.

Power Co. buying it provided we control the resale price and not permit them to benefit at the expense of the Government or at the expense of the consumer.⁵

At the present time Montana Power Co. does not seem able or willing to supply the REA's in the vicinity of Yellowstone.

Mr. Corette's statement that Montana Power Co. has and will continue to have plenty of power should be considered in light of the fact that residential use is less than half of what it is in the Pacific Northwest, and that Montana has relatively little industry.

Residential use, Montana, 1957-----¹ 3, 164
 Residential use, Pacific Northwest-----² 8, 500

¹ Great Falls Tribune, Feb. 11, 1958, news story: Statement attributed to Corette and J. W. McAfee, president of Edison Electric Institute.

² Figure is higher than that of FPC for 1957.

³ B.P.A. advance program, 1957-58, at p. 6.

Why is domestic consumption in Montana less than half of what it is in other States of the Northwest? We submit that it is because of a shortage of low cost power. While the only power available to the 70 percent of the State which Mr. Corette stated his company serves, is high cost power, use will be limited and his company may not be able to sell all it generates.

We wish also to comment on Mr. Corette's statement that his company is one of the lowest cost suppliers of power in the Nation. The Federal Power Commission's "Typical Electric Bills, Residential, Commercial, Industrial, 1959" indicate that this statement is questionable with reference to residential use. While Montana Power Co.'s industrial rates are under those for many States they are high compared with those in States where electricity is generated from falling water as in Washington and Oregon, Tennessee, or Niagara Mohawk at Buffalo and Niagara Falls, N.Y. We wish to raise the question whether, were Montana Power Co.'s rates in line with those of other generators of hydro-power, its "surplus" might not soon turn into a deficiency.

Future increase in consumption

Bonneville Power Administration estimates future needs, as printed in its Advance Program 1957-58, to be:

[Billion kilowatt-hours]

	1957	1968
Domestic-----	11	23
Commercial-----	4	9
Industrial-----	42	80

The industrial figure excludes "potential industrial developments." The annual rate of increase is said to be about 6 percent. Adding potential industrial loads the rate of growth would be about 7 percent. Electrical World, a utility industry publication, estimates the load growth for the entire United States at 8 percent.

In the news release previously cited Montana Power Co.'s production was stated to have risen 2.5 percent in 1957 over the previous year. The addition of Cochrance Dam would doubtless increase this rate. However we question whether the 35,000 kilowatt-hours increase at Thompson Falls, for which application has been made, is at all adequate to keep pace with future needs.⁶

Mr. Corette stated that Bonneville Power Administration is "overbuilt," that it has a surplus of power at present, and concluded this was a reason a Federal dam was not needed on the Clark Fork. He did not mention that the surplus is not expected to last, and that by 1963-65 a shortage is anticipated. Does Mr. Corette believe we should wait until a shortage exists before planning expansion? Adding the years necessary for securing authorization and appropriation to those required for planning and construction, a start should have been made before this if Paradise is to relieve the anticipated shortage of the sixties.

⁵ Hearing on H.R. 3123, Interior Department appropriation bill, for 1948, at p. 720.

⁶ Ronan Pioneer, Jan. 15, 1959. News story attributed to J. E. Corette.

Opponents inconsistent

A basic inconsistency between opponents of S. 1226 should be stressed. While Mr. Corette said the dam was not needed, because there is an oversupply of power, former Governor Bonner complained because the bill does not reserve enough power for use in Montana.

Taxes

Mr. Corette stated he anticipated the dams his company proposes to build at Buffalo Rapids sites 2 and 4, would be taxed at about \$620,000. This gives a basis for comparison of the effects of private utility and Federal dams on county operations.

It may be worth questioning whether Mr. Corette would be willing to pay a tax of \$620,000 in view of the fact that Washington Water Power pays only \$235,919.95 on its 400,000 kilowatt Noxon Rapids Dam.

Anaconda Aluminum, just one of the industries attracted to Flathead County by low-cost Hungry Horse power, pays over \$700,000 in taxes. In addition, there has been expansion of the lumbering industry. A number of new homes have been built and trades and services expanded, which also increase taxes paid to the county. An Anaconda Aluminum uses roughly one-half the power attributable to Hungry Horse.

Paradise would be equal to two Hungry Horse Dams. With a reservation of power for use in Montana as provided in S. 1226 the taxes paid by users of that power could reasonably be expected to be proportionately larger. Since Montana Power Co.'s high-priced power has not attracted industry in the past it is reasonable to assume it would not do so in the future. The public dam, therefore, could be expected to produce more in the way of taxes to the local taxing bodies of the counties involved.

A number of opponents of S. 1226 spoke of public dams as a burden on the taxpayer. As Congressmen know, and as an increasing number of the people know, this is not true, and no matter how many times it is repeated in hearings or printed in expensive advertising, it will never be true. The cost attributable to power at any Federal dam is paid for by consumers of the power. The cost of private utility dams is also paid for by consumers of the power, less the amount which must be made up by taxpayers under the liberalized depreciation program.

Water rights

Mr. Murphy made statements to the effect that S. 1226 would permit downstream States to acquire prior rights to use our water which could "deprive us of use of a single gallon," and that after being contracted downstream, power could not be recalled for use in Montana.

We believe Mr. Murphy's fears are groundless and that the rights of Montanans to beneficial use of the water are sufficiently protected. However we would have no objection to the addition of an amendment: "Nothing in this act shall interfere with rights to consumptive use of water in Montana."

We wish to point out the fact that while Mr. Murphy strenuously opposed the building of the Paradise or Knowles projects, he approved Glacier View Dam, and did not appear to fear loss of water rights for Montana as a consequence of its construction.

Productivity of the pool area

The statement of a representative of the Reclamation Association that western Montana would be made "one vast storage lake" is preposterous. The area of the Paradise pool would equal five-tenths of 1 percent of the basin above Plains. If all nonduplicating storage dams in all three of the engineers' alternative plans were built, their total area would be seven-tenths of 1 percent of the basin above Plains.

This would not be worth mentioning except to compare the productivity of this very small area as it is now used for agriculture, with its productivity if used for water storage under S. 1226, using the Paradise project as an example. Since towns, railroads, pipelines, and powerlines are to be moved and will continue to function in their new location as in the past, only the income from the flooded land is considered.

	Lake	Sanders	Mineral
Cash receipts per farm ¹	\$4, 113	\$3, 922	\$2, 567
Average size of farm ² (acres).....	278	839	393
Cash receipts per acre, gross.....	\$14.79	\$4.67	\$6.53

	Paradise
Annual accomplishments ³	\$31, 129, 000
Less annual costs including interest and amortization ⁴	20, 604, 800
Annual net income.....	10, 524, 200
Reservoir area ⁴ (acres).....	66, 130
Income per acre flooded.....	\$159.14

¹ Montana Almanac 1959-60, p. 215. Source, USDA Agricultural Marketing Service.

² Ibid., p. 214. Source, USDC Census of Agriculture, 1954.

³ "Water Resource Development: Columbia River Basin," U.S. Army Engineer Division, June 1958, p. 189.

⁴ Ibid., p. 184.

It must be remembered that this comparison is between gross income from agriculture and net income from water storage. If costs of farming were deducted, taxes, water for irrigated land, labor, etc., the contrast would be even more extreme.

If raising our national productivity is important both from the standpoint of our own standard of living and of our position with relation to other nations, we believe this tremendous increase in productivity of the project area should be given due weight in considering this bill.

In how many places in the Nation could annual income be multiplied so many times by application of capital, coupled with change of use? This is not like changing the use of a vacant lot by building a factory on it, thereby increasing its productivity. A factory could be built on any one of many vacant tracts of land, while in the entire Columbia Basin within the United States there are only two other comparable storage sites, Libby and Nez Perce. Libby is stalled until the United States and Canada can come to agreement on payment for upstream storage benefits. Nez Perce must await solution of the problem of fish migration. Paradise, at the highest elevation of all, is here, ready and waiting. Its construction should be begun at the earliest date.

Again, we wish to express our thanks for this opportunity to submit additional testimony.

Respectfully,

PAUL K. HARLOW,
President, Committee for Paradise Dam.

—————
 PETITION SIGNED IN THE HEARING ROOM DECEMBER 15, 1959

Senators GRUENING and MARTIN :

Since time does not permit us to be heard individually, we take this way to testify, by our attendance at our own expense and on our own time, in support of S. 1226. We wish to thank you for coming here so the people most concerned may appear.

Regarding choice of site, we believe we should invest in the best, not necessarily the cheapest, for maximum benefits for all of the people of our generation and the generations to come.

(One hundred and forty-one individuals signed the above petition. The names are on file with the committee.)

HOUSE OF REPRESENTATIVES
OF THE STATE OF MONTANA,
Ronan, Mont., December 29, 1959.

Senator JAMES E. MURRAY,
*Chairman, Senate Committee on Interior and Insular Affairs,
Senate Office Building, Washington, D.C.:*

Enclosed find petition blanks, letters, and a copy of an editorial from the Daily Missoulian, Missoula, Mont., dated December 15, 1959, all of which have been given me with the request that they be forwarded to you for inclusion in the hearing record on S. 1226, which hearing was held in Missoula, Mont., December 15, 1959.

Sincerely,

RAY M. LOMAN.

[From the Daily Missoulian, Dec. 15, 1959]

LET US REASON TOGETHER ON LATEST DAM PROPOSAL

Missoula is host today to a small fragment of the Senate Committee on Interior and Insular Affairs.

These gentlemen are here for another of a long series of hearings on the proposal to build a Paradise or Knowles Dam.

There are many questions that it is proper to raise. Some proponents talk of the project as a combination one for flood control and generating power. Can a power dam be very effective in flood control? Is there a need for more power at this time? If not, wouldn't it be well for the heavily indebted Federal Government to use its resources to meet more pressing needs? Wouldn't it be well to "go easy" until Montana's water rights are more clearly defined?

What happens to this bill S. 1226 is of vital importance to the people of western Montana. It is unfortunate that Montana's senior Senator, James E. Murray, did not find it possible to be here. He is the bill's chief sponsor and chairman of the committee conducting the hearing.

To the countless Montanans who have repeatedly rallied to protect their communities against Paradise-Knowles Dam schemes since such hearings were started at Hot Springs in 1948, a sixth today seems a needless irritant.

But let us brush such thoughts aside and reason together on the merits of the major aspects involved.

POWER SURPLUS IN NORTHWEST

In Montana, the use of electric power is increasing. But the consistent program of keeping supply well ahead of demand is widely recognized as adequate.

Is there a power shortage in the Pacific Northwest? Emphatically no, says Dr. William A. Pearl, head of the Bonneville Power Administration. His agency handles the marketing of all public power in the Northwest.

On November 12 of this year, only a month and 3 days ago, he told consumers at Seattle: "The Bonneville Power Administration has power running out of its ears."

He added that BPA expects a surplus of 864,000 kilowatts this winter. That nearly equals the capacity of the Grand Coulee Dam, the largest single producer of hydroelectric power in the United States.

The Northwest power surplus is attributable to the construction programs of recent years of both private and public agencies.

The surplus is likely to get bigger before it gets smaller, Dr. Pearl told the 2-day gathering of consumers. He predicted there would be ample power for all needs to the winter of 1964, even under adverse conditions.

Dr. Pearl thus deflates the major contention on behalf of an immediate Paradise or Knowles Dam, namely to help meet an urgent power shortage.

FLOOD CONTROL

Flood control is another argument advanced for Paradise-Knowles.

The Independent Record of Helena on November 30 editorially advocated this dam, and others at Montana sites not specified, as multipurpose structures—to generate electric power and for flood control.

If the scholarly and usually well-informed editor of the Independent Record will delve a little deeper into the matter, we believe he will conclude his views on this subject should be revised.

For maximum generation of power, all water possible must be retained back of such dams as the proposed one at Knowles or Paradise.

This practice must be modified if flood control is the prime objective. For that purpose, before flood periods the reservoir is drained—so that it may arrest the maximum of floodwaters.

In addition, the place for the most effective flood control dams is on headwater streams, up in the mountains.

Water is most easily controlled where it falls, as rain or snow.

In biblical times, residents of the Euphrates and Tigris valleys were masters of that. Much water was held back by ground cover—forests and grass. There were irrigation dams in the valleys.

But in time those long-ago middle easterners became careless, and overgrazed and deforested the headwaters land to such an extent that there was no longer adequate flood control ground cover. The result was floods which devastated the once fertile valleys.

To a considerable extent we have had that experience in the United States, but have reversed the trend with sustained yield programs for forests, both publicly and privately owned. No longer are timberlands being denuded and left bare to any great extent. Instead there is selective cutting, and annual planting, so that forests are everbearing.

Correspondingly progressive practices in grazing are increasingly the rule.

The best place for flood control dams is on headwater streams, so that they may team with nature for maximum results.

But no one should hold out that man can bring the millennium. Always he is at the mercy of his Maker. And until the Day of Judgment we may expect occasional acts of God in the form of earthquakes, tornadoes, and floods of such devastating proportions that they mock man and his best laid but comparatively puny plans.

We should bear in mind, always, that we live and labor in the palm of the Creator's hand.

WATER RIGHTS

For the last several years, the water rights of Montana and other States have been very clouded.

The U.S. Supreme Court is responsible for that. It held, in 1940, that the commerce clause of the Constitution—giving the Federal Government control over navigable streams—also applied to nonnavigable streams that might be made navigable and to tributaries flowing into navigable rivers.

In 1955, in the *Pelton Dam* case, the Supreme Court went further. It held that the Federal Power Commission had a right to license a power company to build a dam after the State of Oregon had refused to do so. The State thought it had control, since the matter of navigation was not at issue. The court held that the Federal Government had control because it owned the land and had reserved it for use as a power site.

Said Justice William O. Douglas in dissenting:

"In the West, the United States owns a vast amount of land. If by mere executive action the Federal lands may be reserved and all the water rights * * * returned to the United States, vast dislocations in the economics of the Western States may follow."

A concerted effort is underway for a congressional redefinition of Federal-State water relations. Legislation to specifically nullify effects of the *Pelton Dam* case has the support of the Departments of Interior and Justice, and of the National Reclamation Association. This year legislatures of 19 States called upon Congress to enact legislation returning to the States their supremacy over water rights.

Giving utmost support to such efforts would be one way the Montana congressional delegation could effectively encourage economic development, primarily in the State of Montana but also in the rest of the Northwest. That is one of the stated objectives of S. 1226, the subject of today's hearing in Missoula.

There is grave danger that we Montanans would be surrendering our water rights to downstream interests if a Paradise or Knowles Dam is built. If industry should build downstream plants dependent upon power generated from water stored behind a Paradise (Knowles) Dam, before we establish uses for the water, the downstream users would have prior right to our water.

INDIANS

In the 1890's the Flathead Indians were driven from their longtime homes in the Bitter Root Valley to the new Flathead Reservation. Are we now to persecute them further? A few days ago their tribal council voted unanimous opposition to any downstream dam that may affect our resources, and particularly the proposed dams at the Knowles or Paradise sites. * * *

Chairman Walter McDonald of the tribal council said the S. 1226 proposal would drown out forever two practical and desirable power sites, Buffalo No. 2 and Buffalo No. 4, on the Flathead River. We want to develop these sites for the best long-range advantage of the Flathead Indians. * * *

Is there any compelling reason why our good friends, the Flatheads, should not be allowed to do so?

RECREATION

Dam advocates stress that a lake created by Paradise or Knowles would be a fine recreational site. Would it, if the dam were used to the best advantage for its primary purpose, the generation of hydroelectric power?

Paradise would have a draw down of 80 feet. If the water is to be used when and as needed for the generation of power, that means that at times the water would be 80 feet below its maximum level. Would you wish to build a cabin along such a mud bank?

It might be argued that Flathead Lake is extensively used for recreational purposes, and also for power generation—so why not Paradise?

A decided difference is that Flathead is a natural lake, close to the largest in the country if the Great Lakes are excepted. With it, power generation is a comparatively minor incidental, under the stipulation that the water level shall never vary more than 10 feet.

If Paradise or Knowles were built at tremendous expense, would the taxpayers wish to place such a restriction upon the primary purpose of its construction—the generation of hydroelectric power? It is argued that the lowering of the lake could be delayed until the recreational season is over. But suppose the power is needed in the middle of the summer? Should water be denied for its generation?

With all of the fine natural lakes in western Montana that are readily accessible for recreational purposes, do we want to tax ourselves to create a costly manmade one at Knowles or Paradise?

WHAT WOULD THIS DAM DO?

It would provide more electric power, of which the Bonneville Power Administration chief says there will be a surplus for at least half a decade.

What else?

It would inundate a number of towns and thousands of acres of highly developed, intensively cultivated farm. Do we want that?

Is the flooding and replacement of many miles of highway and railway systems either necessary or desirable? There is nothing in Dr. Pearl's BPA statement of last month to so indicate.

WHAT SHALL WE DO?

If the public money it is proposed to sink in either a Paradise or Knowles Dam at this time must be spent, aren't there other things more needed?

Public money comes from taxes, paid by all of us, you and me.

We have both a right and a duty to inform ourselves whether our tax money is being spent wisely—and to protest if we think it isn't.

Why not defer such projects as Knowles-Paradise until there is a sound reason for them?

The saving, which could be considerable, might well be applied to either balancing Uncle Sam's bloated budget or making a dent in the appallingly huge national debt. Action along that line would form a sound basis for tax reduction—a universal desire.

PETITION

To HON. JAMES E. MURRAY,
Chairman, U.S. Senate Interior and Insular Affairs Committee:

We, the undersigned, are opposed to S. 1226, 1st session, 86th Congress, relating to the Knowles-Paradise Dam project.

(Nine hundred and seventy-one individuals signed the foregoing petition. The names are on file with the committee.)

PETITION OF 20 MISSOULA RESIDENTS

DECEMBER 14, 1959.

CORPS OF ENGINEERS,
Washington, D.C.

SIRS: We strongly oppose the construction of Paradise Dam or any similar project in western Montana. We feel that the major benefits are downstream in other States. Whereas the major disadvantages—reduced tax base, loss of farm and recreational land, and fluctuating-level reservoir—are in Montana.

Respectfully yours,

Mrs. OLIVER M. LEE.

(The above petition was signed by 20 individuals. The names are on file with the committee.)

PETITION OF SIX ST. REGIS RESIDENTS

We, the undersigned residents of St. Regis, Mont., wish to oppose the construction of the Paradise or Knowles Dam. Also we oppose Senate bill No. 1226.

(The above petition was signed by six individuals. The names are on file with the committee.)

MONTANA COOPERATIVE WILDLIFE RESEARCH UNIT,
MONTANA STATE UNIVERSITY,
Missoula, Mont., December 22, 1959.

Senator JAMES E. MURRAY,
The U.S. Senate, Washington, D.C.

DEAR SENATOR MURRAY: I attended the Senate hearings on the Knowles Dam project at Missoula December 15, 1959.

I prepared a personal statement urging the classification of our major streams and rivers in western Montana with regard to present and future recreation values. I did not present this testimony, believing that it was in the general interest to withhold it and attempt to get the Western Montana Fish & Game Association to go on record with a statement along the lines I had drawn up. They were prepared to go on record as opposed to Paradise Dam.

At the present time it looks very much as though the association will make a statement urging constructive resource management and the classification of our rivers and streams for recreation purposes, and will not stand opposed to Paradise Dam. If this is accomplished, it will mean a great deal. The decision on this will be made in another week, and a statement will be forwarded to you to be placed in the record of the hearings.

I personally, however, would like to go on record as endorsing the statements of the Wilderness Society and the National Wildlife Federation. Copies of these statements are enclosed.

Very sincerely,

JOHN J. CRAIGHEAD, *Leader.*

WATER STORAGE NEEDS AND WILDERNESS IN THE COLUMBIA RIVER BASIN

The executive committee of the Wilderness Society, having reviewed water storage needs and various proposals for dams in the Columbia River system, adopted the following policy on February 13, 1958:

Projects for construction have been considered in relationship to their impact upon areas of wilderness and other undeveloped country on several of the Columbia River tributaries. It is recognized that in striving for the preservation of these wild areas, it will be necessary to meet the needs for water storage at other sites which do not encroach upon lands that have been dedicated to wilderness uses or upon other areas of high scenic or recreational value. A sound overall program for developing the water resources of this

region should be consistent with and include the preservation of these outdoor resources.

Following a thorough consideration of all the values involved, a sound appraisal from an overall point of view should be made of any project proposed for construction within the Columbia River system. The society will contribute, within the limitations of its resources, to the study and appraisal of each of the proposed dams to determine its effects upon the fish, wildlife, and other wilderness resources of the Northwest. Such appraisals should be designed to facilitate the selection of alternatives to harmful upriver impoundments without jeopardizing the irreplaceable recreational resources of this region. Surveys and studies should be made by all the appropriate Government agencies involved and made available for public consideration.

The society will actively oppose not only any dams in dedicated areas of wilderness but also any proposals for authorization of dams at sites where complete studies of the impact of these projects upon wilderness, wildlife, and other recreational resources have not been completed by all appropriate agencies or where recommendations resulting from these studies have not been made available for full consideration by the public.

Evidence now available indicates that several of the dams currently proposed for construction within the Columbia drainage would seriously encroach upon areas having unique scenic, wilderness, and wildlife assets.

Such dams include Glacier View, which would flood western portions of Glacier National Park; the Penny Cliffs project, which would back water for 6 miles into the Selway-Bitterroot Primitive Area; the Crevice impoundment, which would inundate wild sections of the Salmon River Gorge within both the Selway-Bitterroot and Idaho Primitive Areas; and the following proposed dams at valuable wildland sites not included in specially designated areas of wilderness: Spruce Park on the Middle Fork of the Flathead River in Montana; Long Meadows on the Yaak River in Montana; Ninemile Prairie on the Blackfoot River in Montana; Bruces Eddy on the North Fork of the Clearwater River in Idaho; Nez Perce on the Snake River in Idaho and Oregon; Lower Canyon and Freedom on the Salmon River in Idaho; Wenaha on the Grande Ronde River in Oregon; and Narrows on the upper Snake River in Wyoming.

In order to satisfy current requirements for water storage there are other projects which do not necessitate sacrifices of irreplaceable outdoor values, such as those in wild and other undeveloped areas. From information available at this time some of the dams currently proposed for construction appear to involve only minor losses to outdoor recreational resources. Because of their locations at downstream sites, Paradise on the Clark Fork River in Montana, Libby on the Kootenai River in Montana, and High Hells Canyon on the Snake River in Idaho and Oregon afford maximum flood control and hydroelectric power potentials without serious encroachment upon areas of outstanding recreational value. Other proposed dams that might be considered include Pleasant Valley, or a combination of Pleasant Valley and Mountain Sheep on the Snake River in Idaho and Oregon.

The staff of the Wilderness Society is instructed to cooperate with other conservation groups in studying the various projects which have been and may be proposed for construction in the Columbia Basin, and in counsel with the executive committee of the Wilderness Society, to formulate statements on the position to be taken by the society on each of these dams as they may relate, either directly or indirectly, to the protection of recreational values. The society will also endeavor to work in fullest cooperation with other conservation groups to obtain general agreement on the positions that may be taken on these various proposals in the light of recreational, hydroelectric power, water storage, and general long-range economic needs of the region.

A STATEMENT OF POLICY OF THE NATIONAL WILDLIFE FEDERATION ON THE COLUMBIA RIVER BASIN

The Columbia River Basin of North America is uniquely blessed in the variety and richness of its natural resources. Its torrents, collected in farflung tributaries from the high and forested slopes of the Rocky Mountains and the Cascades, pour 180 million acre-feet annually in a rapid drop to the Pacific Ocean, making this river system potentially one of the world's richest sources of hydroelectric power, a potentiality at present only partially developed. It supports

many and fertile irrigation projects, supplies water for great and growing cities, spins the wheels of booming industry.

The abundance of its wildlife and its fisheries have become a verified legend, told and retold around the world since the explorers Lewis and Clark first beheld the wonders of this great river some 15 decades ago.

Although greatly reduced and cut off from more than 60 percent of their original spawning area by manmade obstructions, the Columbia's anadromous fishes still support a major industry, yielding an annual harvest of more than 31 million pounds to commercial and sport fishermen, a harvest valued at \$20 million annually. Some 15,000 persons are engaged in commercial fishing for Columbia River salmon, and more than half a million sportsmen find recreation in its salmon and steelhead runs.

The forested watersheds and headwater valleys are the summer and winter ranges of the Nation's greatest herds of elk, major herds of mule and whitetail deer, mountain sheep, goats, and other big game. These are resources providing sport and tourist attractions worth millions of dollars to local business and service establishments.

Within this great basin of infinitely varied landscape and fascinating wildlife abundance lie all or parts of three national parks—Glacier, Yellowstone, and Grand Teton. Within the national forests that protect its mountainous watersheds are 11 wilderness and primitive areas and several wild areas, all adding to the commercial tourist trade but providing recreational, scientific, and esthetic resources of inestimable value to the people of the whole Nation, resources whose worth can never be adequately measured in terms of dollars and cents.

If properly developed to utilize the energy of its falling waters, to manage its renewable resources on a sustained yield basis, and at the same time to save the best of its great scenic and wilderness attractions, the Columbia Basin can add immeasurably and permanently to the national security and to the economic and social welfare of all Americans. It is a challenge and a call to the best of American planning genius. But to date we are not getting that kind of planning.

Instead, the political warfare of opposing ideologies, notably public power versus private power, and the sniping and backstabbing of conflicting special interests, threaten to turn the pattern of basin development into a crazy quilt of damaged resources, botched damsites, and missed opportunities. Here we find State pitted against State; Federal agencies against other Federal agencies and against State authority; private interest against public interest; and even nation against nation (United States and Canada).

The National Wildlife Federation calls upon the interested States and Federal agencies and the leaders of Congress to quit the political bickering, to abandon the shortsighted and selfish playing of special interest against special interest, and to work toward unified and comprehensive planning, with adequate consideration of all resource values in the long-range public interest. With respect to such comprehensive planning, the Federation asserts the following principles:

1. Any reservoirs constructed for hydroelectric power, flood control, irrigation, or for multiple purposes, should be designed for maximum storage and maximum utilization of the resource potential of the site.

2. Complete and comprehensive studies of the effects of any proposed dams upon fish, wildlife, wilderness, and other recreational resources should be conducted by appropriate agencies and made available for full public consideration before initiation of the project. Such studies should be completed in advance of consideration of congressional authorizations and appropriations or in the case of private dams before the Federal Power Commission makes its determinations on license applications for a project. The National Wildlife Federation will oppose any proposal for a dam where such procedure has not been followed.

3. Until such time as new fish-passage devices and techniques have been discovered and proven to be effective in surmounting the deleterious effects now caused by dams on fish migrations, any new reservoirs authorized or constructed in the Columbia Basin should be confined to the undeveloped reaches and tributaries already closed to anadromous fishes by existing and natural barriers. The federation points out that tremendous flood-control and hydroelectric potentials remain undeveloped in reaches of the river system where salmon have already been totally or practically eliminated, as in the vast reaches above Grand Coulee.

4. Research should be speeded up on problems relating to the effect of dams on fish migrations and on ways to overcome those problems.

5. Tributaries now relatively open to migrations of anadromous fish and presently supporting important percentages of the remaining salmon and steelhead fisheries of the Columbia Basin, or which have high fish-producing potentials, should be kept open. These include the Salmon River and tributaries, North and Middle Forks of the Clearwater, the Imnaha, Grande Ronde and other lower Snake tributaries. The federation opposes the construction of lower Monumental, Little Goose, lower Granite, lower Canyon or other proposed dams on the lower Snake and Salmon Rivers, because each such project, while of comparatively low head, would progressively delay and deplete the migrations of salmon to major spawning areas and similarly would progressively deplete downstream migrants. Any high dam at the Nez Perce site will be vigorously opposed.

6. The Columbia Fish Sanctuary program, as proposed and endorsed by interested Federal and State agencies and approved by the Legislatures of Washington and Oregon, should be respected, developed, and maintained in good faith by the Congress and executive agencies of the United States, by the Federal Power Commission, and by the States.

7. Future reservoir construction should avoid sites that would invade national parks and wilderness areas or despoil outstanding scenic values. Standing on this principle, the federation will vigorously oppose Glacier View Dam proposed on the Flathead River in Montana, Penny Cliffs Dam proposed on the Middle Fork of the Clearwater in Idaho, and Crevice Dam on the Salmon River in Idaho.

8. Future reservoir construction should avoid sites that would flood out natural winter ranges of important big-game herds. On this basis the federation stands opposed to dams at the Bruces Eddy and Penny Cliffs sites in Idaho, at Spruce Park in Montana, and the proposed Narrows Reservoir in Wyoming.

9. Projects which would yield important benefits in the public interest, while avoiding destructive and offsetting effects upon other resources values, should be granted high priority and scheduled for early development. In this respect, and on the basis of incomplete engineering studies of the site, the federation favors construction of a high or low dam at the Pleasant Valley site, together with a dam at the Mountain Sheep site or at dams which will allow maximum practicable development of the main stem of the Middle Snake River above the mouth of the Salmon River. The federation also calls upon the Canadian-American International Joint Commission to press negotiations, in good faith and with constructive determination, for the purpose of reaching early agreement on planning for construction of the international Libby Dam No. 2 on the Kootenai River; and for projects at other favorable sites on the upper Columbia River and tributaries in Canada.

MONTANA STATE UNIVERSITY,
DEPARTMENT OF CHEMISTRY,
Missoula, December 23, 1959.

Senator JAMES E. MURRAY,
Chairman, Committee on Interior and Insular Affairs,
U.S. Senate, Washington, D.C.

DEAR SENATOR MURRAY: I am writing to you on behalf of the Western Montana Fish & Game Association and enclosing a copy of a policy recently adopted by the executive board of that association relating to water use and conservation.

The Western Montana Fish & Game Association did not make a statement at the recent congressional committee hearing on Paradise and Knowles Dams in Missoula. We do wish to have the enclosed policy made a part of the record concerning the proposals to build one of these dams. We would also appreciate it if you would see that a copy is given to any of the necessary committee members. I am sending one copy to each of the Senators who presided at the Missoula hearing, Senators Gruening and Martin.

I would like to point out to you that this represents a statement of positive policy. We have felt for some time that the association could not go on voicing opposition to all dams—that in order to demonstrate any thinking toward the future and concern with the overall development of our section of the country we must develop some positive statement of policy of what we are for.

We are hoping to press for the adoption of some sort of general policy such as this by the Montana Wildlife Federation in the near future.

I would very much appreciate hearing any comments which you might have in connection with the enclosed statement. I am also sending a copy to both Senator Mansfield and Representative Metcalf.

Very truly yours,

JOHN M. STEWART,
Chairman, Basin Projects Committee, Western Montana Fish & Game Association.

WESTERN MONTANA FISH & GAME ASSOCIATION POLICY FOR WATER USE AND CONSERVATION FOR WESTERN MONTANA

It has become increasingly apparent to those interested in any phase of the potential uses and conservation of the waters of western Montana that in order to provide for the best possible management of these waters and to safeguard the basic interests of the State of Montana as well as the general public, a broad, carefully studied policy covering all phases of water use and management must be developed. Western Montana citizens find themselves confronted almost constantly with the necessity of making personal decisions on various controversial projects relating to some use or management scheme for waters in their area, and yet no basic philosophy or overall plan has been established to give these citizens any real basis for decisions or idea of the broad aims and purposes which should underlie this overall plan.

For example, it may be that one or more large-scale impoundments are necessary for future development of the upper Columbia River system. Yet we question whether any one of these should be considered alone and fought over on the questions of its isolated merits or shortcomings without a reference to all other proposed projects in the territory and without reference to the fact that western Montana is one of the few remaining regions of the United States in which much of the watershed it composed of high-quality recreational land. If it is to be shown on the basis of broad overall planning that such impoundments must be provided on the upper Columbia River system in western Montana, then the citizens should be made aware of this and allowed to choose among the alternatives those which best fit into the basic policy and best provide for the future interests of western Montana.

Formulation of this broad policy should, we feel, have as its underlying framework a classification of the major rivers, streams, and lakes based on use. In setting up this classification it is also our firm contention that outdoor recreation values should receive equal consideration with other major water uses in any well-balanced, forward-looking water resource policy. It should be recognized that we must retain for the future some unspoiled recreation areas, not only for the residents of this region but also for the vastly increasing number of people from other sections of the United States who have no such opportunities near their homes. Western Montana still has the opportunity to preserve and develop an outdoor recreation industry of the highest quality which could well provide one of its most important economic foundations and at the same time to use its water resources for developing industry and agriculture. We must then resist any further dam building which will encroach upon the unique values of our wild and semiwilderness rivers and their watersheds. These are of irreplaceable value to Montana's high-quality recreational land and wilderness areas.

We wish, therefore, to present the following classification system for our major rivers and streams with regard to present and future recreation values and their relation to other uses. This classification might well serve as a guide to conservationists of the State in future planning for development of the water resources.

CLASSIFICATION SCHEME FOR MAJOR RIVERS AND STREAMS

1. Wild rivers: Those that are free of impoundments and inaccessible except by trail. These streams and their watersheds are essentially virgin. They provide wilderness recreation. Few such rivers exist today.
2. Semiwild rivers: Those accessible by road with watersheds still largely in virgin condition and shorelines undeveloped. They provide semiwilderness recreation for small groups or for mass use.
3. The semiharnessed or semideveloped river: Those readily accessible by road, impounded or diverted in their lower stretches, with developed shorelines—including urban development—and characterized by heavy land use on the lower

watersheds. Extensive parts of the upper reaches are still undeveloped and unimpounded.

4. **Harnessed or developed rivers:** Those rivers that are either largely harnessed through impoundments and/or with highly developed, and used watersheds and shorelines. They are characterized by impoundments, artificial channeling, diking, and varying degrees of pollution. Though developed, they have extensive stretches of water and shoreline valuable or potentially valuable for recreation.

The primary function of wild rivers is the protection of watersheds and for scientific, educational, and particularly, recreational use. Recreation is wilderness type and of high and unique quality. Here in the West they are especially important. The water resource can be utilized in many ways further down the major river system. No impoundments should be permitted on these rivers.

The recreational function of semiwild rivers is the same as for wild rivers. They are, however, more accessible and recreation, though of high quality, is not of wilderness type. With proper planning there can be more use of these rivers and their scenic watersheds for hunting, fishing, boating, and camping without abusing the resource. Impoundments should be small or altogether avoided except in cases where the natural watershed is not stable.

The semiharnessed river has potential for dispersed recreation, and for mass recreation, including recreation development sites. The realization of the recreation potential depends upon managing the water and watersheds in such a way that the recreational quality of the water and immediate shore environments is not adversely affected.

The harnessed and developed rivers offer tremendous potential opportunities for mass outdoor recreation. These are generally the lower portions of a river system located close to the users. The present recreation use is usually of mediocre quality. These rivers, if properly managed for their recreational resources could provide large and varied recreational opportunities for expanding urban populations. Pollution is a major drawback and must be remedied. It should be on rivers of this classification that further major impoundments are considered.

Tentatively and on the basis of present knowledge, we classify some of western Montana's major streams, rivers, and adjoining lakes as follows:

Wild rivers:

1. The South Fork of the Flathead River from the upper end of Hungry Horse Reservoir to the tributary sources.
2. The Middle Fork of the Flathead River.
3. The North Fork of the Blackfoot River.

Semiwild rivers and streams:

1. The North Fork of the Flathead River.
2. The Swan River, including Swan and Lindbergh Lakes.
3. The Blackfoot River.
4. The Clearwater River, including the lakes of the chain and Placid Lake.
5. The Yaak River.
6. Rock Creek (Clarks Fork tributary).
7. Larger tributaries of the Bitterroot River.

Semiharnessed, semideveloped rivers:

1. The Bitterroot River proper (Missoula to West Fork junction).
2. Flathead River proper above Kerr Dam (including Flathead Lake).

Harnessed, developed rivers:

1. Main stem of Clarks Fork (below Bitterroot River junction).
2. Main stem of Flathead River (below Kerr Dam).

We have a firm determination to oppose any impoundments on rivers classified as: (1) wild rivers, and (2) semiwild rivers. Specifically, we will oppose a dam at the Nine Mile Prairie on the Blackfoot River, Spruce Park on the Middle Fork of the Flathead, and Glacier View or Smoky Range on the North Fork of the Flathead, and any other dams contemplated on the upper reaches of our river systems.

We will consider support for dams or authorizations for dams on the main stem rivers already partially harnessed and developed. Support for dams on these rivers, however, will be forthcoming only when complete studies of the impact of the projects upon wildlife and other recreation resources have been completed and appropriate funds requested or allocated for restoration of wildlife and recreation values. It is our firm belief that outdoor recreation values should receive equal consideration with other major water uses in any well-balanced water use program.

We believe the basic issue at stake is not a decision to build one dam in preference to another, but to practice sound resource management in western Montana by confining the construction of dams—if any are necessary and justified—to the lower reaches of the major rivers, leaving the upper tributaries largely undeveloped for high-quality recreation. This principle holds—whether the dams are to be constructed by Federal or private agencies.

This association is made up of members from widely varying professions. These members believe in a well-rounded economic development for western Montana, but also believe that the inclusion of recreational resources has hitherto wrongly been considered a minor factor in such economic development.

The Western Montana Fish & Game Association further concurs in the statement of conservation policy of the National Wildlife Federation, and hereby specifically emphasizes the following points from that policy in connection with water management:

1. We believe it is basic that programs for prevention of floods should begin on the uplands with proper watershed management—proper lumbering practices, proper range management, and reforestation.

2. We assert the principle that the producer of contaminating wastes, whether citizen, industry, or municipality, has a social responsibility and moral obligation voluntarily to prevent the pollution of public waters. At the same time we recognize that regulations and enforcement are necessary to restore and to preserve clean waters. In keeping with the aforesaid principle, and in recognition of growing water shortages and of the seriousness of the pollution menace to the public health and welfare, the association believes in the following policies and objectives in water pollution control: (a) Sound and effective pollution control laws and programs in every State; (b) adequate Federal authority to clean up pollution in interstate waters in cases where the States, interstate or private agencies cannot or will not do the job; (c) adequate sewage treatment facilities in every community; adequate waste prevention or waste treatment by every industry.

3. Primary responsibility for the planning of river basin development should not rest with construction agencies whose engineers lack training in the appraisal and management of biological resources. The first Hoover Commission recommended creation of an independent board of analysis to pass on projects proposed by the Corps of Engineers, Bureau of Reclamation, and other Federal agencies concerned with water development. We favor the creation of such a board.

WASHINGTON, D.C., December 15, 1959.

Senator ERNEST GRUENING,
Missoula, Mont.:

We have just been advised that hearings are being held this date regarding construction of Paradise Dam. We are most anxious to support this project as being the wisest use of resources in this area. We would appreciate the opportunity to file a more detailed statement in behalf of Paradise Dam before the records of the hearing are closed. We would appreciate being notified as to where the statement should be sent and the length of time the committee records will stand open.

DR. SPENCER M. SMITH, Jr.,
Secretary, Citizens Committee on Natural Resources.

MONTANA DEMOCRATIC STATE CENTRAL COMMITTEE,
Charlo, Mont., December 23, 1959.

Senator JAMES E. MURRAY,
Chairman, Senate Interior Committee,
Senate Office Building, Washington, D.C.

DEAR SENATOR MURRAY: You have asked how the people of Montana feel about use of our river resources, and particularly how they feel about S. 1226.

As you know, the 1958 platform of the Democratic Party of Montana reiterates the party's longtime stand on conservation and specifically endorses the Paradise project. May I submit a copy of the platform with the request that the brief paragraph pertinent to S. 1226 be included in the record of the hearing on the bill?

"We urge Federal construction of a dam at the Paradise site, or such alternate site as may be feasible, which will utilize this natural reservoir to the maximum consistent with other uses and with economic feasibility. Libby and Paradise are two of the three major sites suitable for multiple-purpose development. These projects will contribute to the continued growth and development of Montana, and, in turn, the Nation. They will give Montana a vast regulated supply of water for domestic, industrial, and agricultural use. We maintain that a full share of the low-cost power from these developments must be allocated to Montana for an abundant supply for free, competitive industry, for our homes and farms."

On March 4 Representative Gill, of Sanders County, introduced House Memorial 8, in support of Paradise Dam in the house of representatives. The memorial was passed. A copy is attached.

On March 8 the executive committee of the Democratic Party passed, without a dissenting vote, a resolution to send the following night letter to Senators Murray and Mansfield, and to Representative Metcalf, sponsor of the companion measure H.R. 5144:

"Endorse S. 1226 and companion house measure. Will do utmost to support your magnificent leadership. Urge immediate study of relocation costs and if feasible location of dam below confluence of Clark Fork and Flathead to control both rivers with one dam for full development."

Mr. Lemire, chairman of the State central committee directed me to present a copy of the message at the hearing of the Board of Rivers and Harbors in Missoula on the following day.

On November 1 the executive committee, again without dissenting vote, passed the following resolution:

"Whereas a Senate committee hearing is expected sometime soon on Senator Murray's bill, S. 1226, to authorize construction of the Knowles (Paradise) Dam;

Whereas the 1958 Montana Democratic platform endorses such authorization in strong terms; and

"Whereas the State executive committee by unanimous vote of those present approved a statement to be presented in support of said bill at the hearing in Missoula conducted by the Army Engineers Board of Review on March 9, 1959:

"Be it resolved, That we hereby authorize a similar presentation in support of S. 1226 to the Senate committee in charge of hearings on this bill."

Mr. Lemire requested me to present the resolution. As there was not time for me to present oral testimony at the hearing on December 15, may I submit it in writing.

Respectfully,

FRANCES D. LOGAN,

Democratic Congressional Committeewoman, First District, Montana.

HOUSE RESOLUTION 8

Introduced by Gill, Strnisha, Jensen, Gunderson, Wold, Shelden (Lincoln), Tonner, Harball, Karlberg, Wayrynen, Holtz, Gilfeather, Holding

A resolution of the House of Representatives of the State of Montana to the President of the United States, Dwight D. Eisenhower; the Congress of the United States; James E. Murray and Mike Mansfield, Senators from the State of Montana; Lee Metcalf and LeRoy Anderson, Representatives in Congress from the State of Montana; the Committee on Public Works of the U.S. Senate; the Committee on Public Works of the U.S. House of Representatives; the Committee on Appropriations of the U.S. Senate; the Committee on Appropriations of the U.S. House of Representatives; the Secretary of the Army, Wilber M. Brucker; the Chief of the Corps of Engineers, Department of the Army, Maj. Gen. E. C. Itchner; and the Director of the Budget, Maurice H. Stans; requesting the introduction and enactment into law of the necessary and proper legislation to authorize construction by the Federal Government of the Paradise Dam on the Clark Fork River in the State of Montana and authorize sufficient appropriations for the detailed planning and construction of the Paradise Dam.

Whereas the Paradise Dam site located in Sanders County in western Montana on the Clark Fork River 4 miles below its confluence with the Flathead River near the town of Plains, Mont., is one of the best remaining undeveloped hydroelectric and storage sites in the upper Columbia Basin; and

Whereas the extensive studies and reports of the U.S. Corps of Army Engineers show an ultimate installed generating capacity of 1,008,000 kilowatts of electrical power and a storage capacity of more than 4 million acre-feet; and

Whereas the studies of the Corps of U.S. Army Engineers shows that no alternative plans equal Paradise in the amount of electrical energy to be produced or in storage capacity and that Paradise offers much greater benefit and less detriment to western Montana than any alternative plans thus far presented; and

Whereas bills to authorize construction of Paradise Dam have been drafted and have been subject to close scrutiny by the people of the affected areas and such draft proposals have included specific provisions for the relief of personal hardship which may result from relocation of people in the flooded area and for payment in lieu of any taxes now being received which may be lost to local governments as a result of the construction of Paradise Dam; and

Whereas expansion of industry in western Montana has been stalemated since the construction of Hungry Horse Dam and will remain stalemated until we go forward with the construction of Paradise and other dams on the upper Columbia; and

Whereas because of the detailed studies already made of the Paradise Dam site, an early start could be made on its construction once the project is authorized and appropriations made; and

Whereas construction of Paradise Dam would give an immediate and substantial stimulus to business in western Montana and the whole Northwest and great permanent benefit to all areas of Montana and the Northwest in the development of industry, reclamation of arid lands, control of floods, protection of forest lands and recreation areas, development of fish and wildlife resources, and generally in making for a more abundant life for all of the people of the Northwest: Now, therefore, be it

Resolved by the House of Representatives of the State of Montana, That the Representatives of the State of Montana in the Congress of the United States be urged and requested to introduce and the Congress of the United States be urged and requested to enact into law necessary and proper legislation to authorize construction by the Federal Government of the Paradise Dam on the Clark Fork River in the State of Montana and to authorize that sufficient appropriations be provided for the detailed planning and construction of the Paradise Dam; and be it further

Resolved, That such legislation include a reservation of hydroelectric power to be used within the State of Montana; and be it further

Resolved, That copies of this resolution be submitted by the secretary of the State of Montana to each of the individuals and to the chairmen of each of the committees named in the title of this resolution and also to the presiding officers of both Houses of the Congress of the United States, Richard M. Nixon, and Sam E. Rayburn.

APPENDIX

(The following communications, statements, and exhibits were filed during and subsequent to the close of the hearing and were ordered printed:)

ST. IGNATIUS, MONT.

DEAR SENATOR: I am writing this letter to urge passage of bill S. 1226 as early as possible and to speed construction of a multipurpose dam at the Paradise or Knowles site.

I am of the opinion that this project is of most urgent importance to the development of the West, especially this locality, and of tremendous importance to the Nation in general if we are to be able to have the strength to fight our enemies if needs be.

Any other solution than this one would waste nature's potentialities and make most of them unavailable forever.

Sincerely

ARNST P. ANDERSON.

DECEMBER 19, 1959.

To Whom It May Concern:

I'd like to enter my protest against the Paradise-Knowles Dams.

I am just newly married and have come here to settle after traveling all over the United States, Canada, and Alaska. I find that Paradise has to offer what I want.

This is a pity a manmade structure should ruin such a beautiful valley with its wildlife, forests, and beauty.

Of all I've seen, God was good to this little valley. I know He must have spent extra time here after some of the desolate, barren places I've seen.

Yours truly,

Mr. and Mrs. J. D. ALLISON.

PARADISE, MONT., *December 15, 1959.*

U.S. Army Engineers.

DEAR SIR: Herewith I wish to express my opposition to the construction of either Paradise or Knowles Dams.

In the first place it is an expensive project at a time when all our efforts should be turned toward the defense of our Nation from the threat of being overcome by our enemies who are bending every effort to outdo us in scientific development.

Furthermore an area of 59,000 acres of valuable farmland would be flooded unnecessarily. The world is getting no larger but the population is growing at such a rate this area will be needed in the future.

Private power is able and willing to develop sites on Flathead River with the same benefit of flood control, etc., without disrupting 2,000 people, relocating railroads, highways, and pipelines.

Taxes received by Sanders and Lake Counties would be greatly reduced.

Finally, I do not think the dam would bring industries to this area as it is too far from raw materials.

Respectfully,

KATHRYN AUCLAIR.

THOMPSON FALLS, MONT., *December 9, 1959.*

HON. JAMES E. MURRAY,
Chairman, U.S. Senate Interior and Insular Affairs Committee,
Washington, D.C.

DEAR MR. MURRAY: I would like to register my protest to bill S. 1226, relating to the Knowles-Paradise Dam project.

My reason for this is because the building of either of these dams would be quite disastrous to the welfare of the citizens in the Knowles, Paradise, Plains, St. Regis, and other points within many miles west of the proposed location for either of said dams.

To be fair in the matter, I am against public ownership and I do not believe in the taxpayers bearing the burden of building and operating dams. There are plenty of private corporations ready and willing to build and operate dams along the Clark Fork River, and in my opinion it is not conducive to the will of the taxpayers and the people to bear this burden of additional taxes.

It is my candid opinion that the people who are most enthusiastic about the building of one of these dams is that they will be benefited in some material way.

From what I have read and know of Government-built dams they are much more expensive than if they are built by private ownership. As I understand, there has been several hearings regarding these bills and the people conclude from the other hearings that it was settled then someone comes forward and urges another hearing.

I have resided in Sanders County for many years and I believe I know the attitude of the people quite well and, I believe, the people that are for the building of this dam do not have the welfare of the people at heart.

Sincerely yours,

A. S. AINSWORTH.

MISSOULA, MONT., *November 30, 1959.*

Senator JAMES E. MURRAY,
Chairman, Senate Committee on Interior and Insular Affairs.

HON. SENATOR MURRAY: I am very pleased that river development for western Montana has reached the stage of hearings on your bill S. 1226. The bill has my full support.

I believe there would be many good effects from construction of Knowles or Paradise Dam. One effect that I think would be especially good would be the adding of some diversity to the Montana economy. My work as photographer takes me traveling all around Montana. I have seen how vulnerable the Montana economy is when something goes wrong: a drop in timber, copper, or wheat prices; or, recently, a long strike.

Power from Hungry Horse Dam at least kept the Victor Chemical plant and the Anaconda Aluminum plant going through these misfortunes. Without them, the economy of Montana would have been worse off. With the additional industries that would be brought by Knowles or Paradise Dam, Montana would have additional buffers against economic slumps.

Knowles Dam would be good; Paradise Dam would be even better, from this point of view. I am glad that S. 1226 provides for the possibility of Paradise Dam, and I hope that the Paradise site is given careful consideration, through further engineering studies.

Very truly yours,

A. E. ALLEN.

PLAINS, MONT., *December 8, 1959.*

Senator JAMES E. MURRAY,
Chairman, U.S. Senate Committee on Interior and Insular Affairs.

DEAR SENATOR MURRAY: I am a farmer stock raiser residing on the banks of the Clark Fork River near the town of Plains in Sanders County, Mont.

I have read Senate bill S. 1226 which was introduced in the Congress on March 2, 1959, and wish to be recorded at this hearing as in favor of the bill and that I also favor location of the dam at the Paradise site. I favor the Paradise site on a basis of its greater production of hydroelectric power and better impoundment of water for flood control.

My farm was inundated in the flood of 1948 and feel that the Paradise project would eliminate further fear of such a tragic disaster hanging over our heads. The Flathead is already somewhat controlled by the Hungry Horse Dam. A dam at Knowles would do little additionally to improve danger from that source whereas only Paradise Dam would afford the protection so badly needed, not only here but in the downstream areas of this great Northwest. There is practically nothing on the Clark Fork above its junction with the Flathead to create flood control.

The production of low cost electric energy is badly needed to develop this section of western Montana, a development which is practically stagnant and has little prospect of improvement with the rapidly increased using up of our forest resources, a resource upon which the present economy is mainly based, even among the small farmers many of whom depend on what work they can obtain away from their farms to eke out a living standard such as all Americans are entitled to.

I respectfully urge your honorable committee to act at its earliest convenience in recommending passage of S. 1226 including a recommendation of selection of the Paradise site.

Yours very truly,

M. W. AIRHART.

BUTTE, MONT., *December 15, 1959.*

Re proposed Paradise and Knowles Dams, western Montana.

SENATE INTERIOR AND INSULAR AFFAIRS COMMITTEE,
Washington, D.C.

GENTLEMEN: A hearing is being held at Missoula to allow both sides to express their views, for and against this proposed project. I would like to express my very great opposition to the building of this or any other dam at this location. Senator Murray and Senator Mansfield are trying to force this on to the people of western Montana, and allow the U.S. Army Engineers to build this with the taxpayers money. This dam is not necessary in any way. We have plenty of electric power in Montana without it. It would destroy a great deal of valuable farming and agricultural land, and displace people from their homes that took them many years to develop and build. They are promised equal irrigated lands to replace that they would lose. There is no irrigated or possible irrigated land anywhere near the present sites of the proposed dams.

It would mean a cost of nearly \$200 million to move the Northern Pacific Railway from a sound safe location, to a very dangerous and hazardous location, where rock and landslides could and would occur in the winter and spring months of the year. The present Hungry Horse Dam, after the great cost of same, cannot furnish reliable volume of power at present to operate the Anaconda aluminum operation at Columbia Falls. This it would appear means that the objective in that project was not attained. It is true that other power is available, but in many cases the results obtained from these dams built by the Army Engineers do not justify the enormous expense. Also their estimates are usually woefully short of the actual final cost.

It is being proven more and more, that it is cheaper to generate power from coal and steam plants, than by water, also it will not be too many years before atomic power will become economically usable, making a great many of these expensive dams of no value.

When this dam that is proposed is necessary, it can easily be built with private money, and private industry, which would remove the burden of its cost from the taxpayer to the investor. Public power does not pay any taxes. Private power carries a large burden. Taxes are now confiscatory, and the Government is now spending 40 percent of the wage earners income, and 52 percent of the income of industry. With the help of many of our Socialist Senators, that live the life of a capitalist the wage earner will soon become a ward of the Government, and initiative will cease and freedom be a thing of the past in this United States.

The best government, is the least government, let us have less public power, less government giveaway of the taxpayers money, more private enterprise, and more inducement for venture capital. I trust you will register this taxpayer's vehement objection to this proposed Paradise-Knowles Dam, in western Montana.

Very truly yours,

ARCHIE W. ADAMS.

RONAN, MONT., *December 14, 1959.*

Senator JAMES E. MURRAY,
Chairman, Committee on Interior and Insular Affairs,
Senate Office Building, Washington, D.C.

SENATOR: Because I will not be able to attend the hearing in Missoula on Tuesday, December 15, on S. 1226, which you have introduced to authorize Federal construction of Paradise or Knowles Dams, I am writing you to express my opposition to either of these projects.

My reasons for opposing these projects are:

1. The past 2 years have seen a healthy and orderly expansion in our economy in western Montana especially in the timber industry and the proposed projects would jeopardize these industries, especially Plum Creek Lumber Co. which gets much of its raw materials in the Thompson River area and the reservoir behind either dam would isolate this source from the Pablo mill.

2. As a native of Ronan and Lake County and building a business in our community I am disturbed at the economic effects the proposal will have on the tax structures of Lake County and school district 28. The property taxes in the county are very high now and any further withdrawal of taxable lands from the tax rolls will mean an increased burden on the remaining taxable lands.

3. With the Bonneville Power Administration statements that there is surplus power in the Northwest and their efforts to secure an intertie with SPA in California, I feel that neither project in S. 1226 can be justified in the name of cheap power.

4. No evidence has been presented to indicate that Montana is suffering from a shortage of power or that private enterprise is dragging its feet in meeting the power needs of Montana consumers and industries; therefore I urge that S. 1226 be rejected and free enterprise be encouraged to meet the demands for power in the future with the construction of taxpaying facilities which do not remove thousands and thousands of irrigated and fine grazing lands from our tax rolls.

Respectfully submitted.

JERRY AKERS.

HOT SPRINGS, MONT., *December 7, 1959.*

Senator MURRAY.

DEAR SIR: I am opposed to the Paradise and Knowles Dams because we freely made our homes here long before these dams were thought of. We are pleased with our way of life and have no desire for change. But if change must come we would like to see it under private ownership as it is around Great Falls.

We believe these dams would destroy too much valley land that is now, or could be later, productive farmland. We have stated our opposition to these dams many times before and shall continue to do so.

Yours truly,

DOROTHY ANDERSON.

PLAINS, MONT., *December 8, 1959.*

1. I am against construction of Knowles and Paradise Dams as to loss of valuable farms and homes of towns that cannot be replaced as they are.

2. Relocating of railroads, highways, and flooding of hundreds of acres of valuable farmland, also the lumber industry.

I am opposed to bill S. 1226.

C. L. ALFORD.

HOT SPRINGS, MONT., *December 7, 1959.*

Senator MURRAY.

DEAR SIR: I am opposed to the Paradise and Knowles Dams for these reasons:

No. 1, I am a strong believer in treaty rights and I believe the tribe owns the power sites on the Flathead River and should have the right to develop them.

No. 2, I believe that an American citizen should have a right to own his land without the constant threat of a forced sale.

No. 3, I believe that a State should control the waters within that State that are not covered by treaty.

No. 4, I believe that small store and bar owners under these dams are spreading untruths in the hope of personal gain.

Yours truly,

THOMAS ANDERSON.

HOT SPRINGS, MONT., *December 7, 1959.*

Senator MURRAY.

DEAR SIR: I am opposed to the Paradise or Knowles Dams because of the serious destruction to our ranches and homes here in this community, which have taken many years for us to acquire.

I am for building several small dams, and they will provide as much power, and hurt no one.

ALBERT T. ANDERSON.

HOT SPRINGS, MONT., *December 7, 1959.*

Senator MURRAY.

DEAR SIR: I am opposed to the Paradise or Knowles Dams because the destruction will be too great here, comparing to the good it could possibly do elsewhere.

AUGUSTA E. ANDERSON.

TROUT CREEK, MONT., *December 12, 1959.*

HON. JAMES E. MURRAY,
Chairman, Interior and Insular Affairs Committee,
U.S. Senate:

I am opposed to the Paradise and Knowles Dams because they are not good for our country.

The reasons given for building them are power and storage, but as for this power the cost is way out of reason, being twice per kilowatt of what is considered economically practical. Naturally, the difference will be made up by the taxpayers. If each of us had to pay a lump sum for this loss today, opposition to these dams would be unanimous. They say this loss will be offset by storage so they can irrigate more lands so they will be worth more in the soil bank and we can pay more taxes. Or, maybe we can store water for the downstream States.

As far as its creating more work for us locally, it will during the construction of the dam, but there will no doubt be an influx of construction workers so competition for jobs will be the same as now, but the local workers will take a back seat with most of them going on doing the same work they are now doing since the construction workers moving in have the advantage in training. I should say the local workers would continue the same if the farmers still had their lands, the railroad is still operating and such, but the farmers will be out, also the sawmills so the locals will probably be worse off. After a project is finished there are workers who stay on waiting for another project to start somewhere else and we will have to support them, so in the end it looks like we will all end up worse off.

Your truly,

RODERICK AUCLAIR.

TROUT CREEK, MONT., *December 12, 1959.*

HON. JAMES E. MURRAY,
Chairman, Interior and Insular Affairs Committee,
U.S. Senate:

I am opposed to the big Government dams specifically Paradise and Knowles because I know more about them. They will flood a great deal of our best land at a time when we are all talking about the big population boom. They will ruin this land so we can never reclaim it at a time when it appears we will soon be able to produce power more economically with atomic energy.

There are other sites located at Buffalo Rapids that would ruin no land, that would help the Indians, and would produce the power cheaper. They would be built by private power so we would also gain income from taxes. Those who

complain that these corporations make all of the money can buy a few shares of stock so they, too, can make a profit instead of having a large uneconomical dam built and have to pay out their money in taxes to make up a loss.

Yours truly,

MABEL M. AUCLAIR.

PLAINS, MONT., December 5, 1959.

Senator JAMES E. MURRAY,
Chairman, U.S. Senate Committee on Interior and Insular Affairs.

DEAR SENATOR MURRAY: I am a resident of and operate a refreshment business in the town of Plains.

I have read Senate bill S. 1226 and wish to be recorded at your hearing as in favor of this legislation and that I am also in favor of the Paradise site in preference to the Knowles site on a basis that the latter would constitute a waste of multipurpose development of natural resources which all forecasts tell us will be badly needed before the end of the next decade.

I believe an independent survey will show that the figures on cost of relocation of railroads and highways will show them to be substantially less than those appearing in the reports of the U.S. Army Corps of Engineers and sincerely hope that the Congress will conduct such a survey if it appears to them that existing figures might weigh against passage of S. 1226.

Such legislation is long overdue and it is my earnest hope that your honorable committee will recommend its early passage.

Very truly yours,

ALBERT AVERY.

HOT SPRINGS, MONT., December 3, 1959.

HON. JAMES MURRAY.

DEAR SENATOR: I am writing you in hope you see fit to let me give my views before the dam hearing at Missoula on December 15.

I am a rancher on the Little Bitter Root River, 7 miles east of Hot Springs, and am very interested in seeing western Montana developed.

I realize that you can't make an omelet without breaking eggs, so I hope to help break through the do-nothing, horse-and-buggy group.

Thanking you in advance.

Sincerely,

GEORGE AWEKA.

DIXON, MONT., December 8, 1959.

We, the undersigned, are opposed to Senate bill 1226.

We are residents and property owners in the Flathead Valley near Dixon, Mont.

Mrs. IONE AYERS.
LEW AYERS.

MALTA, MONT., December 2, 1959.

HON. JAMES E. MURRAY,
Chairman, Senate Committee on Interior and Insular Affairs.

MY DEAR SENATOR MURRAY: I urge your support of S. 1226. I am in favor of full development of our natural resources. The State of Montana needs the power that Paradise Dam will produce. Anything less than full development of our waterpower would be foolhardy, not only for the good of Montana but the Nation as a whole.

Extending you my best personal regards, I am,

Sincerely yours,

GEO. BANCROFT.

PARADISE, MONT., December 11, 1959.

To Whom It May Concern:

We are opposed to S. 1226, relating to the Knowles-Paradise Dam project.

We own our home here and my job is here, and we don't like the idea of having to start all over again some place else. The hunting and fishing is good in

the area and the country is beautiful and we don't like to see it destroyed. We certainly hope this project never goes through.

Sincerely,

ROEBUCK BARBER.
DOROTHY O. BARBER.

HOT SPRINGS, MONT., *December 3, 1959.*

Senator JAMES E. MURRAY,
U.S. Senate, Interior and Insular Affairs Committee:

I am against Paradise and Knowles Dams. I don't think it will benefit anyone who lives here.

Mrs. CHARLES BAXTER.

HOT SPRINGS, MONT., *December 3, 1959.*

Senator JAMES E. MURRAY,
Washington, D.C.

Hon. Mr. MURRAY: I would like to show my protest against Paradise Dam.

Yours truly,

MAUD BAXTER.

HOT SPRINGS, MONT., *December 3, 1959.*

Senator JAMES E. MURRAY,
Washington, D.C.

Hon. Mr. MURRAY: I am using these means to show my protest against construction of any multiple purpose claims on the Clarks Fork River near Paradise, Mont.

Yours truly,

L. E. BAXTER.

HOT SPRINGS, MONT., *December 5, 1959.*

Senator MURRAY.

DEAR SIR: I am against the construction of the proposed Paradise and Knowles Dams. Too many people will be left homeless and even though they may be paid for their property it can never be as much as it is worth.

IRA BAXTER.

HOT SPRINGS, MONT., *December 5, 1959.*

Senator MURRAY.

DEAR SIR: I am opposed to the proposed Paradise or Knowles Dams because it will destroy more homes and taxable property than it will be worth. At present, Sanders County gets taxes from the railroad which will be lost if these dams go through. The people of Sanders County cannot afford this loss.

MARIE BAXTER.

PERMA, MONT., *December 10, 1959.*

Senator J. E. MURRAY,
Washington, D.C.

DEAR SIR: I believe in States rights with full control of all assets, such as State lands, public lands, waters, minerals, and so on.

I believe as a State subject we should look to our State government to protect us from invasion of outsiders, from plans and schemes by those who are poor business managers for themselves. The harm such dams as a Knowles or Paradise Dam would kill the best part of Montana. Vote against these dams, please.

JACK BALLANTINE.

LANEPINE, MONT., *December 7, 1959.*

DEAR SENATOR MURRAY: This letter is a rejection letter concerning the Paradise Dam. From what I can gather this dam will not even benefit Montana.

Sure I could use work, like lots of other men. But when the project is done, what then? Also we buy quite often in Missoula. We already have to drive 80

miles and I do not care to travel any farther. Also cattle are hauled to Missoula for sale and shipping, etc., and that means traveling many miles out of the way. I cannot see where it would benefit any of us here in the valley at all. My answer is no to the Paradise Dam.

RICHARD BENNETT.

 BONAN, MONT., December 7, 1959.

Senator JAMES E. MURRAY,
 Chairman, Senate Committee on Interior and Insular Affairs.

DEAR SENATOR MURRAY: I am wholeheartedly in favor of S. 1226 and the construction of Paradise Dam. Paradise Dam should be built because it stores so much more water and therefore produces more power than Knowles. We shouldn't let one drop of water flow to the Pacific without being fully utilized.

Due to the fast increase in the use of pure water for industrial and domestic purposes, the Nation is becoming alarmed at the diminishing supply and is beginning to look for new sources. With the many industries and people that will definitely come here after the development of our water resources, we most assuredly will have an abundance of crystal clear, pure water.

Many of us know that one corporation controls the majority of the press as well as the major industry in the State which allegedly through Wall Street connections is affiliated with Montana Power Co. Naturally they distort or omit anything that is not in favor of private company dams.

With good unbiased reporting of the many benefits of multipurpose dams built by Government money, the sentiment in favor of them would be overwhelming.

Sincerely,

 FLOYD F. BENNETT.

 PLAINS, MONT., December 5, 1959.

Senator JAMES E. MURRAY,
 Washington, D.C.

DEAR SIR: I am against your bill which proposes to build a high Federal dam at either the Knowles or Paradise sites.

These dams would not help me or any part of Sanders County, but they would raise our taxes, and it is possible that I would lose my job, because I am employed at the tie plant at Paradise, Mont.

Sincerely,

 M. J. BATES.

 DIXON, MONT., December 8, 1959.

Hon. JAMES E. MURRAY,
 Washington, D.C.:

I am opposed to Senate bill 1226, relating to the Knowles-Paradise Dam project. I own and farm land that will be flooded if either of these dams are built. This is where I make my home, and I do not care to move.

 FRANK BIGCRANE,
 Mrs. FRANK BIGCRANE.

 PLAINS, MONT., December 12, 1959.

Hon. JAMES E. MURRAY,
 U.S. Senator.

DEAR SIR: I am opposed to the Paradise and the Knowles Dams. I believe it will spoil too much good farm and grazing land that the Government will not want to pay for.

The U.S. Government made a treaty with the Flathead Tribe of Indians that they were to have the land as long as water flows, the grass grows, and the wind blows, and I do not think that the treaty should be broken.

ROBERT C. BEAMISH.

PLAINS, MONT., *December 9, 1959.*

HON. JAMES E. MURRAY,
Washington, D.C.:

I am opposed to bill S. 1226 relating to the Knowles-Paradise Dam project.

Mrs. RICHARD BELLER.

PLAINS, MONT., *December 10, 1959.*

HON. JAMES E. MURRAY,
Washington, D.C.:

I am opposed to bill S. 1226 relating to the Knowles-Paradise Dam project.

Mrs. CLAUDE BENEDICK.

ST. IGNATIUS, MONT., *December 15, 1959.*

Senators GRUENING and MARTIN,
Missoula, Mont.

GENTLEMEN: We think construction of Paradise or Knowles Dam would be a grievous mistake. Have opposed it from beginning. Agree heartily with able editorial in today's Missoulian, and with able Editor Ray Loman and others.

ST. IGNATIUS POST,
MILLARD BULLERDICK, *Editor.*

PLAINS, MONT., *December 7, 1959.*

Re proposed Knowles or Paradise Dam.

HON. JAMES E. MURRAY,
Chairman, U.S. Senate, Interior and Insular Affairs Committee,
Washington, D.C.:

I oppose either of these dams, since I live here and cannot reason that destroying our homes and valley is better than creating privately built dams upstream, to create flood control and electric power.

I believe this is the seventh time this has come up, and the seventh time the people who are vitally interested have protested. If these protests are in vain—why meet? If not how many meetings and protests does it take for someone to get the idea that we don't want the Clark Fork Valley all under water? The west end is pretty well soaked up now. The west half of Sanders County is now backed up behind Cabinet Gorge and Noxon. Those dams were built by private enterprise and do pay taxes. Otherwise, does anyone see any prosperity evident in that area, as a result of the dams?

A Government-built dam at Paradise will pay no taxes, but only increase taxes by its enormous cost. The railroad, the pipeline, will be moved. A half billion dollars will be spent and after the initial shot in the arm of actual construction is over—God help our valley what is left of it. Homes destroyed, families moved to the four winds, and one of the remaining valleys of western Montana destroyed. And for what? The bureaucrats of Washington, D.C. who constantly preach Government ownership, and Government control, can best answer.

Anyone locally, advocating the construction of either dam, has a personal axe to grind, and I believe they can be, one by one, pointed out, as to what that axe is. It's a temporary job—or the disposal of undesirable property, or to stimulate business locally for a short time, with little thought or consideration for that solid segment of our community, who built this valley and whose lives, fortunes and futures will be so critically affected by such construction.

And, for the termination of this sort of protracted inquisition, which is keeping these interested people in such an unhappy state of suspense, I hope and pray that the men who are responsible for this diabolical "sword of Damocles," will either remove it, or cut the thread and crush these people quickly. It would be less cruel.

The people of Plains and Paradise have become a divided camp on the subject of the dam. This little community was once peaceful and happy. The pros and cons have disturbed the peace.

If you all in the committee will drop these dams back in Washington, instead, of on top of the Clark Fork Valley folks, I am sure there will be adequate upstream dams built in due time, and you'll have rendered the people a service never to be forgotten.

C. H. BIGGERSTAFF.

PLAINS, MONT., *December 9, 1959.*

HON. JAMES E. MURRAY,
Chairman of Committee on Interior and Insular Affairs:

As we are opposed to all unnecessary Government spending we are opposed to bill S. 1226. Federal aid is needed on the Kootenai River in western Washington and in some of our eastern States where flood damage has been severe. Excessive Government spending such as this proposed bill 1226, is unnecessary and would be an added drain on the taxpayers.

One cannot accept the estimated, as these projects invariably cost many millions more, and once the project is started the estimates are forgotten and they are completed at any cost.

The Corps of Army Engineers has admitted that the cost ratio of Paradise is excessive, but still this proposed bill authorizes this site. Therefore we oppose bill S. 1226.

G. C. BROWN.
 ETHEL K. BROWN.

To Whom It May Concern:

We are opposed to the building of Paradise Dam and/or the Knowles Dam. Not only because it is destroying the natural beauty of this valley—there are more people driving through this valley in a year, admiring its scenery, than there are visitors to the Glacier Park, and its scenery is as splendid as any of our national parks.

But the destruction to lands and personal properties, the cost of relocating existing railroads and highways, destruction of cemeteries and towns is nauseating to the people of our country as it is known that there are other locations where dams for hydroelectric power and water control can be built with very little cost for damage to properties of our citizens and to our economy.

WILHELM N. BROX.
 Mrs. W. N. BROX.
 ANGELO DEMERS.
 OLAF Z. DICKSON.
 Mrs. OLAF DICKSON.

MISSOULA, MONT., *December 13, 1959.*

TO THE MEMBERS OF THE SENATE COMMITTEE ON INTERIOR AFFAIRS,
Missoula, Mont.

GENTLEMEN: I wish to add my voice to the others begging you to report favorably on the Senate bill proposing a dam at Paradise—or, failing that, Knowles Dam.

We need money for schools, for roads, for more public service. Montana, with its present low population and lack of diversified industry, is hard put to supply these moneys. New industry, brought here by cheap power such as Paradise would supply, would help finance the State's services to the public.

Paradise Dam would, I believe, provide diversified employment. The Anaconda Copper Mining Co. might actually have to compete for a labor force. The mere suggestion of public utility districts might encourage Montana Power to stop milking its customers and supply residential electric power at a more reasonable rate.

New industry, unprotected by the ACM's years of successful finagling in the State's legislature, might mean that a new attitude could be engendered among our politicians regarding the corporate tax laws in the State, thereby enriching the coffers of the State.

The cost of living is too high in Montana. People who profess to know tell me this is partly because of high freight rates, and partly because the small population with its laissez-faire attitude make people like the oil companies rub their hands with glee and push the price of gasoline up another notch, knowing that no one will protest. I feel strongly that Paradise Dam, bringing new industry and new population with some sense of outrage still left in them, would cause a few sparks to fly. Freight rates could be changed; gasoline could cost approximately what it does in our neighboring State of Idaho.

You gentlemen are in a position to render a great service to this State. May I ask you again to please report favorably on the Senate bill proposing Paradise Dam?

Sincerely yours,

Mrs. WALTER L. BROWN.

C. G. BENNETT LUMBER Co.,
St. Regis, Mont., December 10, 1959.

DEAR SENATOR MURRAY: As the chief industry in St. Regis, we are immediately concerned with the Paradise Dam. Not to waste words, the construction of such a dam here would put an end to our business, and to any other business in St. Regis. Since the town can't exist without a way for the inhabitants to make money to live, it would put an end to the town of St. Regis. Our payroll last year was \$310,780. We keep 68 men and therefore 68 families going all the year long. We have never operated on a seasonal basis, and we have been in the logging and sawmill business since 1940. No sawmill or logging firm could operate in the St. Regis vicinity after the Paradise Dam is introduced for the following reasons:

(1) No industrial site of sufficient size would be left in this area. The site mentioned by any future planners is nothing more than a good-sized field, a pocket located against the hill. It might be sufficient at so many cubic feet per person, the way the number of school children are plotted to a school room, but it is not large enough for either pleasant country living or a modern factory site with adjoining town.

(2) All the level valley and present timber access roads would be flooded. It would be financially impossible for a business of even large size making its money from timber to build the expensive roads necessary along the rocky hillsides to get the logs out.

(3) The fluctuating level of the reservoir would mean that no lumber company could float its logs from a landing that would be located at one time under water and at another time perhaps 1 mile away, to a sawmill that would be located on the water at one time and surrounded by 1 mile of mud at another. St. Regis is nearly flat and a drop of 2 feet of water would mean exposure of perhaps a mile of mud flat.

(4) Without a main railroad line adjacent to a mill site, present day costs would make it impossible to market any product. The Northern Pacific Railroad would not be in this valley as far as St. Regis, and the Milwaukee Railroad would be a considerable number of miles across the pond. A main highway is also necessary to any industry, and there would be no main road put in to skirt a rocky hillside. If Federal planners cannot build a road through a fertile valley, there would be no roads.

These are factual, economic reasons why we are opposed to the Paradise Dam. I could mention the esthetic side, such as our beautiful vistas of mountains and rivers, and the favorable living factor that we do not have to eat and sleep separated by only the width of an automobile driveway from our neighbors. Space and privacy are expensive luxuries nowadays, and most of us could not afford these benefits were we crowded into the cities. Even a workingman can afford space and living room in St. Regis, and have a constant reminder of the beauties of nature when he steps outside his door each morning on his way to work.

Sincerely,

Mrs. T. P. BENNETT.
CHARLES G. BENNETT.

STATEMENT OF CLARENCE P. BICK

Upon careful study of Senate bill 1226, I am moved to oppose the bill for many reasons. Having served two terms as a State legislator, I have formed the habit of considering legislation from the following angles.

1. What introduces the matter.
2. What purpose is it intended to serve.
3. Is the need for such legislation real or imaginary and is the request motivated by spite or by an unselfish urge to provide additional service and protection to the people affected.

4. Is the bill carefully drawn so as not to require amendments to provide constitutionality and to make it conform to the title and its purposes.

5. Will the expenditure of money required be justified. Will it be a luxury or a wise investment.

6. Are there alternative proposals which might better serve the same purpose.

I note that Senate bill 1226 and its companion measure House bill 5144 are introduced by our congressional delegation but upon studying the proposals, I conclude that they were authored by persons of much lesser ability than our able congressional delegation and that in all probability they were introduced under pressure from a group of fanatical socialistic zealots who by the intensity and persistence of their constant clamoring have led our Congressmen to believe that they represent the sentiment of a majority of the people in the area involved.

There appears to be the element of spite—even hate for the large utility companies who in my humble opinion have helped to build Montana to its present position.

The prime purposes of a large dam are to provide flood control and a more even flow of the water downstream, yet we hear no urgent request from downstream residents compared to the demand from the local area.

The bill itself is not carefully drawn. It provides for the creation of a "Knowles" planning board and administration but makes provision for and hints strongly to the idea that the dam will really be at Paradise 9 miles downstream. No provision for a change of names in that event.

It provides for the acquirement of a considerable area of property ceded to the Confederated Salish and Kootenai Tribes by sacred treaty to be theirs as "long as the grass grows and the waters flow."

This acquirement to be by negotiation or if need be—confiscation, section 7, subsections B and C.

Are the treaties solemnly entered into by our Government to be regarded as mere scraps of paper?

Land necessary for the project will displace some 3,000 persons. This also to be acquired by negotiation or condemnation and a "fair" price to be established with no apparent consideration to be given to the owners' estimate of value.

In fact the language of the bill is vague in this respect.

It provides for acquirement of other land, not described, to be placed under irrigation and sold to the displaced persons who in all probability would be beyond the need for such land by the time it could possibly be brought to a state of potential production.

I believe there is no considerable area near enough to the proposed dam that would be economically feasible as an irrigation project. A careful survey will show it to be nonexistent. However, if there are such areas they are again to be acquired by negotiation or condemnation with no provision for the present owners, except the promise of money in amount to be prescribed by the Secretary of the Interior. Much elaboration of the provision for power to be reserved for local industrial use all of which is nullified by the provision that all power will be placed in the Bonneville pool and distributed exactly as the rest of the power therein.

The project is to be paid for from the proceeds of the sale of power. Since it is an extremely expensive project the cost of power to the consumer will of necessity be high.

The at-site rate will be applicable only to a 35-mile radius which means no low cost power for use in most of the area which provides the major sacrifice.

The bills provide for vast development of recreational area adjacent to the lake.

Were it in an area where there are no other bodies of water, this might be a good selling point but in an area such as western Montana, another lake is as necessary as a third shoe.

A large body of water covering a comparatively level area such as the Moiese Valley, would be by comparison with other local lakes, shallow. An 84 foot drawdown would logically create a vast area of mudflats and swamps. The fish able to survive there would be largely what are known as rough fish.

Administration of the project is to be by a board composed largely of members now on the State and Federal payroll. Additional salary of \$15 per day is provided for such time as they may take from their regular "paid for" duties.

There is an alternative which will serve the demand for more power.

Four sites are available for development of power dams between Kerr Dam and the proposed Knowles or Paradise Dam.

They would impound beautiful lakes in areas where little farmland would be taken from production. They could feasibly irrigate more land than Knowles or Paradise. They would require little relocation of persons.

They would provide tax revenue immediately upon construction and such construction could be begun much sooner than the larger dams.

I believe the power to condemn an acquired private property for public use is necessary but I further believe that such power should be exercised only under the circumstances of urgent and extreme necessity.

HOT SPRINGS, MONT., December 4, 1959.

Senator MURRAY,
Senate Office Building, Washington, D.C.

DEAR SIR: I am opposed to the construction of Paradise and Knowles Dam in Montana for the following reasons:

1. It would cause a lot of destruction to private and public property such as roads, bridges, power lines, railroads, and towns.
2. It would be necessary to relocate and construct new roads, railroads, and power lines.

3. What about the heartbroken people who would be forced out of their homes?

4. Farms and farmers would be flooded out.

5. Lake and Sanders Counties would lose a lot of tax money.

6. It would violate the treaty with the Indians.

7. It would destroy a lot of beautiful scenery in western Montana.

It is my opinion that it would be more economical and practical to build a smaller dam in another location where it would not cause so much destruction, expense and loss of taxation.

Yours very truly,

ORVILLE M. BJORGE.

PARADISE, MONT., December 4, 1959.

GENTLEMEN: Having lived in the Flathead River drainage the better part of my life I feel it a very foolish thing to give up so much very valuable land and get nothing in return. It is true that an industry has been established by the Hungry Horse project but how many industries have the dams on the Columbia River established. I often wondered how the expression "Sold down the river" originated but I fully understand it now. That is exactly what the Paradise Dam would accomplish and nothing more. It would also destroy the best and most valuable transcontinental railroad.

Respectfully,

CHAS. C. BOWSER.

RONAN, MONT., December 14, 1959.

Senator JAMES E. MURRAY,
Chairman, Committee on Interior and Insular Affairs,
Senate Office Building, Washington, D.C.

SENATOR: I am opposed to S. 1226 authorizing the construction of Knowles or Paradise Dams. Reasons: 1. I am against the U.S. Government in business and especially the electric power business. 2. The taxpayers cannot afford such expensive Government services. Any private concern can build better, larger, more efficient power centers for less money than the U.S. Government. 3. You know the damage these projects would do to Lake County. You are our elected Representative and should make every effort to prevent said damage. 4. It seems the only excuse for the dams is production of electric power for areas downstream and outside of our State. The only other reason is flood control? Senator I venture to say that within 10 years we will be able to supply all of the electric power required by the downstream States by other means. This leaves the only excuse for said dams flood control. There are many who feel that there are better ways for flood control than the proposed dams.

Sincerely,

J. M. BROOKE, M.D.

DIXON, MONT., *December 7, 1959.*

I have lived and worked in the Dixon community for 47 years. I own my ranch and am a taxpayer. I am opposed to bill S. 1226 because it would destroy my home and livelihood.

KENNETH BROWNING.

LONEPINE, MONT., *December 5, 1959.*

DEAR SENATOR MURRAY: As a taxpayer I am definitely against the Paradise Dam. They say it will bring in industry; what industry and for how long? Also true it will give local work for awhile. Then what? Also everyone here goes to Missoula a lot. We don't care to travel any further than the 80 miles we already do. No. I don't care to see the dam go in.

Sincerely,

JEAN D. BENNETT.

BROTHERHOOD OF RAILWAY & STEAMSHIP CLERKS,
FREIGHT HANDLERS, EXPRESS & STATION EMPLOYEES,
IDAHO DIVISION PROTECTIVE COMMITTEE,
PARADISE VALLEY LODGE No. 652,
Paradise, Mont.

To Whom It May Concern:

This lodge or organization wishes to go on record as opposing the Paradise Dam, on the Clarks Fork River and the Knowles Dam on the Flathead River.

We feel that the one-half billion dollars it would cost would create a very heavy burden to the taxpayers when we already have a heavy taxload as it is.

We are also opposed to flooding so many thousands of acres of fertile soil and the destruction of five western Montana towns where so many people would be driven from their homes and jobs. We favor smaller dams, built either by Federal funds or private funds, in areas that do not adversely affect so many people.

JERRY P. COLYER, *President.*
C. J. EKMAN, *Secretary.*
CHARLES E. PORTER, *Chairman.*

PERMA, MONT., *December 10, 1959.*

Senator MURRAY.

DEAR SIR: I am opposed to the building of the proposed Paradise Dam or the Knowles Dam.

ANDREW V. BURGESS.

PERMA, MONT., *December 3, 1959.*

HON. JAMES E. MURRAY,
U.S. Senate Interior and Insular Affairs Committee:

I am opposed to the Knowles or Paradise Dams or any other Government dams.
Respectfully,

HARRY H. BURGESS.

PERMA, MONT., *December 10, 1959.*

Senator MURRAY.

DEAR SIR: I am opposed to the Government building the proposed Paradise Dam or the proposed Knowles Dam.

Sincerely yours,

MRS. A. V. BURGESS.

PERMA, MONT., *December 10, 1959.*

Senator JAMES E. MURRAY,
U.S. Senate,
Washington, D.C.

DEAR SENATOR MURRAY: This is to urge you to use your influences and votes to defeat the construction of either of the proposed Knowles or Paradise Dams.

Such supreme laws as the Treaty of 1855 with members of the Flathead Indian Reservation are worthy of consideration and nonviolation.

My main objections are: Loss of tax revenue, violation of the 1855 treaty, removal of persons from homes of their choice, farms, ranches, ranges, graveyards, grazing lands, timber, minerals, railroads, highways, pipelines, telegraph line, telephone lines, power lines, towns, residences, private and public enterprises, and so forth. In fact, the western part of Montana would certainly be harmed beyond repair.

Remember that after water leaves Montana it then becomes the property of that State, rightly, with no interference from us.

Montana's water for Montana is the secret of Montana's progress.

I am in favor of smaller headwater dams built by private enterprise wherever feasible.

Once again urging you to help us defeat the big Knowles or Paradise proposed dams.

Sincerely,

LORENA M. BURGESS.

THOMPSON FALLS, MONT., December 15, 1959.

Subject: Hearing on S. 1226, Missoula, Mont.

Senator JAMES E. MURRAY,

Chairman, Senate Committee on Interior and Insular Affairs.

GENTLEMEN: "I am only one, but I am one. I cannot do everything, but I can do something. What I can do, I ought to do. And what I ought to do, by the grace of God, I will do!"

The above sentences are a simple rule for human behavior. To accept and discharge the challenge expressed in those few lines requires courage, at times a sense of duty will be the motivating factor. It is a combination of both courage and a sense of duty that provides the necessary motivation for me to participate in the discussion at hand. Hope and faith are other factors involved. Hope that your committee will have the patience to bear with me while I try to express briefly my simple and sincere objections to the proposed dams. Faith in the integrity, wisdom, and honesty of those entrusted with the responsibility of gathering evidence both pro and con and rendering a decision the evidence submitted will support.

Realizing full well that time and brevity are of the essence I shall attempt to state my position with that in mind and try to avoid being repetitious by submitting statements that have been or will be offered by others at this hearing.

The statements I make or the views I express are not influenced by affiliations or allegiance to any individual, group, organization, company, or corporation. No selfish interest or ulterior motive prompts a desire to voice my protests, unless it could be construed as selfish to see the State in which I was born and which has been my lifelong home developed and exploited in an orderly and practical manner, both morally and economically.

Let the record show that I am unalterably and unequivocally opposed to the proposed Paradise or Knowles Dams. Among my principal objections are these three basic ones, it is morally wrong and economically unsound and provides an opportunity for our Government to enter further into the field of private enterprise and thus once again provide more competition to legitimate business with tax supported and maintained experimental monstrosities.

To those of us familiar with or have been exposed to Government regulation, supervision, or ownership—the thought of which is obnoxious and repugnant, especially so when the Government proposes to enter fields where private enterprise operates successfully; to those of us who are the sons and daughters of those great men and women who came to Montana in the 1870's and 1880's when Montana was still a wilderness, it is an insult to our intelligence to even suggest that we need any help from the outside for the orderly development of our State or its resources.

To build a dam as proposed would call for supervision from a Federal agency whose authoritative personnel would be stationed in Washington, D.C., or other faraway places, thus limiting and controlling the development and solution of problems to people who cannot be as sympathetic and familiar with local conditions as local people. This is like absentee landlords whose intolerance and oppression caused many of those people who came to Montana in the 1870's and 1880's to leave their homelands. It might be well to interject here, that western people as a whole, and Montanans especially have an antipathy and hatred for that stock phrase, "I don't make the laws or the rules, I only enforce them,"

which is tossed around so glibly by unsympathetic unscrupulous, and uninformed Federal bureaucrats and administrators. If it is within your province, please do not burden us with any more of this breed than we now have.

Further, I charge, it is morally wrong to force some 3,500 persons from their homes, farms, businesses and etc., without any regard for the injustices and consequences they have to endure, especially so, when there is no need for it. Many of the victims of this dislocation are descendants of those great people who twice before suffered because of similar selfish motives. On one occasion they were forced, rightly or wrongly, by our Government to move from their ancestral homes in the Bitter Root Valley to the Flathead Valley. Again these same people were robbed, raped, and plundered in 1910, when the Flathead Valley was thrown open to settlement by the whites. May God forbid that my generation should be a party to the perpetration or repetition of such an outrage. To build a Paradise or Knowles Dam would again constitute a wrong and an outrage against these people. If built it would destroy two valuable power sites owned by these people by heritage and treaty known as Buffalo Rapids 2 and 4 because they would be flooded for all time. They would also be deprived of large sums derived from lease rental payments if these sites were not permitted to be developed by private enterprise. Acceptable agreement to both the Confederated Tribes of the Flathead and a private power company that provide for immediate construction of these dams in the event that the Paradise-Knowles proposal is abandoned have been reached. From a moral and humane point of view as well as an economic one, it is my contention that these dams be built in preference to the ones proposed. One reason being only two families would be dislocated and forced to find new homes as a result of the construction of Buffalo Rapids No. 2. Site No. 4 would affect and dislocate four families. This in comparison to 3,500 people who would be drowned out if plans for Knowles-Paradise were prosecuted.

No rich farmlands will be inundated. Agriculture will not be adversely affected. Cattlemen will have access as usual to their grazing lands. It will not be necessary to relocate or rebuild any new highways other than to replace the Sloan Bridge. There would be no necessity to relocate or abandon or build any railroad right-of-way. As a result no inconvenience to the industrial, agricultural, or social activities would be caused to the area affected.

Finally, I am opposed, as no need or justification for the Government to enter this field exists or is imminent. The people of Montana can and will if left to their own resources provide the capital, brains, and brawn for the orderly development of our great State.

Government ownership and regulation make possible the creation of big and little dictators, who in turn seem to take great delight in proving to the people who support them through taxation, fees, fines and penalties, and those august bodies who create them that they are not responsible to no one. Experience has shown that our representatives have in the past delegated the powers vested in them by the people to heads of agencies and bureaus and, when they found it necessary to curtail or retrieve some of the authority given to these agency heads, it was difficult or impossible to retrieve.

In summation, let me say again that the foregoing remarks, statements, and objections in support of my position are not motivated or influenced by any affiliation or allegiance to any individual group, large or small. Neither do I have even remotely any interest, personal or private, in any business or venture that would be in conflict with the construction of either Paradise or Knowles Dam. In an honest attempt to find out why some people were anxious to see these dams built, I have found the vast majority of those in favor either feel that their personal fortunes will be enhanced because of construction, because they own property, real and personal, from which they feel they will be paid more than ample damages, or they are engaged in some business such as grocery, liquor, service station, tourist court, or trailer camp, and the increased business during the construction will compensate them for the desecration of this area.

Without being facetious, may I suggest that the Federal Government devote the time it is now spending trying to create and build dams to putting its own house in order. The people generally would be more appreciative to see some effort made to reducing our staggering debt and to lightening the staggering load of confiscatory taxes, and to live and exist within its income before looking with covetous eyes for other fields to enter that will create further deficits.

In conclusion, may I suggest that you keep in mind: "You are only one, but you are one. You cannot do everything, but you can do something. What you can do, you ought to do. And what you ought to do, by the grace of God, you should do."

JOHN E. BRITT.

ST. REGIS, MONT., *December 10, 1959.*

HON. JAMES E. MURRAY,
Senator of Montana, Washington, D.C.

DEAR SIR: We would like to enter our opposition to Paradise and Knowles proposed dams. We have lived here 35 years, raised our family; our home and all our interests are here.

We sincerely think the small proposed dams would be equally as good and save millions of dollars for U.S. taxpayers. And also save the homes and lands of hundreds of western Montana citizens.

Yours very truly.

G. E. and DELPHINE BREEDING.

MOIESE, MONT., *December 11, 1959.*

HON. SENATOR JAMES E. MURRAY,
Chairman of U.S. Senate Interior and Insular Affairs Committee.

DEAR SENATOR JAMES E. MURRAY: We are sure against bill S. 1226, which we would give up all our rights and our places, and everything we own. We are getting too old to start over again and would not have the money to do anything else, as you would not pay us anything for our land and property.

The destruction would overcome all the good. If you must build, try some small ones.

We definitely are opposed to bill S. 1226.

Mr. and Mrs. L. W. BURRELL.

DIXON, MONT., *December 12, 1959.*

Senators MURRAY, GRUENING, and MARTIN.

DEAR SENATORS: I am for the dam. It is not only for us, but for the coming generations. You can't stop progress. But I don't go for the Knowles site. It ought to be down far enough to dam both rivers.

I put 20 years of my life on my place. I don't know how a man is supposed to get along on this land. My dad-in-law was a hard worker. He sunk \$20,000 into his place, five homesteads and some State land. That was in 1915. When he was killed on the railroad in 1935 he was \$2,000 in debt. And he had worked hard all the time.

Most of the men working at the Diehl sawmill are ex-farmers, ex-ranchers, or men who are still trying to hold on and working there to save their homes.

Let's build the dam. The money spent there would give work to a lot of people.

Respectfully,

EVERETT COTTON.

PARADISE, MONT., *December 14, 1959.*

Senator JAMES E. MURRAY,
Washington, D. C.:

I have been a resident of the Paradise community for several years. I want to go on record in opposition to bill S. 1226. This bill, if passed, would be the ruination of western Montana for the benefit of downstream States; as well as the flooding of our fertile, productive, agricultural land; the loss of homes, steady employment, and cherished friends. Should bill S. 1226 become a reality it would mean the moving of two cemeteries at least. Many who are buried in our local cemeteries are there by request. I oppose this bill as well as any bill that promotes a gigantic, unnecessary, Federal dam on the Flathead-Clarks-Fork Rivers.

A. P. CALDER.

STATEMENT OF THE CAMAS PRAIRIE GRANGE No. 103, EDGAR WALTER, MASTER

The Camas Prairie Grange No. 103 went on record as opposing the construction of the Knowles Dam project or S. 1226, on the Flathead and Clarks Fork Rivers.

Although the people will not be flooded they think reclamation will propose an irrigation project for the prairie and make them sell their farmland to 160 acres, of which they are very much opposed. They also think it would isolate them from the main highway and railroad.

PLAINS, MONT., December 7, 1959.

HON. J. E. MURRAY,
Washington, D.C.

DEAR SIR: My husband and I wish to give our reasons for not wanting either Knowles or Paradise Dam, S. 1226 bill.

First: If the same amount of money were spent on conservation in the head-water it would do more good for flood control.

Second: We believe in private enterprise. For one thing, they pay taxes and a Government-owned does not.

Third: Either of the above dams is not feasible from the cost standpoint and if so private, the power companies would be interested in building same.

Fourth: It covers up a lot of reservation land that was given to the Indians by treaty. If we can't honor our own treaties how can we expect other countries to honor theirs?

Fifth: As we understand, this project is primarily for flood control instead of power. It takes away a lot of tax money in Sanders, Lake, and Mineral Counties at a time when county taxes are already going higher every year. And Federal taxes are already too high.

So why throw away another half billion dollars of the taxpayers' money on the Paradise Dam?

Sixth: If built, instead of year ahead in industry, it will take away, for instance, Diehl's Mill. They employ over 100 men and will for years to come. But cover up their roads to timber, they will be through. And what is left: Mud flats, or water where only the rich can afford boats, etc. for sports.

We like to hunt and fish and both are excellent as is, but not in a dam.

What comes in for a few years while dam is being built—tarpaper shacks and trailer houses. Only ones to really benefit are the bars.

We built our home here because we like the country as is and not made into a stinkhole.

HAZELL P. CAMPBELL.
GLEN A. CAMPBELL.

DIXON, MONT., December 1, 1959.

Senator JAMES E. MURRAY,
Senate Committee on Interior and Insular Affairs:

I am writing this letter in regard to the proposed Knowles and Paradise Dams. I have lived in the Dixon community since June 1909 so I'm quite well acquainted with this part of the country. I think these dams are progress to Northwest as well as Montana. I think it will help build industry in Montana and also all the way to the coast, and help prevent floods and damage from floods. If it helps this part of the State as much as Hungry Horse Dam did Kalispell and that part, it surely will be worth a lot to Montana.

But for sentimental reasons as this has been my home most of my life I don't like to see it destroyed and people who has homes be forced to relocate, but I'm for seeing the country progress so I'm for the dams. I can't see why they would want to build this Knowles project instead of Paradise; the Knowles project is on the Flathead River, and this river is already partly controlled by Hungry Horse and Kerr Dams. While the Clarks Fork River hasn't any control dams at all. This dam at Knowles would be just a few miles above where the Clark Fork empty in so that would let one river run by the dam uncontrolled.

The Paradise will control both rivers with one dam, do the work of two dams as they will put dams on the Clark Fork somewhere later on anyway. I recommend to build Paradise; it will take the place of two dams and this trouble over building these dams will be settled and won't have to go through all this troubles

and meeting later on. If Knowles dam is built, sometime later on there will be dam on the Clark Fork and all these meetings and troubles will have to be gone through again. I'm not against private or public power; I think they should work together on these dams.

GERALD E. CANTREL.

PLAINS, MONT., *December 11, 1959.*

HON. JAMES E. MURRAY,
Washington, D.C.:

I am opposed to bill S. 1226 relating to the Knowles-Paradise Dam project. It won't benefit Montana or its people. All the electricity will go out of the State and even when they are building the dam our residents won't be employed by it. The construction will be done by their regular crews.

GEORGE COE.
MRS. GEORGE COE.

PLAINS, MONT., *December 11, 1959.*

HON. JAMES E. MURRAY,
Washington, D.C.:

I am opposed to bill S. 1226 relating to the Knowles-Paradise Dam project.

MARIE COE.
NORMAN COE.

PLAINS, MONT., *December 11, 1959.*

Senator JAMES E. MURRAY,
Senate Office Building, Washington, D.C.:

I wish to express my opposition to any Federal dam on either the Flathead or Clarks Fork of the Columbia River in the vicinity of Plains or Paradise, Mont. Therefore I oppose bill S. 1226.

Mrs. VADA M. COE.

PLAINS, MONT., *December 8, 1959.*

Re Senate bill 1226.

To the U.S. SENATE INTERIOR COMMITTEE:

I wish to go on record as opposed to Senate bill 1226, a bill to authorize construction of a Federal dam at the Paradise or Knowles sites on the Clarks Fork River, for the following reasons:

1. Western Montana and Sanders County, in particular, would be seriously handicapped, economically, by either dam.
2. Communication between our section and the rest of western Montana, both highway and rail, would be disrupted, and no suitable relocations have been found.
3. Much of our best agricultural land would be submerged, and land proposed to be substituted for submerged land is of inferior quality.
4. Access to our timber resources, the chief industry of this region, would be destroyed.
5. Recreational facilities, fish and wildlife resources under a large storage dam with fluctuating shorelines would be much inferior to present conditions.
6. Montana's rights and needs are not fully protected by the proposed bill.
7. The tax base of Sanders County would be adversely affected. After 5 years there is no provision for tax replacement.
8. Senate bill 1226 makes no provision for supplying educational facilities for the increased enrollment that would occur in schools during the construction period.

RIAL CUMMINGS,
Ex-Superintendent, Plains Public Schools.

To Whom It May Concern:

Regarding my opposition to the Paradise and Knowles Dams.

Because of the probable tax that would be imposed on us because of the project, and the loss of some 65,000 acres of fertile land that would be lost to the local residents.

Thank you.

JERRY COCHIN.

PARADISE, MONT., *December 2, 1959.*

HON. JAMES E. MURRAY,
Washington, D.C.

DEAR SIR: Senate bill 1226 as introduced by you and your colleague Senator Mansfield, is totally unacceptable to me as a resident of Paradise, Mont.

I resent the fact that I would be flooded out of my home by the proposed Paradise Dam, and I do not relish the thought of living on the lower side of a high earthen or cement dam, as the Knowles Dam would be if built.

Yours truly,

JERRY P. COLYER.

PARADISE, MONT., *November 29, 1959.*

To Whom It May Concern:

Although I am a retired man, my wife and I chose the town of Paradise to spend our retirement years, because of the pleasant friendships we have made, the beautiful surrounding countryside, the abundant forest wildlife, the big game hunting, the accessibility of well stocked fishing streams and upland birds, and the climate that is ideal for the pursuit of these hobbies.

Senate bill 1226 would erase all these advantages, scatter our friends and neighbors to the four corners, figuratively speaking, and force us to make new friends and locate in another locality; therefore, I strongly oppose the construction of the Paradise or the Knowles Dam, as proposed in Senate bill 1226.

Yours truly,

ROBERT CONNELL and WIFE.

DECEMBER 2, 1959.

It is wrong to flood our best land. The railroad should not be wrecked just to provide a large and tempting target for enemy bombers. We do not need it for power, storage, flood control, or a make-work project. Anyone who urges such spending as a large dam costs is playing into the hands of the Communists.

FRANCES CONE.
G. H. CONE.

PARADISE, MONT., *December 4, 1959.*

I am hereby giving my reasons for not wanting the Paradise Dam, at Paradise, Mont.

We have our home here. I work for the Northern Pacific Railroad, and my husband works here for the American Legion, and we feel that at our ages we don't care about starting another home somewhere else. Also my folks live in this vicinity and they would be very hard to care for and watch over if we were not here.

Mrs. VICTOR L. CYR.

PARADISE, MONT., *December 2, 1959.*

Senator MURRAY: I have lived in the Paradise Valley for several years now and like it very much. I have a small herd of registered Herefords and they do real well here. I would hate to move them.

I like it here and I would hate to see the dams, either one, go in.

EMILY R. COLE.

PARADISE, MONT., *December 2, 1959.*

JAMES E. MURRAY:

This is a great country to live in.
And I don't want the dam.

A. W. COLE.

HOT SPRINGS, MONT., *December 3, 1959.*

HON. JAMES MURRAY,
U.S. Senate Interior and Insular Affairs Committee:

I am opposed to the Paradise and Knowles Dams because I have lived here all my life. We own our home and property. I can't see where the dams will help Montana any except to flood out a lot of homes and land that can be farmed.

Yours truly,

IVA CHRISTENSEN.

HOT SPRINGS, MONT., *December 9, 1959.*

Senator MURRAY:

We realize that development of our great State should not be held up. But you must realize that Sanders County is very young, our population is increasing every day and the land which Paradise or Knowles will cover is going to take a large portion of the production land we're going to need this land in the very near future.

If these dams must be put in we think that private enterprise should do it, then we have a taxable project which will serve the same purpose but smaller and will not flood near as much of our county. Hoping you take this letter into consideration.

Sincerely,

BILL CHRISTENSEN.

DECEMBER 9, 1959.

Senator MURRAY:

We like our county with its rangeland and spaciouness, it helps make up a true part of the West. Let us keep it and the homes our ancestors have started so many years ago.

Our climate here is of the very best, a touch of winter and a season of warm but not severe hot days. An ideal country for industry, not flooded land, if a choice was to be made.

Thank you.

Mrs. BILL CHRISTENSEN.

DIXON, MONT., *December 8, 1959.*

Hon. JAMES E. MURRAY:

I am opposed to S. 1226 relating to the Knowles-Paradise project. I have my home here and I am no longer young, and for the money I cannot possibly do as well somewhere else.

Mrs. ETHEL CAPLE.

DIXON, MONT., *December 8, 1959.*

I am opposed to S. 1226, the Paradise Dam bill. This is my home and it could not be replaced elsewhere.

Mrs. WM. CAPLE.
WM. W. CAPLE.DIXON, MONT., *December 8, 1959.*

HON. JAMES E. MURRAY,
Washington, D.C.:

I am a rancher and stockman, and reside in the area that would be inundated should the Knowles-Paradise Dam be built. This bill, namely S. 1226, would be the ruination of my property and many others along with western Montana. Therefore I oppose bill S. 1226.

CLEM COLE.

BELKNAP, MONT., *December 7, 1959.*

Senator MURRAY.

DEAR SIR: In view of all the destruction weighed against the benefits Montana would receive from Knowles or Paradise Dams, I feel they would be a detriment to the country.

Too many good farm homes, projects already furnishing employment for Montana people would be taken away.

I am opposed to both Knowles or Paradise Dams.

JESS M. COOK.

ST. IGNATIUS, MONT., *December 11, 1959.*

Senator JAMES E. MURRAY:

We are both taxpayers of Lake County, therefore we feel that Paradise or Knowles Dam is a must for the good of all people, of western Montana.

Respectfully,

HULDALE CARTER.
CLAY CARTER.

THOMPSON FALLS, MONT., *November 30, 1959.*

The COMMITTEE FOR PARADISE DAM:

I wish to take a stand for Paradise Dam. There are now four dams on the waters of our river and the power all goes out of our State.

Montana Power has raised the rates in Thompson Falls one-third. We need a dam like Hungry Horse so we can have some industry at home. More income, so we can pay these high rates. As it is we sure are a powerless county as none is used at home.

Yours for a Federal dam,

Mrs. ART CRABTREE.

CORTNER'S CORNER,
Hot Springs, Mont., November 28, 1959.

Senator JAMES E. MURRAY,
Chairman, Senate Committee on Interior and Insular Affairs.

DEAR SIR: I wish to go on record as favoring the Paradise Dam site over Knowles for I believe Paradise would promote better waterfowl and game hunting in western Montana, as well as promote large investments in recreation and general business within this area.

I believe small dams only benefit those interested in the business of electric power.

Yours very truly,

BEN F. CORTNER.

GRANTSDALE, MONT., *December 9, 1959.*

DEAR SENATOR MURRAY: Am writing you to let you know I am very much in approval of your Senate bill (S. 1226) and also that I favor the Paradise Dam site, as I believe it will do the most good for the most people, and I know we need this large dam and all that it stands for, flood control, irrigation, and cheap power and lights. Also we need the employment which the project will afford, and the jobs it will create through the added industry which the abundance of cheap power will bring to our State.

We just cannot afford to be selfish about these things that affect the living standards of us all. We mustn't be so selfish as to build small dams on our rivers just for the profit of a few of us. I believe these natural resources were created for the benefit and profit of us all and not for just a favored few.

I wish to say, I think Paradise Dam will be the largest and brightest golden star ever placed in the crown of our State.

Yours sincerely,

R. H. COOK.

STEVENSVILLE, MONT., *December 1959.*

Senator JAMES E. MURRAY,
Chairman, Interior and Insular Affairs,
Washington, D.C.

DEAR SENATOR: The Ravalli County Farmers Union once again wishes to express the importance and necessity of a Federal multipurpose dam such as Paradise or Knowles.

We feel Paradise Dam would be a great step forward toward developing Montana.

With our growing population we need this dam for expansion. Therefore we urge passage of S. 1226 and construction at the Paradise site.

RAVALLI COUNTY FARMERS UNION,
EMMA CLEVIDENCE, *Secretary-Treasurer.*

PERMA, MONT., *December 11, 1959.*

Senator JAMES MURRAY,
Washington, D.C.

DEAR SENATOR MURRAY: We are opposed to the Paradise and Knowles Dams because it'll be out of the way to our market points, we will be a long way from a railroad, and freight and passenger buses have never been successful through this territory. With the lack of railroad and land and pipeline taxes coming in our taxes would be raised and we would still lack enough tax money to run our schools, take care of our roads, and so forth.

The small dams would be built by taxpaying corporations leasing from the Indians so everyone would be profiting.

Yours truly,

Mrs. DONNA CROSS.
GORDON L. CROSS.

DIXON, MONT.

COMMITTEE FOR PARADISE DAM :

I'm in favor of the construction of the Paradise Dam as if the Knowles project is built it means the building another dam on the Clarks Fork River and the Flathead River already has two controlled dams on it. The Paradise Dam will control both rivers with one dam. This means a lot to the taxpayers.

ED CANTREL.

PERMA, MONT., *December 10, 1959.*

Senator JAMES E. MURRAY,
Senate Interior and Insular Affairs Committee,
Missoula, Mont.

GENTLEMEN: I am opposed to the Paradise or Knowles Dams. I think the dam would be more detrimental than beneficial to western Montana.

The dam would flood farmland and several towns, roads, and railroads would have to be relocated.

LOTTIE CUMMINGS.

PARADISE, MONT., *December 5, 1959.*

CHAIRMAN, PUBLIC WORKS COMMITTEE,
Washington, D.C.

DEAR SIR: I am opposed to the construction of either the Paradise or Knowles Dams, as provided in your Senate bill, S. 1226.

I am employed and live in Paradise, Mont., and these dams threaten to abolish my work, flood my home, and make it imperative that I try to obtain employment in another location.

E. E. DAY.

STATEMENT OF MRS. ANDREW DAHL, VICE PRESIDENT, SHERIDAN COUNTY
ELECTRIC CO-OP, INC.

I want to add my voice to the many that are asking for the development and construction of the Paradise-Knowles project.

We in eastern Montana are faced constantly with the threat of power shortages. To us this can be serious; in many places disastrous. Our REA projects are expanding beyond our fondest dreams and since there is always a promise of industry where there is adequate power, we look with hope toward a future that will keep Montana's young men and women in the State. Only by the full development of our natural resources, and chief among those, water, can this be done.

Since Paradise-Knowles ties in so completely with the development of the Columbia, we must not give up this opportunity of full and complete development.

This is a challenge to our foresight and to our integrity. In the interests of our own REA cooperative and our generation and transmission cooperative of nearly a dozen REA cooperatives, I sincerely hope that favorable action will be reached at this hearing.

Thank you for your attention and for the privilege of presenting this statement.

DIEHL LUMBER Co., INC.,
Plains, Mont., December 8, 1959.

Senator JAMES E. MURRAY,
Senate Office Building, Washington, D.C.

DEAR MR. MURRAY: With reference to the hearing which is to be held in Missoula, Mont., December 15 on the Paradise and Knowles Dams.

We are against the Paradise Dam. Our main objection is: It would put us on a branch railroad line. Our past experience on branch lines has been unsatisfactory, especially when grain and other products start moving in the third quarter of each year. Also, we are not in favor of Government projects. I don't see how our country could survive taxwise if Paradise or Knowles Dam was built by our Government.

Yours very truly,

J. I. DIEHL, *President.*

LONEPINE, MONT., December 7, 1959.

Hon. JAMES E. MURRAY,
Washington, D.C.

DEAR SENATOR MURRAY: I wish to express my opposition to the construction of either Paradise or Knowles Dam, and following are only a very small "few" of the many reasons. I feel you should make an honest effort to prevent the construction of a dam at either of these sites.

First: Consider the many acres of land under irrigation in the Moiese Valley. Land that was settled on by many of the present residents or their descendents. This land was pioneered in its settlement, and only the people, who homesteaded this land, developed it from its rough stages to its present position can appreciate how closely their hearts have been interwoven, in this development, and its future.

Second: We strongly condemn some of our distant European neighbors, for placing so much power in the hands of a few—the Government—thereby removing the power of control of the people, by the people, and for the people, the foundation upon which our country was founded. Can you or any proponent, of so much Government taking over the business structures of our country, feel that you are supporting a Government by the people?

Third: Our tax structure in Montana is rapidly being weakened by the continuance of the Federal Government taking of our lands, and intruding on private business and from which, when in Government hands, no longer are taxable.

Fourth: It seems the Government has plenty to do, just operating the functions it is supposed to look after in Washington. One could go on for pages; but give private enterprise, low-rate money, tax-free dams, and charge part of construction to flood control, and recreation, and see what they could do.

Many of the proponents in Sanders County are people who will benefit from some small business, and certainly would profit a great deal during the construction, and they are not interested in what happens to the small towns, and homes submerged.

I saw at one meeting an artist's dream of what a beautiful lake the dam would make but he failed to give us a picture of the miles of mud flats, after the drawdown. Nor do any of the proponents ever mention, the sad results of

capillary action, that has made thousands of adjoining acres of shoreline worthless.

I have lived in this county since 1911 and we've managed to get our country developed and prospered; not in sole sense of moneys, but in love for our lands, beautiful scenery. And with the rapidly increasing atomic power, it does not seem right to push the will of the people aside, because some wish to make a name for themselves, and large financial gains.

Yours truly,

L. G. DONDANVILLE.

LONEPINE, MONT., *December 7, 1959.*

Senator JAMES MURRAY,
Washington, D.C.

DEAR SENATOR MURRAY: I am opposed to the construction of Paradise Dam. I enjoy living in this area just as it is. The construtcion of such a dam would certainly alter our pattern of living.

I favor the construction of smaller dams upstream, which would serve the purpose, without disrupting our schools, railroads, highways, towns, homes, and hundreds of acres of valuable land.

In the event of a war, our large dams would be one of the first targets, which would be disastrous all the way downstream.

Yours truly,

ELSIE M. DONDANVILLE.

HOT SPRINGS, *December 8, 1959.*

Senator JAMES MURRAY,
Washington, D.C.

DEAR SIR: I'm strictly opposed to any Government construction in this county. Since the Government is tax free, it would only hurt and disrupt this county and our ways plus putting more taxes per person.

I'm opposed to Knowles and Paradise Dams.

Sincerely,

BERT DOLSON.

HOT SPRINGS, MONT., *December 12, 1959.*

DEAR SENATOR MURRAY: I am opposed to the construction of Paradise and Knowles Dams, as it interferes with the 1855 treaty.

Mrs. BERTHA DOLSON.

HOT SPRINGS, MONT., *December 10, 1959.*

Senator MURRAY: Being a Flathead Indian, I am opposed to the construction of either Knowles or Paradise Dams because of the treaty of 1855.

I am not in favor of the higher rate of taxes we would have to pay. We are overtaxed now.

The disrupted homes would be enormous.

WILLIAM DOLSON.

NIARADA, MONT., *December 5, 1959.*

Senator MURRAY:

DEAR SIR: I am against the Paradise or Knowles Dam because of the people it will hurt. All the families that live down by the river and in that vicinity will have to all move out and start their homes all over again.

Respectfully,

MEREDITH DOLSON.

HOT SPRINGS, MONT., *December 3, 1959.*

Senator MURRAY:

DEAR SIR: I've lived in this country all my life and looking from my viewpoint, I disapprove of either dam.

Your Federal projects are tax free and that would hinder this country. So therefore I'm strictly opposed to either dam.

Respectfully,

JACK H. DOLSON.

DIXON, MONT., *December 8, 1959.*

We, the undersigned, are opposed to Senate bill No. 1226.

EDITH G. DANIELS.

MRS. HARLEY DANIELS.

HARLEY F. DANIELS.

DIXON, MONT., *December 11, 1959.*

HON. JAMES E. MURRAY,
Senate Interior Committee,
Missoula, Mont.

DEAR SIR: I am a member of the Confederated Salish and Kootenai Tribes of the Flathead Reservation, as well as a taxpayer and property owner.

I am unalterably opposed to S. 1226 which you are cosponsoring with Senator Mike Mansfield. You are supposedly in Washington representing the people of Montana, therefore I am writing this to you as an expression of my personal opinion and observation after years of living on our reservation.

The Indian people were moved against their wishes from the Bitterroot Valley to the Lower Flathead Valley; from a productive valley to one of lesser value—and, now our land is again threatened by the encroachment of powerful interests. Our lands are desired as a reservoir site for downstream interests.

I want to see our power sites developed on this reservation. Montana Power will immediately begin construction of a power dam on one of our Buffalo Rapids sites which will be of immediate benefit to the tribe. It could even be developed in conjunction with the Federal Government for flood control. This would create work for my people, and be of benefit to the counties concerned. As an American citizen, a tribal employee as well as a member of the tribe, I want this area developed for the inhabitants of this area, rather than inundated for the benefit of other areas.

The Federal Government is committed to assist the Indian reservations in developing industry on the reservations. Development of our power sites would result in serving the best interests of the Indian people, and the construction of Paradise or Knowles would defeat the purpose for which Congress is committed.

EILEEN DECKER.

STATEMENT OF LAWRENCE DRISCOLL, LAKE COUNTY, MONT.

My name is Lawrence Driscoll. I live on my farm in the upper drawdown area of the reservoir in Lake County, 6½ miles southwest of Charlo and 2 miles northeast of Moiese post office. A large part of my farm will be inundated, but I and my neighbors do not wish to stand in the way of progress and the good of the country.

We believe the value of land in the valley will be increased, many good jobs made available, and the markets for farm products and timber greatly improved. Farm units are relatively small and farmers need not only better markets, but opportunities for off-farm jobs for themselves or a part of their families.

Construction, as specified in S. 1226, would greatly benefit the dairy industry, and Lake County is a dairy county. I mention the dairy industry because I milk cows and I am a member of the board of directors of Consolidated Dairies, the principal processing and marketing dairy business located in Lake County. The proposed dam would bring to our door several thousand more consumers, many more than we could supply, and would make our operation highly profitable. This is only one example of the beneficial effect upon agriculture, business, and employment generally which the great multipurpose Federal dam proposed would have in this county.

DUPUIS BROS. LUMBER CO.,
Polson, Mont., December 10, 1959.

COMMITTEE ON INTERIOR AND INSULAR AFFAIRS,
The U.S. Senate, Washington, D.C.

GENTLEMEN: We are an independent lumber producing business situated in Lake County, Mont., with our new mill just in the process of completion at Polson. Prior to this time we have been located at Rainbow Lake between Hot Springs and Plains, shipping through Plains by Northern Pacific Railway and by truck to our buyers in Missoula and other localities. The building of Paradise or Knowles Dams would threaten our transportation lines from our mill in Polson, and endanger our heavy investment.

We do not favor the passage of Senate bill 1226 for many reasons, but chiefly because of the following:

It would provide for building dams which would cover the present Indian power sites on the Pend Oreille River below Polson. We as members of the Flathead Tribe do not want to see this potential source of revenue destroyed and a Government dam built which would have to be supported by taxes on us. We would like to see a taxpaying project built in this area, if there is going to be one built, and we believe that you as Americans should reserve the right to free enterprise, not to Government.

Taking of Indian lands for the building of Government projects on the Flathead Indian Reservation, without hope of return in money to the tribes, is in direct violation of our treaty of 1855, and certainly any encroachments on this treaty, in addition to those already committed, are not American and not in the interests of all of the people.

Building of either Knowles or Paradise Dams would threaten the loss of the railroad to Polson, the main shipping point of a large and prospering and tax-paying lumber and plywood industry, which has budded and grown in the past 5 years.

Access to timber and a steep rise in hauling costs would result from the building of such dams, because of the highways and railroads which would be removed from service.

We do not believe the overwhelming sentiment is in favor of either of these dams, and we challenge the Montana delegation to Congress to show that they are acting in accordance with the wishes of the majority of the people of western Montana, when they propose such a project. They are certainly rushing through to conclusion a legislative measure which does not have the backing or approval of the Army Engineers, and has not been proved to be economically feasible.

The destruction of tribal lands by Government without hope of return to the Indians is about as radical a proposal as we have ever encountered. We would like to see Congress act in accordance with the wishes of the people of the area to be affected. The chief proponents of these Government projects are not from Montana, and do not know the problems of Montana. If the Montana congressional delegation acts to build one of these dams, we believe that is an admission that they care more for the opinion and wishes of out-of-State interests than those of the people they have been elected to represent.

The time has come for all Members of Congress and especially of Montana's delegation to respect the rights and wishes of the people of Montana. Build dams through free private enterprise, which pays taxes, not through Government which taxes everyone to operate these projects.

Sincerely yours,

PETER O. DUPUIS.
EDWIN DUPUIS.
LYLE DUPUIS.
OLIVER. DUPUIS.

PLAINS, MONT., December 9, 1959.

HON. JAMES E. MURRAY,
Washington, D.C.:

I am opposed to bill S. 1226 relating to the Knowles-Paradise Dam project.

MARY C. DELSBROOT.

PLAINS, MONT., *December 2, 1959.*

To Whom It May Concern:

I am very much opposed to the Paradise and Knowles Dams. I have lived here all my life and to start a new home some other place at my age would not be a very good idea.

MRS. ANGELO DEMERS.

PLAINS, MONT., *December 13, 1959.*

HON. JAMES E. MURRAY,
Washington, D.C.:

I wish to oppose the building of the Paradise or the Knowles Dams—or bill S. 1226.

It would destroy so much valuable property in western Montana.

As in the case of the Grand Coulee Dam, no industries came to that part of Washington. Instead the electric power was sent to the west.

ALICE D. DIERKES.

PLAINS, MONT., *December 9, 1959.*

HON. JAMES E. MURRAY,
Washington, D.C.:

I am opposed to bill S. 1226 as relating to the Knowles-Paradise Dam.

CLARENCE DOUK.

PLAINS, MONT., *December 11, 1959.*

Senator JAMES E. MURRAY,
Senate Office Building, Washington, D.C.:

We wish to express our opposition to any Federal dam on either the Flathead or Clarks Fork of the Columbia River in the vicinity of Plains or Paradise, Mont.

We also wish to express our opposition to any legislation enabling the construction of the above-mentioned dams.

HARVEY L. DOTY, JR.
JEAN C. DOTY.

RAVALLI, MONT., *December 10, 1959.*

Senator JIM MURRAY,
Washington, D.C.

DEAR SENATOR MURRAY: This is to urge you to vote against the proposed Knowles or/and Paradise Dams. Also use your seniority influence to get others to vote as requested above.

Small unharmed dams can be an asset to be proud of and help with further State development. I am opposed to big Federal dams.

Yours truly,

WILLIAM B. DAY.

PARADISE, MONT., *December 4, 1959.*

I would like to go on record as being opposed to the Paradise Dam.

MRS. C. J. EKMAN.
C. J. EKMAN.

DIXON, MONT., *December 8, 1959.*

HON. JAMES E. MURRAY,
Washington, D.C.:

I am opposed to bill S. 1226 as relating to the Knowles-Paradise project.

I am a rancher and raise cattle in the area directly affected, and realize the damage it would do to western Montana.

JOHN W. ELLIS.

DIXON, MONT., *December 8, 1959.*

I am opposed to the Paradise Dam bill, S. 1226.

We have lived here for years. We have a good farm with good outbuildings and could not replace it elsewhere.

MANNIE ELLIS.

MOIESE, MONT., *December 11, 1959.*

Senator JAMES E. MURRAY,

Chairman, Senate Committee on Interior and Insular Affairs.

DEAR SIR: Regarding Senate bill S. 1226. The proposed bill in my opinion would be putting a burden on not only the people being dispossessed in Moiese Valley but on the country as a whole.

Moiese Valley is good farmland and has an irrigation system that is fully developed and has a very adequate water supply which is more than can be said for some irrigation systems.

As the rate of population of the United States is expanding it appears to me we should keep the land that is tillable and prepared to grow food for some future generation who may need it. There are plenty of countries in the world today who would give a lot to be able to have this valley to grow food for their hungry people.

It also appears to me there are too many people working to get this project through who have no apparent reason to want it put in, in fact there are some whom it would injure unless they can't see that far into the future.

Sincerely,

GEO V. DeVoe.

PERMA, MONT., *December 10, 1959.*

Senator JAMES MURRAY.

DEAR SENATOR MURRAY: I want to protest very strongly the construction of either Paradise or Knowles Dams.

I favor small dams that will be less costly, less destructive to the people and country, and serve the purpose fully as well.

Let's save money where we can and spend on our defense effort so we may survive in the nuclear age.

Sincerely,

Mrs. VIRGINIA ERCHUL.

PERMA, MONT., *December 10, 1959.*

Senator JAMES MURRAY.

DEAR SENATOR MURRAY: I want to protest the construction of either the Paradise or Knowles Dams.

Let me say leave our wonderful western country as it is. We want our roads, railways, and farmlands as they are. Give us small dams and power for our country without displacing its people.

Spend on the defense effort. This country has enough trouble now. The river has enough dams on it now. Give us private enterprise.

Sincerely,

JOE ERCHUL.

PARADISE, MONT., *December 10, 1959.*

Senator JAMES E. MURRAY,

Chairman, U.S. Senate Committee on Interior and Insular Affairs.

DEAR SENATOR MURRAY: Have been a resident of Sanders County since 1918. Am a property owner during that span of time. To my observation, has been at a standstill to the exception of removing millions of feet of timber.

I have read Senate bill S. 1226 introduced in the 86th Congress, first session, which has been referred to your committee.

Wish to advise you that I am fully in favor of this legislation which has been overdue, sadly needed for flood control, future needed water recreation, and other benefits.

Also am in favor of the Paradise Dam instead of the Knowles damsite to obtain full well-being of western Montana.

Yours very truly,

L. E. ERICKSEN.

PLAINS, MONT., *December 11, 1955.*

HON. JAMES E. MURRAY,
Washington, D.C.:

I am opposed to bill S. 1226, relating to the Knowles-Paradise Dam project, because I would rather see private industry have a chance.

Montana Power Co. is a State-owned industry and they are willing to build two dams which would be privately-owned industry. This country needs more private industry to keep it a democratic nation.

Yours respectfully,

MEL EVINS.

PLAINS, MONT., *December 11, 1959.*

HON. JAMES E. MURRAY,
Washington, D.C.:

I am opposed to bill S. 1226, relating to the Knowles-Paradise Dam because I feel that it not only would ruin our community, but it would drive people from their homes who have put their life into their places and although I would not be forced to move I wouldn't want to live so close under a dam.

Yours truly,

TRESS EVINS.

PLAINS, MONT., *December 14, 1959.*

Senator JAMES E. MURRAY,
Washington, D.C.:

I have been a resident of Plains for 18 years and have a new home built in which we now reside. I want to go on record in opposition to bill S. 1226 for several reasons. If passed, we would have to move again—probably away from our neighbors and friends; the hunting and fishing grounds, to which we are acquainted, would be gone. The steady employment, which we are accustomed to, would be disrupted, fertile agricultural land would be flooded. I oppose any bill that promotes a gigantic, unnecessary Federal dam on the Flathead-Clark Fork Rivers. Am opposed to unnecessary Government spending, an added drain on taxpayers—our dollars are depreciating due to such projects.

LAVEBNE FJELDE.

PLAINS, MONT., *December 11, 1959.*

HON. JAMES E. MURRAY,
Washington, D.C.:

I am opposed to bill No. 1226 pertaining to Knowles Dam, and also Paradise Dam.

ORÉTHA FRENCH.
PERRY FRENCH.

PARADISE, MONT., *December 3, 1959.*

HON. JAMES E. MURRAY,
Chairman, U.S. Senate Interior and Insular Affairs Committee:

I am opposed to S. 1226, relating to the Knowles-Paradise Dams project.

Legislation such as S. 1226 is detrimental to the welfare of the State of Montana and the people of Montana, because such construction creates a false economy during the construction period, followed by devastation of our tax base, also it provides undue hardship for those forced to give up their homes, their jobs, and seek new environment and friends elsewhere.

Yours truly,

CLARA FLO FORTNER.

PARADISE, MONT., *December 6, 1959.**To Whom It May Concern:*

I am a resident and I am employed at Paradise, Mont.

I am opposed to the proposed Paradise and Knowles Dams as introduced by Senators Murray and Mansfield.

If either of these dams are built, I will be forced to seek other employment, and because I am past the age of 45 years, it would be almost impossible to obtain other employment, and highly improbable that I could find employment that would pay me the same wages that I have worked years to achieve.

Sincerely,

JAMES R. FOETNER

 PARADISE, MONT., *December 4, 1959.*

I am opposed to Senate bill S. 1226 relating to Paradise and Knowles Dams. I have lived in Paradise for years, have my home and work here, I prefer to stay here.

MARJORIE C. FOETNER

 PARADISE, MONT., *November 28, 1959.*

HON. JAMES MURRAY,

Chairman, U.S. Senate Interior and Insular Affairs Committee:

S. 1226 introduced by you, that proposes to build the Knowles or Paradise Dam is objectionable to me, my way of life, my home, my many friends, and will also do away with my means of earning a living for my wife and family.

I and my wife have lived in Paradise for over 30 years. We like it here, and plan to spend our remaining years here, unless your dam bill forces to move to some other town.

Very truly yours,

ART FOETNER

 HOT SPRINGS, MONT., *December 7, 1959.*

Senator MURRAY,

Senate Office Building, Washington, D.C.

DEAR SIR: In regard to the proposed Paradise Dam, I wish to add my objections as the result will be many thousand acres of land inundated and many people displaced from their homes.

Respectfully,

TOM G. FITZPATRICK.

 HOT SPRINGS, MONT., *December 7, 1959.*

Senator MURRAY,

*Senate Office Building,
Washington, D.C.*

DEAR SIR: Am taking this opportunity to voice my opposition to the proposed Paradise Dam in western Montana as the damage caused to real estate and property would be irreparable in its vastness.

Respectfully,

FRED H. FITZPATRICK.

 HOT SPRINGS, MONT., *December 7, 1959.*

Senator MURRAY,

*Senate Office Building,
Washington, D.C.*

DEAR SIR: As one of the boys whose home and land will be under 21 feet of muddy water, would like to voice my objections to the proposed Paradise Dam on the basis as I see it "A muddy stinking frogpond full of scum and mosquitos covering up the years of hard work of the pioneers, homesteaders, and their descendants, plus the land granted the Flathead Tribe."

Respectfully,

FRED H. FITZPATRICK.

HOT SPRINGS, MONT., *December 7, 1959.*

Senator MURRAY,
Senate Office Building,
Washington, D.C.

DEAR SIR: I hereby extend my opposition to the proposed Paradise Dam in western Montana on the basis of destruction of real estate and property belonging to the taxpaying public.

Sincerely,

LELA C. FITZPATRICK.

STEVENSVILLE, MONT.

ROY M. LOMAN,
President, U.C.D.O.,
Ronan, Mont.

DEAR SIR: Enclosed you will find a copy of a letter which I sent as an open letter to the Missoulan Sentinel. I am hoping this letter may be the catalyst which will help to bring about a satisfactory solution of the water problem to the majority of the people concerned.

Yours truly,

R. E. FRAZER.

To Whom It May Concern:

It is preposterous for anyone to insist that the majority of the people of Montana or the Western United States or anywhere else will benefit by large dams in Montana flooding a large percent of our arable land. On the contrary the majority of the people will be penalized.

The proponents of these dams say we need electric power. I say yes we do need power; but we do not need these large dams to obtain that power. We can establish many powerhouses below present dams and with the water control we have, generate enough power. The Government refused to let the Montana Power Co. put another powerhouse below the present Kerr Dam. They could put several powerhouses at intervals below Kerr and using the same water they could generate great amounts of power. As for farther west several powerhouses could be set up one after the other near the confluence of the Columbia River with the ocean where there is always ample water and great amounts of power generated. Do you know that in Germany they have a powerplant that generates as much power with just several feet of fall as we do in some of our highest dams of hundreds of feet. So much for power.

Now take flood control. This dam which would inundate large areas of our good land would be of little value as far as flood control farther down stream. This dam would control very little water having any effect on the lower Columbia Basin because it is too far from the danger areas and because its control would be over a very small watershed compared to the whole Columbia Basin. The actual flood control would be small because it would be the volume of water which the dam would hold beyond that volume normally held for power purposes and recreational purposes. The proponents claim they would maintain the level of the reservoir for recreation thus they would have little room left for floodwaters. They cannot do all at the same time. That is namely provide space for floodwater and still maintain the reservoir at high level for recreation. Proof of the little use of this dam for flood control can be shown by the recent floods which were caused in Washington by the unseasonal weather in Washington. I am of course referring to Washington State and not Washington, D.C. where there seems to be some unseasonal weather of another sort.

We now have in this world approximately 57,510,000 square miles of land as against 139,440,000 square miles of water. With the growing population it is foolish to flood more arable land. The Dutch who are struggling with the sea for more land would surely trade us water for the land.

Now for a better system of flood control we could establish many small dams throughout Washington, Oregon, Idaho, and Montana. These dams could be near the source of our water in the mountainous areas which would not deprive us of arable land. These dams would no doubt need to be great in number and controlled with a respect to our water and snowfall thus assuring us of good flood control. Since these dams would be great in number they would provide a greater area with water as well as provide a greater amount of temporary and permanent jobs for unemployed people.

Thus we have the problem of power solved by numerous low fall powerhouses.

We have the problem of flood control solved by numerous small dams.

We boost our economy by more permanent jobs.

That leaves, ladies and gentlemen, a problem to solve on which I would like to make a suggestion. That problem is making fertile thousands of acres of arid land which we have in some of our States such as Nevada, Arizona, and so on.

Of course it is true we have a large surplus of food here now; but the world as a whole is short on food for we have many impoverished nations in the world coupled with an increasing population. We must look ahead to the years when we will have peace with righteousness, justice, and freedom in the world; when all nations will live in harmony as our States in these United States so live.

We can construct nuclear powerplants which will be capable of preventing all great rivers from entering the ocean in their entirety and turn the surplus water back upon arid sections of the world to make those sections fertile. By raising the standard of living we can create jobs the world over. Thank you.

Yours truly,

B. E. FRAZER.

DIXON, MONT., December 10, 1959.

To Whom It May Concern:

I am very much against the proposed building of Paradise or Knowles Dams.
B. C. FLANSBURG.

MORISE, MONT.

HON. JAMES E. MURRAY,

Chairman, U.S. Senate Interior and Insular Affairs Committee.

DEAR SENATOR MURRAY: I herewith wish to state that I am very much opposed to the construction of a Federal dam at either the Paradise or Knowles sites for the following reasons: It would flood out the Morise Valley where I have lived for the past 24 years and where I am at present living. Since I am not a landowner, I, as well as a great many other people in this area, would stand to lose practically everything I've worked for: my job, my home, my friends, and the chance of ever being able to eventually own property here. This may not mean much to people who will not be affected but it means that all my plans and efforts of the past 13 years will be lost with no compensation whatsoever. In 1946, after I was discharged from the service, I decided that farming would be my lifetime vocation. I spent 2 years at Montana State College getting the education I felt necessary in this field. In 1950, my brother and I rented our father's farm and additional land from Mr. L. O. Smith and for 5 years, we carried on a successful sugar beet operation. In 1956 I entered into a partnership with Mr. L. O. Smith in a farming-cattle operation which I have been engaged in ever since. Starting from nothing, it's taken a long time and the help of many of my friends here to get where I am now. Should this proposed project go through, it would mean having to start all over again without the help of people who know me.

There are a great number of people in the affected areas who fall in the same category as mine, who will lose jobs and futures with no compensation for such losses as well as losing cherished friendships and carefully built up business relations.

Sincerely,

EVERITT FOUSE.

FUNKE & SONS FEDERATED STORE,
Polson, Mont., December 12, 1959.

SENATE INTERIOR COMMITTEE:

We wish to hereby oppose the building of Paradise or Knowles Dams for the following reasons:

The building of either of these dams will be a loss, taxwise, of 13,179 acres to Lake County, one-half of which is irrigable land. The improvements alone of which are \$600,000, and this is going to be a terrific impact on the taxpayers of our county.

About 800,000 acres of Indian and powersite land will be inundated, including two powersites, which will be eventually built by a private power company. The loss of these powersites would be a terrific loss, taxwise, to Lake County.

The building of either of these two dams would take from Lake County 13,600 acres of taxable land from school district No. 28, which would make it unbearable to us taxpayers.

We believe that the building of either Paradise or Knowles Dams at a cost of over half a billion dollars is fantastic.

A drawdown of 80 feet from a newly created reservoir would only make an unsightly and smelly condition for we and our children to put up with, instead of a flowery place of recreation like many would like us to believe. Past experiences with other Government reservoirs speak for themselves.

We could go on to mention many other reasons why Paradise or Knowles Dams are impractical.

Very truly,

E. E. Funke, Bessie M. Funke, Mary Ann Le Brun, Clifford R. Le Brun,
Eva L. Funke, Thomas E. Funke, Patricia A. Funke. (Mrs. E. E.),
Carol Ann Funke, James H. Funke.

THE FLATHEAD COURIER,
Polson, Mont., December 15, 1959.

Senator JAMES E. MURRAY,
Chairman,
Hon. ERNEST GRUENING,
U.S. Senator, Alaska,
Hon. THOMAS E. MARTIN,
U.S. Senator, Iowa,
Members, Senate Interior Committee.

GENTLEMEN: The Flathead Courier, official weekly newspaper of Lake County, published at Polson, Mont., respectfully submits the following statement pertaining to S. 1226 which would provide for the Knowles Dam project:

It appears to us that any dam construction within the Knowles project area as outlined in S. 1226 would effect irreparable economic harm on the future growth and development of Lake County, Mont.

Unlike Hungry Horse Dam, any reservoir created by either Paradise or Knowles Dams would make necessary transfer of major rail lines, tend to disrupt established local industries, flood tillable farmland and good grazing land, cause relocation of many families, threaten the future of an already well established lake resort area, remove large amounts of acreage from county tax rolls, and might well cause the economic death of Lake County as a political subdivision. Statistics show that more than half of the land in Lake County already is nontaxable.

Few, if any, of the above-cited items were factors involved in construction of Hungry Horse Dam, a much smaller project. We feel there is no logical comparison between the two sites.

At present—without S. 1226 approval—Lake County is assured of the brightest future in its history. The area is Montana's newest timber capital as well as being the fastest growing resort region in the State. Behind all this is a solid agricultural base. The Flathead Courier opposes S. 1226 and any other proposal which would tend to undermine the present and future foundations of Lake County.

Respectfully submitted by

PAUL H. FUGLEBERG, *Editor.*

POLSON, MONT., December 15, 1959.

Re S. 1226 (Paradise Dam).

The CHAIRMAN, SENATE COMMITTEE ON INTERNAL AND INSULAR AFFAIRS,
Washington, D.C.

DEAR SIR: This is to express my disapproval of the construction of this dam. My reasons are as follows:

1. Constructions of this type should be left to private industry which always does it more economically. Our Government is already in too many businesses in which it does not belong. We cannot hope to reduce taxes by this project as it most certainly would not be self-sustaining as there is no shortage of electric power in Montana.

2. The relocation of the railroad lines, highways, and residents affected would result in too great a loss to the economy of the counties concerned.

3. Flood control should be undertaken in the States where the floods occur. This should be done, in my opinion, with a series of small dams where indicated. Your consideration of this letter will be deeply appreciated. Thank you.

Sincerely,

GORDON G. FISHER, O.D.

STATEMENT OF FLATHEAD LAKERS, INC.

This statement is submitted on behalf of Flathead Lakers, Inc. This organization is composed of 750 western Montana taxpayers organized for the protection of Flathead Lake, which we believe to be one of the keystones of the economy of western Montana.

Although Flathead Lake is our primary concern, we are also concerned with anything that we feel offers any threat to western Montana.

We are opposed to S. 1226 for the reason that we feel it is detrimental to western Montana and therefore to Flathead Lake.

The detriment that we see in S. 1226 is that it fails to make an absolute reservation for use in Montana of the at-site power and a fair share of the power generated downstream by the use of waters stored here. We believe that any bill authorizing storage in Montana should be so worded that there is no doubt in the mind of anyone that there is reserved for sale in Montana the at-site power and a fair share of the power generated downstream by our stored waters with the provision that we have a right to recall this power for use here when needed, if it is contracted for sale downstream prior to the time we need it.

This bill is also dangerous to Montana in that it has no provision protecting us in our rights to use our waters in the future. This bill, or any bill authorizing the flooding of Montana's lands, should provide that no rights could be established downstream for the use of waters stored here that would prevent us from using these waters in Montana when we need them in the future.

We believe that this bill, as written, could offer a direct threat to Flathead Lake, if it became necessary to lower Flathead Lake to fill the storage reservoir to supply rights which might be acquired against us in the absence of any provisions protecting us in the future use of our waters.

We have no desire to prevent growth and development or to act as obstructionists for any feasible projects, but we feel that any bills providing for the storage of water in Montana should give to Montana the protection and benefits which fairness dictates that we should be given.

STATEMENT OF THE FLATHEAD COUNTY FARMERS UNION, FRED C. KUEHNE,
LEGISLATIVE CHAIRMAN

We the Flathead County Farmers Union, are on record in support of Senate bill 1226 and favoring Paradise Dam.

We recognize that Montana must develop its most valuable resources, water power and multiple-purpose dams, in order that the State may attract industry, build its economy, so that our children may find useful employment in their own State. Safeguard the water rights and its resources which in turn will not only benefit the economy of Montana but the entire Northwest and the Nation.

Taking into consideration Hungry Horse Dam. The benefits already derived in power, flood control and irrigation, and yet has only begun to develop the benefits and potentials yet in store.

The benefits to Flathead County alone is worth the price of the dam. First the aluminum plant, which pays as much taxes alone as the whole city of Kalispell. It employs 600 people whom could otherwise not live in Montana. They also pay taxes. The flood control has made land useful averting much flood damage. An entire community east of Kalispell has been built up, which suffered much flood damage before the dam was built. Besides firming up power all the way down the Columbia Basin.

Cheap power has not only brought in the aluminum plant with all its benefits but the entire country has been benefited by cheap power which would not have been possible without Hungry Horse Dam.

What this dam has done for Flathead County and the surrounding country and more can also be gained by building Paradise Dam. As for the time of developing Montana's greatest resources, "water" is long past due and we must act soon and build our State, the Northwest and the Nation.

As to the cost of such dams it is not an expense to the taxpayers of Montana nor the Nation, the money is only loaned to the project by the Government and the loan is paid back in full with interest. Usually in 50 years by the sale of electrical power. Many such projects are being paid for years in advance.

Such dams as heretofore mentioned do most certainly not only benefit Montana or any particular area. But are an investment to the Nation as a whole. In distribution of population in defense, and the overall economy and many other benefits too numerous to mention.

FLATHEAD SWEET CHERRY ASSOCIATION, INC.,

Polson, Mont., December 11, 1959.

COMMITTEE ON INTERIOR AND INSULAR AFFAIRS,
U.S. Senate, Washington, D.C.

GENTLEMEN: We again submit our protest against the construction of Paradise Dam for several reasons.

Our association is entirely dependent on rail transportation in getting our fruit to markets in carload quantities.

The rail situation at the present time is bad enough, it being a branch line out of Missoula and Paradise, in that we lose about 6 hours of very vital time in getting the cars on the main line from Polson. Any relocation or elimination of the rails could adversely affect our business and could easily cause further loss in spoilage en route to eastern points.

We feel the elimination of lands in Lake County which contribute to the tax structure of the county could be a very serious threat to our industry and we feel any further increase in land taxes will fold many fruitgrowers in the area because we are receiving 1940 prices for our product and buying material and equipment at 1959 prices, leaving a very small margin of profit that simply cannot absorb any more taxes and continue to operate.

We sincerely urge the proposition for the building of Paradise Dam be killed and removed from any further immediate consideration by your committee.

Yours very truly,

FLATHEAD SWEET CHERRY ASSOCIATION.

By E. C. CARPEATER, *Secretary-Treasurer.*

STATEMENT OF CLYDE P. FICKES, MISSOULA, MONT.

My name is Clyde P. Fickes, I live at 821 Stephens Avenue in Missoula, Mont. I am executive secretary of the Upper Columbia Development Council, an organization of western Montana residents who are concerned about the water resource. It seems desirable that you have some knowledge of my background in order that you may be able to better evaluate what I have to offer for your consideration.

I was born in Nebraska in 1884 and came to Kalispell, Mont., by way of Bedford County and Pittsburgh, Pa., in 1900. Most of my life has been spent in Montana and especially western Montana, which to me is God's own country. In 1907 I joined up with the U.S. Forest Service and from that time until 1928 I served as a forest ranger and assistant supervisor on several different forests of region one. In 1928 I was transferred into the regional office at Missoula as an administrative assistant in the offices of operation and engineering. My work from 1928 until 1944 was with the direction of planning, supervision, and inspection of all phases of improvements on the national forests of region one. The supervision and inspection of construction and maintenance of trails, telephone lines, buildings, and many other improvements required that I visit and become familiar with the terrain of each and every forest in the region. In connection with this work, it was my good fortune to have gained an intimate knowledge of Montana's rivers and streams not had by many other persons.

The problem of protecting and conserving our water has been my concern and study ever since 1906 when I worked on the location survey of the St. Mary's-Milk River diversion canal on the Blackfoot Indian Reservation and had the opportunity to listen to discussions about water problems between the

project engineer, C. C. Babb, and the location engineer, a man who had worked on the Panama Canal and the Salt River project in Arizona. At that time conservation was a very live topic of discussion led mostly by Theodore Roosevelt and Gifford Pinchot for the proponents and their arguments soon made a believer out of me. While I do not claim to be an authority on this or any other subject, I do believe, that as a result of a lifetime of observations and experiences as a dedicated conservationist, that I do know something about where Montana water comes from and how it gets where it goes.

In 1944 I was transferred to the Treasury Department at Seattle and became engaged in the war surplus disposal activity, becoming Associate Regional Director for War Assets Administration at Seattle and in 1946 Regional Director for WAA at Los Angeles, from which post I retired from Government service in 1947. Returning to Montana that same year to resume residence in God's country, I have continued my interest in matters affecting my home country not the least of which is what to do to preserve our water so that our children and grandchildren will have it as clean and plentiful as we have had it.

I have prepared the statement, Water Resource Management for the Clark Fork Basin in Montana, which has the approval and endorsement of the members of the Upper Columbia Development Council and it is presented as being a more practical and beneficial plan for all concerned than is proposed by S. 1226 for the Clark Fork basin:

A PLAN FOR WATER RESOURCE MANAGEMENT

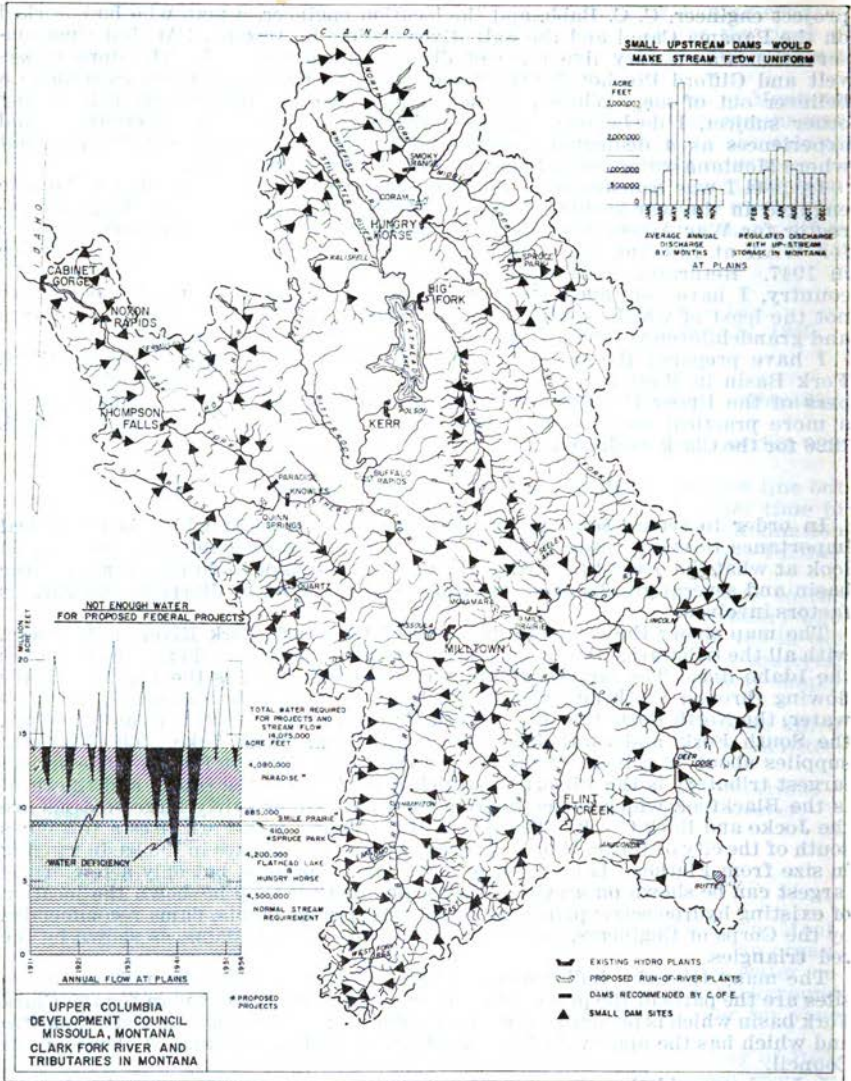
In order to secure some understanding of the problem which is of critical importance to every resident of western Montana, we should first take a good look at what the overall picture may be. In an attempt to do this, a map of the basin and several graphs or charts have been prepared to illustrate the various factors involved.

The map shows the complete drainage of the Clark Fork River in Montana, with all the tributaries that come together to make the river where it flows across the Idaho line. The largest tributary of the Clark Fork is the Flathead River flowing through Flathead Lake, which has for its principal branches, the Stillwater, the North Fork, the Middle Fork, better known to oldtimers as Big River, the South Fork, and Swan River flowing through Swan Lake. The Flathead supplies about 62 percent of the flow of the Clark Fork at Plains. The second largest tributary is the Bitterroot, which flows in from the south, and the third is the Blackfoot, which comes in from the east. Other fairly large streams are the Jocko and Rock Creek. The source of the main Clark Fork rises a few miles south of the city of Butte, Mont. There are many small lakes in the basin ranging in size from Flathead Lake down to many small potholes, but only a few of the largest can be shown on a map of this scale. On the map is shown the location of existing hydroelectric plants, proposed run-of-river plants, dams recommended by the Corps of Engineers, and the possible sites of small dams, as shown by the red triangles.

The many triangles indicate sites where small dams might be built and these sites are the parts of the proposed water resource management plan for the Clark Fork basin which is presented for the consideration of the Senate select committee and which has the approval of the members of the Upper Columbia Development Council.

It has been said that this plan of water storage for stream regulation is "unrealistic," that "about all they (the small dams) would do is provide storage of value downstream, result in little or no power, give no community benefits, and the drawdown would be heaviest in summer, when it isn't desirable to Montanans." With the reading of this statement the reader can decide for himself whether or not the proposed plan is "unrealistic."

The annual flow graph in the lower left-hand corner of the map shows the runoff in acre-feet of the Clark Fork River at Plains, Mont., for a period of over 40 years. Each vertical projection indicates the runoff for 1 year. The horizontal shaded areas across the graph represent the amount of water available for various storage projects. The bottom shaded area indicates the amount of water necessary to maintain normal streamflow throughout the year. This is water that cannot be included in any storage plan. The maximum discharge in any one year was 21,300,000 acre-feet in 1928 and the minimum discharge in any one year was 6,404,000 acre-feet in 1941. The average or mean discharge for the period was approximately 13,766,000 acre-feet.



The monthly flow graphs in the upper right-hand corner indicates the average recorded discharge by months at Plains and the "regulated" discharge by months with the proposed upstream storage by small dams. It will be noted that about 65 percent of the runoff occurs in the months of May, June, and July, with 35 percent distributed over the other 9 months. Obviously, any storage plans that may be considered, must take into consideration the amount of water that it takes to keep the river "wet" 365 days of the year. It should be clear that the water indicated in the bottom shaded area of the annual flow graph cannot be made available for storage in a reservoir. Water that does not come down until January cannot be stored in June. The red shaded areas on the annual flow graph indicate the water deficiency for storage purposes during the period represented.

It is believed that any plan to impound water in the streams rising in Montana should be made on the basis of the greatest use possible to the people of Montana as well as the folks down the river; such use is not confined to the genera-

tion of electric power, which in the long run is a minor factor in the water use picture. Much more important is the long-range planning for adequate water supplies for consumptive use by a rapidly growing population and the maintenance of a uniform streamflow throughout the year in our many side streams. Strange as it may seem to some, water runs downhill and, after it leaves Montana, the use of it is lost to us here in Montana forever. If we want a proper and adequate water supply for our children and grandchildren, we had better plan now to store some of our water up where, as it comes down the hill, it will be available for use here in Montana.

And so, to get to the heart of the plan, it is proposed that before any more monolithic, monumental, Egyptian pyramid type dams are built in Montana, that a detailed survey and study be made of the possibilities of building many small reservoirs in the headwaters of our streams as shown by the red triangles on the map, so that the end result of such storage will be to the benefit of the people living in Montana, as well as those living in Oregon and Washington. It is believed that the development of such a plan of water conservation will, in the long run, be of infinitely greater value to all the people than will the building of the proposed Paradise, Knowles, or similar dams.

Upstream means one thing to the person living in Portland, Oreg., and quite another to the person living in Kalispell or Missoula. It all depends on your viewpoint from where you look at it.

There persists in this country a school of thought that all hydroelectric production should be Government owned and operated so as to assure, it is alleged, cheap power for a restricted class of privileged users. Our timber, a natural resource, has been under administration by the U.S. Forest Service for over 50 years and yet in all that time it has not been proposed that the Government build and operate sawmills and sell the finished product, lumber. What sound reason is there to assume that our water resource should be managed any differently than our timber resource, by building powerplants, manufacturing and selling the finished product, kilowatts? It appears logical and sound political practice for the Federal Government to create a new division (service) or department of water conservation and place the administration of all fresh water resources, just as it has the forests, under a single control. It is interesting to note that a major forward step in that direction has been made in the establishment by the U.S. Senate of a Select Committee on National Water Resources composed of members representing the four permanent committees of the Senate having something to do with the water resource.

There is another phase of water resource management which is being given a lot of emphasis, and that is flood control, which could better be termed flood prevention. The present program of the Engineers of building dikes, deepening channels, and constructing mammoth dams to control floods might be compared with the control and prevention of contagious diseases. Is a smallpox or polio epidemic controlled by building a large hospital or is their spread prevented by vaccination and inoculation? Floods can be prevented by headwater storage vaccination.

Flood control for Portland, Oreg., to be sure. But what about flood control for Missoula, Mont.? The editor of the Moorefield, W. Va., Examiner had this to say about flood control: "We attended the committee meeting on the flood prevention program * * * held at Brandywine. This is the project sponsored by the Potomac Valley Soil Conservation District * * * and should not be confused with the flood control project by the Corps of Engineers. The Army Engineers go in for huge dams which inundate large areas of land, whereas the flood prevention project is a series of small retention dams in the upper reaches of a watershed which prevents floods rather than controlling them."

Is it unrealistic to assume that 20 or 30 small dams on the Blackfoot would prevent flood damage at Missoula? Is it unrealistic to believe that a Paradise Dam would not prevent flood damage at Missoula? It appears obvious that flood prevention is one of the important items in any water management plan. The Engineers have spent a couple billion dollars building levees and deepening channels along the Mississippi River, trying to control floodwaters, but the old Mississippi still goes where it wants whenever it wants. It seems safe to say that half that money spent in headwater storage would have, in the past 50 years, completely controlled the Mississippi floods. And the same is true of the Columbia River Valley, where by proper planning we can take the destructive crest off of any high water year by holding the floodwater up where it comes from.

The graph, regulated discharge, has been prepared to show what good planning and control of upstream storage might do to secure uniform regulation of streamflow. It should be understood that while this graph is prepared for the flow of the Clark Fork at Plains, that it is representative of practically every side-stream in the drainage, regardless of the individual volume of discharge. It represents the monthly flow of Rock Creek just as much as it does the Clark Fork. The short monthly pipes on the graph could be increased in height and the long pipes shortened by regulating the river flow as illustrated by the regulated discharge graph. Everyone has observed how low the streamflow gets in the winter and early spring months. Do you suppose this could be an unrealistic approach to the regulation of streamflow and does it indicate that the drawdown would be heaviest in the summer months? Is it unrealistic to suppose that this late flowing flood would not pass through downstream turbines, just because it was held behind little dams?

During the late summer months because of the demand for irrigation water the Bitterroot gets so low that the fish have a hard time to keep from getting sunburned while their bellies are scraping the bottom of the river. In order to try to protect the fish under these conditions, the Fish and Game Association has arranged to purchase from the State 5,000 acre-feet of water in the West Fork Reservoir. This water is to be released when and as the fish need the additional water. Is that a beneficial use of upstream storage? Would such a use of the water be possible if the water was stored behind a Paradise Dam? This is believed to be a concrete example of how upstream storage can serve the needs of all the people, all the way to the ocean. How much better would western Montana fishing be if half the streambed mileage carried twice as much water from July to March as it does now? Fishermen ought to be able to figure that out with the greatest of ease. And it should not be difficult for the farmer to figure how much water would be available for irrigation if the June flood water came down in August and September or even later. Is it unrealistic to suppose that this would not be desirable to Montanans? There is another aspect to these numerous small reservoirs that will be filled with water from early spring until winter and that is that they will furnish nesting places for all kinds of waterfowl in places where the birds will not be subjected to molestation by any but natural predators.

As to electric power production, that can be just as well and perhaps better and more satisfactorily accomplished by run-of-river plants, such as Cabinet Gorge, Noxon Rapids, and the proposed Buffalo Rapids, or Quartz Creek, and others. Such plants, operate at near capacity the year round rather than only part of the year because of water shortage. Is it unrealistic to assume that power produced in 10 or 12 run-of-river plants, generating power continuously would not be just as usable as power from a plant that can operate only part of the year.

It has been stated that the construction of these many small dams will require the construction of roads into wilderness areas and thus open them up to unrestricted use as well as spoiling the natural scenery. What is the difference between a road built to haul out logs and a road built to haul in cement and other supplies? Today's logging roads are built to as high a standard as any construction road to a dam. And after a dam is completed, it will be a simple matter, if considered necessary to destroy the usefulness of the construction road so that the litterbugs cannot use it.

Mention has been made of the number of employees necessary to operate these many small dams. Such dams as are contemplated will not require attention from resident employees, as only periodic inspections will be necessary to see that the discharge gates are operating properly and that damage to the dam structure is not threatening. By the time they are built, it seems possible that electronic remote-control devices can be installed so that a man, located in Missoula or Kalispell or elsewhere, can control the flow of water out of each reservoir by a pushbutton control, having on a board in front of him instruments to tell him what the water level in the reservoir is and the amount of water being discharged. But even without such controls the discharge gates can be set to discharge a constant flow of water from each reservoir in the system and required changes in the flow made by a visit of one man to the reservoir site.

Some question has been raised as to the cost of the small dams, which will be built on lands of low value, as compared to one large dam. At \$50 per acre-foot, a dam with a capacity of 50,000 acre-feet would cost \$2½ million, and a hundred such dams, holding 5 million acre-feet, \$250 million. The dams would

probably range in size from 5,000 to 100,000 acre-feet. Paradise is estimated to cost \$553 million, of which over \$300 million will be spent to buy the private land, move railroads, highways, and other improvements before the construction of the dam can be started. Is it unrealistic to assume that \$200 million spent to build 80 small dams is a better investment than to spend \$200 million just to rebuild one railroad so a Paradise Dam can be built? Even if the small dams should cost more per acre-foot to build than a large dam, it is contended that the resulting benefits from the small dams to all the people along the river far exceeds that from one large dam which inundates much valuable and productive land and which primarily benefits the people below the dam.

The question has been raised, How are these small dams to be financed? The answer might be that the Federal Government and the States would share the cost on the same basis as the Federal highway funds are used. In order to provide that the storage dams return the cost of construction and maintenance to the Government it should be relatively simple to establish a toll charge of a fraction of a mill per kilowatt generated at the bus bar of each powerplant through which the water flows.

It is believed that the plan as outlined above is designed to serve the best interests of all the people of the Columbia River Basin as well as giving the folks in the Clarks Fork Basin the use and protection of their interests in our most valuable natural resource, water. It is designed to comply with the stated objectives of the Upper Columbia Development Council: "Economic and recreational development by maximum use of natural resources through conservation and creative free enterprise and the cooperation of local, State, and Federal Governments."

MOIESE, MONT., *December 8, 1959.*

Senator JAMES E. MURRAY,
U.S. Senate, Interior and Insular Affairs Committee.

DEAR SIR: I wish to go on record as opposing your bill S. 1226.

I reside in the Moiese Valley and make my living by farming and this has been our home for 45 years and everything I own is here, and, I feel like it is taking it away from Montana.

Yours truly,

CORDELIA FRANCIS.

HOT SPRINGS, MONT., *December 9, 1959.*

HON. JAMES E. MURRAY,
Washington, D.C.

DEAR SENATOR MURRAY: I am opposed to the construction of either the Knowles or Paradise Dams.

The doubtful benefits of more power will certainly not offset the loss of homes, farmland, and taxes in our part of Montana.

The result would be a loss of income, higher taxes for the rest of us whose farms are not flooded, and nearly complete isolation as far as railroads and highways are concerned.

I repeat I am definitely opposed to either dam.

Sincerely,

Mrs. KENNETH R. FOX.

HOT SPRINGS, MONT., *December 9, 1959.*

HON. JAMES E. MURRAY,
Washington, D.C.:

I am against the construction of Paradise or Knowles Dam.

Sanders County would lose the taxes from the land covered by water, raising our taxes to make up for it. The cost of constructing the dam would raise taxes also.

Smaller dams put in by private enterprise would bring in taxes, and furnish all the electricity needed.

KENNETH FOX.

PARADISE, MONT., *December 10, 1959.*

HON. JAMES E. MURRAY,
Washington, D.C.:

We request to go on record as opposed to S. 1226. As a family who would be displaced by either of the projects we know this bill is not adequate to protect our rights. There is no guarantee that the few things that are beneficial in this bill would still be there after the bill was amended and put through committee. We do not believe that Congressmen from downstream States will stand by and let Montana keep the power produced by this project, as their votes far outnumber the four from Montana we do not stand a chance on this point or any other. It is very easy to say in print that the displaced people will be relocated to at least an equivalent place, but nobody has been able to show us where this place is.

We believe our river can be developed by private industries who pay taxes and support our towns and schools.

DEAN B. FRENCH.
ROBERT L. FRENCH.

PLAINS, MONT.

I am a rancher and railroader.

I am opposed to Paradise and Knowles Dams.

Either would take tax support from the county and State if built by the Government.

I do not believe in the Government going into competition with private power companies.

The Tennessee Valley Dam is not producing the power in that location. It is produced by steam power.

The Paradise or Knowles Dam would not help this locality as a flood control measure. It would flood practically all the rich farm ground we have now.

If the Government continues to take ground from the Indians they will have nothing left. I think the Indians have come up with the short end most of the time.

The bill states that Bonneville Power would manage distribution of power and Montana would get what was not needed elsewhere.

E. W. FARRINGTON.

HON. JAMES E. MURRAY,
The Senate Committee on Interior and Insular Affairs:

I, Mary Farrington, am opposed to Senate bill S. 1226. I do not believe it is necessary to build such a huge dam and destroy so much land suitable for raising of food. Now we have a surplus of food, but with so much land being taken for housing, industry, roads, and dams and the growth of our country's population demanding more food, where is the food to be raised?

With power being produced by other methods, as steam-generated or atomic power, is it still necessary to flood so much land, especially in a county that produces as much power as Sanders County? How much of the power is steam generated at TVA?

Yes, I think we need some flood control but why dam a good rich valley with such a huge dam in Montana? Wouldn't it be better to have smaller dams in more remote areas or even let private power companies build some of the dams they plan instead of so much Federal control?

I am opposed to such supercolossal Federal control dams as Senate bill 1226 proposes and I hope and pray that whoever has the final decision to make, has the wisdom to do what is best for our country for future years. I also believe this controversy has kept industry out of this valley and kept it from the growth it would otherwise have had.

MARY FARRINGTON.
Mrs. E. W. Farrington.

PLAINS, MONT., *December 10, 1959.*

HON. SENATOR MURRAY,
Washington, D.C.

DEAR SIR: We are very much opposed to the bill S. 1226, and do not favor the construction of Paradise or Knowles Dam because of the loss of taxes to

our county, the covering of good fertile producing soil and the influx of people which would overcrowd our now crowded schools.

Sincerely,

Mrs. HARRY B. FRENCH.
Mr. HARRY B. FRENCH.

MOIESE, MONT., *December 9, 1959.*

Senator JAMES E. MURRAY,
U.S. Senate Interior and Insular Affairs Committee.

DEAR SIR: I wish to go on record as opposing your bill S. 1226.

I reside in Moiese Valley and am a farmer. This bill, if passed, would deprive me of all means of supporting myself and my mother, who owns the property that will be flooded.

I sincerely believe this bill will be rejected by a majority of the people directly affected.

Sincerely,

GLADYS FRANCIS.

STATEMENT OF PHYLLIS N. FRENCH

I oppose this legislation because I lived in the Fort Peck area during the construction of that dam and I lived with many of the problems associated with large construction jobs.

Our schools became overcrowded. The bars and streets were crowded with drinkers at night and it was not advisable for young girls to be out. Some of the high school boys quit school because of the lure of the big wage. Most of the workers lived—not in the clean Government town—but in squalid cardboard and tar paper shacks. Now they are ghost towns—eyesores along the highway.

Construction such as proposed in bill S. 1226 would not only disrupt and harm the lives of many of our young people it would also ruin many farms and ranches and seriously affect the lumber business, both of which are a big part of the lifeblood of Montana.

PLAINS, MONT., *December 10, 1959.*

HON. JAMES E. MURRAY,
Washington, D.C.:

I am opposed to bill S. 1226 pertaining to the Knowles-Paradise Dam project.

TALMADGE FOUST.

DECEMBER 3, 1959.

Senator MURRAY.

DEAR SIR: I am against the Paradise-Knowles Dam. Reasons: Employment will last such a short time, why flood Montana? We need our water for future use. Time may bring industry and manufactures to our State, more profitable to us.

Being a Flathead Indian, it will cover reservation land; the last debt has not been paid by the Government.

Against.

BERNICE M. GOODE.

DIXON, MONT., *December 7, 1959.*

We are opposed to the building of a dam, as described in bill S. 1226, because it would destroy a productive ranch which our family has owned for 33 years. It would scatter and destroy a pleasant community in which to live, many thousands of dollars worth of school property, and irrigation improvements as well as land improvements.

After studying similar Government projects, it seems to us to be a consistent fact that ranchers are never reimbursed properly for loss of their property because of the great difficulties encountered in moving and replacing a business of this sort.

We want to continue to live here and raise our family here. The continuing discussion and hearings and publicity about this project are causing a great deal of inconvenience, loss of property values, and making long-range planning nearly impossible in this whole area. We think the whole subject should be dropped as soon as possible.

DON GRAZIER.
Mrs. DON GRAZIER.

STATEMENT OF MARSHALL GRAY, SEELEY LAKE, MONT.

My name is Marshall Gray. I own and operate the Gray Lumber Co. at Seeley Lake, Mont., in the Clark Fork of the Columbia River drainage. Our mill cuts about 25 million board feet of lumber annually. Most of this lumber is marketed in the eastern part of the United States.

I am opposed to construction of Paradise or Knowles Dams as proposed in S. 1226 or H.R. 5144. I object to obligating my business to pay for such a colossal venture as the construction of this dam. I object to the removal of lands and businesses from the tax rolls. Even though a provision is made for payment in lieu of taxes, I cannot agree that using tax money to replace tax money is good business.

It is my understanding that one of the principal arguments for this dam, if not the principal one, is that new industry would result from its construction. It is my feeling that present industries, such as the lumber industry, should be given encouragement by lowering taxes, creating better business conditions with less regulation and control. This is more important to me than unsupported claims that much new industry would result from the dam. I cannot see any benefit that would result from this dam that would necessarily create new industry. We already have plenty of power in Montana.

Let us take care of our established, taxpaying industry and continue the development that private enterprise has brought to Montana. We cannot improve ourselves by destroying our river valleys at great expense to taxpayers.

RONAN, MONT., *December 11, 1959.*

Senator JAMES E. MURRAY,
Chairman, Senate Committee on Interior and Insular Affairs, Senate Office Building, Washington, D.C.

As a property owner and businessman in Lake County, I wish to express my opposition to S. 1226 which, if enacted, would mean the construction of either Knowles or Paradise Dams.

Of particular concern to me is the threat that these projects pose for continued stability of Flathead Lake since both projects—if they are to be operated efficiently—will require the proposed Flathead channel outlet dredging. It is my fear that the outlet dredging will permit frequent and unseasonal draw-downs which will affect the tourist value of Flathead Lake upon which many of us in Lake County depend and for which many of us have substantial investments in facilities and advertising.

I am also concerned as a taxpayer because any substantial reduction in the present tax base of the county which will result from the proposed projects means an increased burden on the taxpayers not removed by the projects. The provisions for payments in lieu of taxes seem to be loosely worded and do not insure adequate protection of the county's tax base.

I am aware of pending legislation to limit the Flathead Lake drawdown to the present limitations in the FPC license for Kerr Dam. However, the actions of one Congress are not binding on the other and I also fear that once the outlet is dredged, and under the control of the Corps of Engineers or Bonneville Power Administration, downstream needs will dictate the levels of Flathead Lake rather than local needs—especially during the tourist season. It is not too unreasonable to foresee several drawdowns during a year; whereas at the present we have only one and have adjusted to it. I am also concerned as to whether Knowles-Paradise or Flathead Lake would have a priority on water in short-water years. In view of the propaganda being put forth on behalf of Knowles-Paradise, I think it is safe to assume that in water-short years, Flathead would have to wait its turn after every Federal project has been filled,

because of the political aspects of leaving a Federal reservoir empty after it has been oversold to the Congress and the people.

Therefore, I earnestly request that this committee reject S. 1226 as being uneconomic and unwarranted and unneeded.

O. H. GRANLEY.
M. B. HANSON.

PLAINS, MONT., December 7, 1959.

Senator JAMES E. MURRAY,
Chairman, U.S. Senate Committee on Interior and Insular Affairs.

DEAR SENATOR MURRAY: The undersigned is a native and resident of the town of Plains in Sanders County, Mont. I am a retired railroad train dispatcher, formerly employed by the Northern Pacific Railway Co. and, for some 12 years previous to retirement, a national officer of the American Train Dispatchers Association and editor of their official publication, the Train Dispatcher, at Chicago, Ill.

It is my request that this letter be made a part of the record in the above-styled hearing, to be held at Missoula, Mont., on December 15, 1959, and that it show that I am in favor of the legislation embodied in S. 1226 with a preference of location at the Paradise site. It is needless to say here that a companion bill, H.R. 5144, introduced in the House simultaneously with S. 1226, has my approval.

As an officer of the Committee for Paradise Dam, Inc., it has been my good fortune to have been in contact with people living and working in the area of the Paradise project and I can assure you that a majority sentiment exists in favor of its construction. A minority sentiment, opposing the project, consists mainly of those who have been misled by propaganda disseminated by the usual opponents of public power, mostly the private power interests and their allies.

I am sure you will understand that many of those in favor of the project will be unable to attend this hearing because of business and employment obligations. They do not have the resources of some of the opponents who are in a financial position to subsidize a lavish attendance. Nevertheless these people who favor development of our natural resources for the benefit of all the people are just as numerous as they were during the conservation battles carried on by such conservation pioneers as Theodore Roosevelt, Gifford Pinchot, and George Norris which ended in the victory for TVA, an example which we hope to see repeated in our great Northwest.

I sincerely trust that your honorable committee will look carefully into what appears to be a gross exaggeration in the railroad relocation cost figures which should materially reduce the cost of the project as well as provide a more favorable benefit-cost ratio.

Yours very truly,

JOHN R. GARBER.

PARADISE, MONT., December 19, 1959.

DEAR SENATOR MURRAY: I am a resident and taxpayer of Sanders County, Mont., for over 40 years and I am very much opposed to the Paradise or Knowles Dams.

It is true we need electric power and flood control. But there are other ways and other places such as the head of these streams. The real source of the water anyway, and not destroy a fine valley with rich farmlands. Within the next 50 years we will need these acres to grow food for the growing population.

The cities of the Nation are spread out over once tilled acres and I think it is time we thought of land conservation instead of huge expensive dams. The Paradise Valley has got the finest climate, not only in the State, but anywhere this far north. I believe it is not just a pity but a crime to destroy it. A huge dam like this proposed Paradise Dam is a hazzard to all who live below it for they can go out and do. The great San Francis Dam in California went out in 1928, causing tremendous property damage and a terrible death toll.

The question came up once at a meeting in Missoula with the Army Engineers, asking what would happen if the Paradise went out by one cause or another. And the engineer said if it did the water would be to the second story of the Multnomah Hotel in Portland, Oreg.

We the people of Paradise Valley are asking and depending on you, Senator Murray, to help us save our valley and our homes.

I thank you sincerely.

MILES GINGERY.

PARADISE, MONT., *December 3, 1959.*

SENATOR MURRAY: I am very much against the Paradise or Knowles Dams or any other Federal projects. They are unjust to the people who have given their lives building a better future for the younger generations to follow.

Since the U.S. Government doesn't pay taxes it would be prohibitive for the people to accept the added burden. We started on a raw place, clearing every acre that was farmed. Why not let us farm it? We like the climate, scenery, good water and hunting. My parents are living on the farm they cleared from stumps, brush, and timber. They didn't even have a road. Is it fair to make them start anew in a strange community and leave all their hard work to see it being flooded out? That has been their home and livelihood for 49 years.

Respectfully,

BERTHA B. GINGERY.

PARADISE, MONT., *December 3, 1959.*

Senator MURRAY.

DEAR SIR: I have lived in this valley for 48 years and my reasons for wanting to live here are: I've never seen a crop failure or a human life taken from weather conditions.

I don't want to leave the home we have worked to build in the last 21 years and cause me to be a wanderer instead of me being able to enjoy the home I've built. I consider it unjust to have to battle the inconsiderate persistency of the people of our own Nation, therefore I am opposed to the proposed Paradise or Knowles Dams.

Respectfully,

LESTER GINGERY.

K. G. DISTRIBUTORS, INC.,
Missoula, Mont., December 12, 1959.

Senators GRUENING and MARTIN,
Senate Committee Hearing,
Missoula, Mont.:

As a businessman and citizen I support enactment of S. 1226 in the next session of Congress. The strength and security of the Nation call imperatively in this critical time for full and fast development of our rivers, especially the Columbia, the mightiest of them all.

In conjunction with river control, recreational, and irrigation benefits, power can be produced cheaply on the Columbia and can pay most of the total development costs. Comparatively little of the Columbia's huge hydroelectric potential—some 40 percent of the total in the United States (48 States)—has been developed. Despite its high elevation and superior value for flood control and power production, here and downstream, there has been comparatively little development on the Flathead and Clark's Fork. The Paradise site has been shown to be of key importance in any comprehensive river basin program. Should it not therefore take high priority for authorization and construction? Montana's sparse population, its lagging economy, its abundance of potential cheap power and clean water which S. 1226 would make available can help greatly to provide for the country's fast growing population and need for power, water, and recreation and also help to solve Montana's most basic economic problems.

Opposition by the Missoula Chamber of Commerce does not, in my opinion, reflect the sentiment of the Missoula businessmen and citizens. There has been extremely little public discussion. Until the change of ownership, the company press, mainly through its news columns, for many years opposed the project. A referendum to determine the degree of support in the membership of the chamber of commerce on this project has never been taken. It may be noteworthy that Robert Corrette, president of the Montana Chamber of Commerce,

is a brother of J. E. Corrette, president of Montana Power Co. Many businessmen have not joined the chamber, in part because of its attitude on such public questions.

From every standpoint, national and local, I think S. 1226 should be pushed to passage and appropriations made to begin construction.

Respectfully,

HOWARD R. GAVIN.

MISSOULA, MONT., November 30, 1959.

Senator JAMES E. MURRAY,
U.S. Senate, Washington, D.C.

DEAR SENATOR: Our daily paper indicated a hearing is to be held in regard to the selection of a dam to be built, either Knowles or Paradise.

It appears the wishes of property owners in the effected areas to be flooded have been definitely disregarded.

I attended the meeting held by the Army Engineers at the university and it was clearly demonstrated property owners affected did not want a dam in either place, and I, not as a property owner but a city citizen, feel the Army Engineers can find plenty of locations back in the mountain valleys, where the soils are less fertile, short seasons which are not conducive to crops, and very few if any private ownerships of the land so affected, as well as no taxes lost to the county in which it could be built.

Hungry Horse is one in that category. It was put back in the mountain gorge where dams should be put.

Furthermore, if it were blown out in time of war, populated areas lying below in the more fertile and populated areas would have time to escape. If one were blown out in a populated area the loss of life would be terrific as well as improvements lost.

I feel all possible damsites in isolated canyons should be utilized first by all means. Communities should not be flooded unnecessarily, productive lands lost forever, when unproductive lands are available to serve the same purpose.

Respectfully yours,

E. R. GRAY.

HOUSE OF REPRESENTATIVES
OF THE STATE OF MONTANA,
December 2, 1959.

U.S. Senator JAMES E. MURRAY,
Chairman, Senate Committee on Interior and Insular Affairs.

GENTLEMEN: It is with a great deal of pleasure that I prepare this statement in support of S. 1226, which will authorize construction of Paradise Dam or the alternate Knowles Dam.

Naturally I support Paradise over Knowles, as it would account for 4,521 million kw-hrs. per year, as compared with 2,523 million kw-hrs. per year for Knowles—or 80 percent more power production.

In the cold war, which has shifted from the military to the economic field, we cannot afford to waste our resources. Full comprehensive development of our water resources is also the key to the industrial development of Montana and the Nation.

As you know, Montana has the distinction of having one of the highest unemployment rates in the Nation; our per capita net income is falling rapidly, while that of the Nation is rising. In short, we need this project now to stave off what could become another major depression in this area. A depression of this extent would have serious repercussions in our national economy.

I urge that you act favorably on S. 1226 as soon as possible.

Sincerely,

HAROLD O. GUNDERSON.

HOT SPRINGS, MONT., November 7, 1959.

To Whom It May Concern:

To the people of Montana and in the interest of Montana development there can be no advantage in the continuation of a program to impound our waters in the so-called multiple-purpose dams. These so-called projects are merely storage reservoirs for development of downstream power and industry in other States.

Paradise and Knowles Dams proposals are a sabotage to Montana. Montana waterpower should be developed in the interest of Montana for Montana industry first and any surplus sold to other areas as a revenue for tax losses in Montana.

ROY GUFFEY.

HOT SPRINGS, MONT., December 7, 1959.

To All Concerned:

We of western Montana should at this time be very interested in seeing we have no more dams. It would take away some of our best stock land and force many to find homes elsewhere.

Washington and Oregon States would be the ones to gain if Paradise or Knowles Dam went in. Have been told by several that their electric bill was less while living in Washington than they paid here in Montana.

EMMA GUFFEY.

[From the Camas Hot Springs Exchange, Oct. 10, 1957]

EDNATORIALS—WHAT PRICE PROGRESS?

We have on a number of occasions expressed ourself regarding the Paradise Dam project. Many others are doing a lot of talking about, both pro and con, much of which is useless waste of time, since the same thing is repeated over and over, like a child who declares he wants this, he wants that, and must have it, regardless of how annoying he may become.

Our reasons for being a con is the humanitarian side of the project. "What profit a man if he gain the whole world and lose his own soul?" And we say what is the worth of any prosperity this dam, if any, it may bring, at the sacrifice of people who have builded the country?

The homesteaders of Moiese came in here and settled on sterile land—they worked this land and brought it to productivity, builded their homes, proudly and happy adding to them each year, to make them what they had visioned all along. This was nearly 50 years ago. They were young then, now those 50 years have followed along with them and they are old, and will our Government pull them up from the land into which their lives are so imbedded and place them here and there on unknown lands, with unknown associations. Will our Government tear them from friends of early manhood and womanhood and expect these people in the late sixties, seventies, and possibly eighties to be happy among strangers.

The people of Paradise was there when we came to this country. They, too, have builded their homes expecting to spend their lives there and they, too, will be buried in the flood waters of the dam. The Indians, well, we have stolen and cheated them so much that they may not be surprised at anything the white man may do to them.

What will be the gain. We may realize a few work days while the highway is being relocated; Plains may boom while the dam is being built, and the law enforcement for crime may cost the county as much as Plains may gain; but after that, what? No doubt the town will be dead for many years. All this talk about industries to come sounds like a pipe dream. Take the Anaconda Co. aluminum at Columbia Falls; should aluminum follow the trend of copper and some other metals, no doubt the plant would close down, and what would be left for Columbia Falls. This dam would destroy far more in Sanders and Lake Counties than the industries of our wildest dreams could compensate.

We have had nearly a million dollars taxable property added to our county in the last year, but has it brought our tax millage down? Property owners have failed to get any relief from this; there always seems a planned way to use every dollar squeezed out of us.

Physically we will not be effected by the floodwaters of the dam, but I weep to realize that I must lose confidence in my Government.—EDNA B. GANNAWAY.

MISSOULA, MONT., December 8, 1959.

HON. JAMES E. MURRAY,
Washington, D.C.:

I am opposed to S. 1226 relating to the Knowles-Paradise Dam project because I am a member of the Confederated Kootani-Salish Tribe.

CATHERINE HAMEL.

TROUT CREEK, MONT., December 12, 1959.

HON. JAMES E. MURRAY:
Chairman, Interior and Insular Affairs Committee,
U.S. Senate:

I am opposed to the Paradise and Knowles Dams because they are not good for our country.

We here in Trout Creek know what the immediate benefits are from having an influx of workers. It is not the local people who benefit. There is a surge of spending and bullding, a few more bars, maybe another store or service station to add more competition to those who have already been here and helped the community, and then after it is over, struggle along to survive or move to the next location. It is the same with the workers and after it is over, there are more on welfare, and with a Government project less taxes to take care of them.

These dams will ruin land, move people from their homes and increase our taxes so that those of us left will have a greater struggle to keep our schools, roads, and welfare paid for with this loss of taxes.

The storage may help irrigate lands, but it will also ruin lands that are now producing. It will produce power, but will be more expensive power that we will have to subsidize with taxes, instead of power that could be produced at a profit by a taxpaying company without ruining lands and moving out families.

Yours truly,

DAVID R. HALE.

PLAINS, MONT.

JAMES MURRAY:

Senate bill 1226: We are definitely against the Knowles Dam and the Paradise Dam.

AMY G. HANSEN.
OSCAR P. HANSEN.

PLAINS, MONT., December 7, 1959.

HON. JAMES E. MURRAY,
Chairman of Committee on Interior and Insular Affairs.

DEAR SIR: I am opposed to the bulding of either the Paradise or the Knowles Dams for several reasons. As a resident of this valley I am interested in what changes may take place, and whether they would be for the best interest of the people.

As an electrician and lineman, I feel that I am qualified to state that there are a great many untruths circulated by proponents of the dam. At this time there is no power shortage in the Northwest. In the past there has been a shortage, but in the last 3 years there have been over 2 million kilowatt-hours added to the Northwest power grid, which has altered the situation.

In reference to industrial development in this valley, I would say that it is purely a figment of the opposition's imagination—it is just not in the picture—nothing more than an air castle. The only possible industry would be a pulp-mill. On the whole, this type of mill is so undesirable that I hope it does not locate here in my time. I have visited nearly all of the dams in the Northwest, and with the possible exception of two of them, they have not altered the economic conditions for the communities.

Regarding the interchange of power—it has been stated that more power was being interchanged east over private powerlines. However, I can assure you that an average of at least 50,000 kilowatt-hours are sent west the year round. Quite a number of uninformed people make ridiculous statements in public regarding the distribution of power that are absolutely wrong.

We have a farm program that is designed to discourage overproduction of farm products. Reclamation, on the other hand, encourages more land to be put into irrigation. **This does not make sense.**

I sincerely hope you use every weapon at hand to oppose the building of either the Paradise or Knowles Dams.

Sincerely,

BRYAN L. HANSON.

PERMA, MONT., December 11, 1959.

Senator JAMES MURRAY,
Washington, D.C.

DEAR SENATOR MURRAY: I am opposed to the Paradise Dam, as I don't see where it will better our county or State in any way. As I see it we will have higher taxes, as we would have to build new roads. I am also against the Knowles Dam.

Yours truly,

Mrs. A. HARPER.

PLAINS, MONT., December 9, 1959.

JAMES E. MURRAY,
Senator of Montana:

I am opposed to bill, S. 1226, for the building of either Paradise or Knowles, because I don't believe giant Federal dams are the answer to our power and water resource development problems.

I am in favor of the small dam development by private enterprise.

DONALD E. HELTERLINE.

PLAINS, MONT., December 9, 1959.

The INTERIOR COMMITTEE:

I am opposed to S. 1226 for the following reasons:

1. To me the proposed damsites are not feasible. Drillings at the Knowles site show a loose boulder and gravel wash formation as deep as they drilled with no solid bottom. Drillings at the Paradise site hit artesian water at 132 feet. Certainly artesian water and a loose formation are not suitable foundations for dams 250 feet high.

2. Proponents of these dams dream of all the industries the power would bring in. For over 40 years Montana has had a surplus of electric power and has been sending power out to the West. Industries will not come in in the future for the same reason they did not come in during the past years with ample power available. This reason is our high rail freight rates as compared with the low water shipping rates available on the coast.

3. Either Paradise or Knowles Dam would cut a vital link in our railroads across Montana. The low line of the Northern Pacific from Paradise to Missoula. The Milwaukee and the Great Northern are all in country that is often subject to high water trouble and slide trouble. In 1948 all the traffic of the three railroads went over the old, safe, dependable high line of the Northern Pacific from Paradise to Missoula for nearly 3 weeks. Flood out this line with either of these dams and a vital link in the transcontinental railroads across Montana will be gone.

4. Why should our rich river bottom farmlands, homes, railroads, highways, towns, and everything be flooded to make a huge reservoir for the benefit of downstream interests? That is purely and plainly selling Montana down the river.

5. The objection to Glacier View Dam on the North Fork of the Flathead River is that it would flood part of Glacier Park and the winter feeding ground of numerous game. Yet in the game census of the park, given last spring and 2 years ago, the west side of the park is not mentioned. Either Paradise or Knowles would flood our national bison range at Mofese. Isn't this park just as sacred as Glacier Park? If Glacier Park must not be flooded then our national bison range must not be flooded.

6. With the coming of atomic power, that can be produced where it is needed, why should these huge dams be built? Why flood out the homes of thousands

of our people, thousands of acres of our farmland, our railroads and highways, wreck the economy of our counties when we have the alternative of atomic power?

Respectfully submitted.

JOHN HELTERLINE.

PLAINS, MONT.

HON. JAMES E. MURRAY,

Chairman of the Committee on Interior and Insular Affairs:

I oppose S. 1226, a bill to authorize construction of a Federal dam at the Paradise site or the Knowles site, because:

Western Montana would be strangled by valley blocking which would hurt us economically, cut or hamper the transportation facilities, and cause the loss of the agricultural capacity of this area.

This bill calls for the expenditure of a huge sum of the American taxpayers' money and I believe it is time that the Federal Government get out of business that should be handled by private enterprises.

The displacement of persons affected and the loss of their means of livelihood must be considered.

I believe that the water development of western Montana should be in the upper reaches of our watersheds.

Mrs. FRANK HELTERLINE.

PLAINS, MONT.

Senator JAMES E. MURRAY,
Washington, D.C.

HONORABLE SIR: I oppose S. 1226 to authorize construction of a Federal dam either at the Paradise or Knowles site because of the unsoundness of the foundation on which they propose to build the dam, the destruction of the economic stability of Sanders County, the displacement of too many people and towns, and of the flooding of the best valley acres.

I also believe that private industry should build dams instead of the U.S. Government.

Mrs. JOHN HELTERLINE.

PLAINS, MONT., *December 9, 1959.*

HON. JAMES E. MURRAY,
Washington, D.C.:

We, the undersigned, would like to go on record as being opposed to Senate bill 1226, which pertains to the construction of the Paradise-Knowles Dams.

WILLIAM M. HOLLAND.
MARY ELLEN HOLLAND.

PLAINS, MONT., *December 11, 1959.*

Senator JAMES E. MURRAY,
Washington, D.C.:

I wish to state my opposition to bill S. 1226, relating to the Knowles-Paradise Dam project, or any other Federal dam on the Clarks Fork and/or Flathead of the Columbia River.

Mrs. JULIA HOLLAND.

PLAINS, MONT., *December 8, 1959.*

Senator JAMES E. MURRAY,
Washington, D.C.

DEAR SIR: I am opposed to the Paradise and Knowles Dam because it destroys the main route which connects western and eastern Montana, thus destroying agriculture and commercial development of our State.

Over 3,500 people would be compelled to give up their homes.

The dam would not only cripple our county but would also cripple other adjoining counties.

To build this dam would place a great burden on the taxpayers, who are over-taxed now.

This project is not needed, as we have plenty of power for our State.
If they need power in other States, that is where the dams should be built.
Yours respectfully,

MAMIE HUTCHISON.

PLAINS, MONT., December 8, 1959.

HON. JAMES E. MURRAY,
Chairman of the Committee of S. 1226.

DEAR SIR: My opinion of the Paradise and Knowles Dam.

I think it would be a terrible mistake and a terrible waste.

There is other places to build dams without putting 3,500 people out of their homes, destroying railroads and highways, besides making a bomb target and deathtrap for people to live under.

We have very few railroads but what could be destroyed by these big dams in case of war.

Private companies can build small dams and do not have to use the taxpayers' money.

The taxes are so great we cannot stand under them now.

This terrific spending is got to be stopped or we have turn everything over to the Government and have a Communist country.

If either one of these dams goes in, our county cannot exist—from the loss of taxes, from our railroads, and other sources.

We already covered up too much of our land with dams for the benefit of Washington and Oregon.

I lived on this river for 22 years as a taxpayer.

There has been very few acres of crops destroyed by high water during my time here.

Hundreds of acres of land benefit by the subirrigation from the river.

Yours respectfully,

WILLIAM HUTCHISON.

STATEMENT OF MR. AND MRS. BILL HAYNES, HOT SPRINGS, MONT.

We are against Paradise or Knowles Dams for the following reasons:

We have a good ranch, and when we bought it, we intended to live here, develop it and enjoy it for as long as we are able to do so. Our lowland would be flooded out by either of these dams, and that land is necessary to the raising of livestock. It is used for hay and grain and for fall and winter grazing land.

Our climate, grass, water, and ground moisture is as good, on the average, as any place in the State. We do not want to see our ranch ruined by such a thing as Paradise or Knowles Dams. And we are only a small part of the country affected. This whole area is as good a stock and farm country as one would want, and to flood it would be a crime.

We think this dam idea is mainly for political purposes, and do not believe our Government officials should play with our lives as they are doing. We shouldn't have to suffer for their benefit, or for the benefit of people downstream who don't want dams in their countries but want to have Montana build them for their use.

The great amount of money spent on this dam should be spent on atomic power development, because in the future that will probably be more in use than waterpower. To build a dam that is not needed appears to be a terrible waste. Once the dams are built, they are there to stay, whether needed or not. And our land cannot be brought back to us.

We don't want to be relocated like cattle. There aren't enough good ranches for sale to take care of the people who would be flooded out by either of these dams, to say nothing of homes or farms. If there were, prices would be prohibitive, especially with the large number of people who would be trying to buy. Prices would skyrocket even higher than they are, and for what the Government would pay us for our places, we could not expect to get anything decent to live on. None of us wants to leave this country.

As for irrigation, where would that come in? With the dam covering all of the lowland, all that would be left would be the high country, which anyone knows cannot be irrigated.

Either of the dams would back up the water and cause a lot of erosion, to say nothing of the awful mudflats. That is easy to see if one looks at Fort Peck or Canyon Ferry Dams. The way these dams are filling with mud, it won't be many years before they won't hold much water. There are many neighboring ranchers in those areas who have pulled their cattle out of bogs caused by these dams, also.

We are in favor of dams built up in the mountains, at the headwaters of creeks and rivers. They can make beautiful little lakes for the tourists to ride around, and can store a lot of water without hurting anyone. If dams are necessary, then that is where they should be built.

With the growth of population, we are going to need every bit of good land for growing food. There are so few good valleys for farming it is a shame to consider covering even one of them, when there is a lot of mountain country that would not affect farming, ranching, or homes.

To date there has been no proof that we need Paradise or Knowles Dam for power. There is a plentiful supply of power available. We certainly don't need our taxes raised any higher by the Government's building of more dams. And the headwater dams will take care of the flood situation.

There are many promises made on this question; however, the Government can give no guarantee nor give us any assurance that this is anything but a huge expense and loss to the people. The flooded area's valuation would be far greater, also, than the damage done by floods for many years.

There are many people who homesteaded in this area, and they don't care to build new homes after all these years. We who haven't been here so long are satisfied and happy with our homes and we don't want to leave. We all love this part of Montana, and we have just as much right to stay here as the people who are crying for the dams have, to stay in their homes. We wonder what their reaction would be if they were in our positions?

We are getting a taste of what the Indians got: Whenever the Government wanted some land, they moved the Indians on someplace else. That is what they are trying to do with us; the only difference is our method of fighting.

DIXON, MONT., *December 7, 1959.*

To Whom It May Concern:

I am definitely opposed to S. 1226.

I am a rancher and with my father run a lot of cattle, as do many other farmers. We like it here, this is our home, and having no desire to move elsewhere intend to remain here.

Yours truly,

JAMES HULEVA.
SOPHIE HULEVA.
GEORGE HULEVA.

DIXON, MONT., *December 8, 1959.*

HON. JAMES E. MURRAY,
Washington, D.C.:

I am opposed to S. 1226 relating to the Knowles-Paradise Dam project because it will displace people who have lived in this area for years, and though it is not valuable in dollars it is pleasant and a place to live and die.

MARIE HAMEL.

DIXON, MONT., *December 8, 1959.*

Senator JAMES E. MURRAY,
Senate Office Building, Washington, D.C.

HONORABLE SENATOR: I own a home and 600 acres east of Dixon, Mont., and wish to enter this letter as strict opposition to the proposed bill, S. 1226, regarding construction of the Paradise or Knowles Dam.

I have a firm opinion that these projects would be detrimental to western Montana and believe that a series of small dams could be constructed which would further increase conservation of valuable land, fishing, and recreation.

These projects would be a terrific waste of the taxpayers' money and a tax loss to both Lake and Sanders Counties, which could stop them from functioning as counties.

We know that a series of smaller dams would not interfere with such costs as the relocation of miles of highway and railroad as in this case. Furthermore, you would be infringing on the treaty rights of the Confederated Salish and Kootenai Tribes, which would be a terrific cost.

If I had to move out on account of this project it would take some time and expense to relocate, and also time and money to get adjusted. I do not believe that I would be sufficiently compensated to make this change.

Sincerely,

PHILIP E. HAMEL.

HANSON MOTORS, INC.,
Ronan, Mont., December 12, 1959.

Senator JAMES E. MURRAY,
Chairman, Senate Committee on Interior and Insular Affairs,
Washington, D.C.

HONORABLE SENATOR MURRAY: This letter is written in opposition to Senate bill 1226, which proposes the Knowles-Paradise project on the Flathead and Clarks Fork River.

As a resident of western Montana I do not feel that it is necessary to build a dam at the proposed location. This location would inundate large areas of farmlands and would necessitate the displacement of many people who have made their homes here for many years.

I feel we have too much Government in business and if we continue to follow this trend it appears that the small private business will soon become extinct. Our country was built on free enterprise and I think we should get back to that principle.

I have lived on the reservation all of my life and many of my friends are members of the tribe. If the proposed dam goes through I do not think the local Indians would get a fair shake.

Respectfully,

R. S. HANSON.

PARADISE, MONT., *December 12, 1959.*

Re S. 1226.

HON. JAMES E. MURRAY:

As a resident of Paradise and also a resident of the Flathead country for over 30 years, I am strongly opposed to either project that your bill S. 1226 sponsors.

I have my home in Paradise and wish to have it as my retirement home in a few years, so if the Paradise Dam is built we would be flooded out of our home and would have to go somewhere else and start anew.

And if the Knowles Dam is built the country that we have loved and known as our home this past many years would be flooded and it would mean that our relatives and friends would have to move away from us and leave behind what they have toiled for many years to make a home and they would have to start a new task of building up for the future and so many of us are getting along in years that it would be a hardship on so many of us.

So please, sir, take my plea under deep consideration.

Respectfully yours,

LARS HEBNES.

I shall sign along with my husband.

Thanking you,

Mrs. LOUISE HEBNES.

HAVRE, MONT., *December 7, 1959.*

Senator JAMES E. MURRAY,
Chairman, Senate Committee on Interior and Insular Affairs,
Washington, D.C.

DEAR SENATOR MURRAY: I wish you to use your influence in the passage of Senate bill 1226. Paradise Dam is very necessary for development of more power. Montana and the United States are in need of full river development and would benefit greatly by building of this dam.

Thanking you for your continued support, I am,

Yours very truly,

Mrs. H. H. HESS.

PARADISE, MONT., *December 12, 1959.*

Hon. Senator JAMES E. MURRAY,
Chairman of Committee on Interior and Insular Affairs,
Washington, D.C.

DEAR SIR: I am Edward J. Hermes, a dairy farmer, located 1 mile east of Paradise, Mont. I own and operate the farm jointly with my wife, and I would like to put on record my objection to the proposed Senate bill 1226.

All objections raised to the proposed Paradise Dam project at the hearing held in Missoula, October 21, 1957, hold for Senate bill 1226.

This is known as a free and civilized country, so why try to displace an established population for the benefit of storage for increased electrical power downstream, when the same objective could be reached by more run-of-river dams, auxiliary steamplants, or future atomic power?

I believe that private capital through the hands of private utilities can develop the water resources more economically than it can be done through Government channels.

I am tired of reiterating my objection to these big storage dam proposals. There were hearings in 1948, again in 1957, three in 1959, and at all these hearings it was decisively defeated. Now here it is again, camouflaged under Senate bill 1226, and a site to be determined by the Secretary of Interior.

EDWARD J. HERMES.

PARADISE, MONT., *December 12, 1959.*

Hon. Senator JAMES E. MURRAY,
Chairman of Committee on Interior and Insular Affairs, Washington, D.C.

DEAR SIR: I am opposed to Senate bill 1226 concerning construction of a huge dam in Clark Fork on Flathead Valley. It repeatedly states protection for power rights, use of water rights, etc., primarily for the people of Montana, then, the surplus to be used by States on west, ignoring the fact that we need no protection at the present time. They are ours.

Considering the location of western Montana and its distance from most heavy industry raw materials and the demand market, it is obvious the great percentage of power would never be used here. You would have us give up our valley floors essential to our economy, our river grade access roads linking our inhabitable sections, displace our people and therefore our local market, and give us truly nothing in return.

I firmly believe that the power shortages on west can be overcome by auxiliary steamplants and other means without destroying any segment of our beautiful western Montana. We have the recreation facilities. The manmade lake could give us only less.

Sincerely,

Mrs. E. J. HERMES,
Housewife and Teacher.

PERMA, MONT., *December 10, 1959.*

HON. JAMES E. MURRAY,
Washington, D.C.

DEAR SENATOR MURRAY: I am not in favor of the Paradise Dam or Knowles Dam.

If these dams are constructed too many people will have to leave Sanders County, which will cause taxes too high for those who can remain.

The construction of smaller dams in the smaller creeks would easily control the high water of the Columbia River in the spring.

After a large dam is constructed only a few people remain to maintain it, which will decrease the population of Sanders County.

Yours truly,

RUTH H. HELMING.

CHARLO, MONT., *December 14, 1959.*

Senator GRUENING and Senator MARTIN:

As a resident and landowner of Lake County, I wish to urge passage of S. 1226.

I have lived in Lake County for 45 years and have always felt that Montana has been denied full development of her natural resources. We have so few industries most of our young people must leave the State to seek employment. Let's develop our natural and human resources to the fullest.

Respectfully,

NICK HERAK.

CHARLO, MONT., *December 12, 1959.*

Senator GRUENING and Senator MARTIN :

We of the Lake County Democratic Central Committee wish to reaffirm our stand as expressed in favor of a Federal multipurpose dam for maximum development in the interests of all of the people. We urge passage of S. 1226.

Sincerely,

VIOLA HERAK,
Chairman, Lake County Democratic Central Committee.

PARADISE DAM COMMITTEE,
Missoula, Mont., December 9, 1959.

Senator MURRAY.

DEAR SIR: We want the Paradise Dam to go in because it will make work or jobs for many and we need the electricity, our power is very weak. Just don't get all we need to run our appliances proper.

There is not too much good farming land that will be flooded since other dams have used much more valuable land to flood. I just don't see why we don't have a dam in that territory.

Respectfully,

Mr. and Mrs. GEORGE HAYEN.

MISSOULA, MONT., *December 19, 1959.*

The U.S. SENATE COMMITTEE ON INSULAR AFFAIRS :

I am addressing this communication to you on the subject of Senate bill 1226, to provide for the constructions of dam/or dams on the Flathead or Clark's Fork River in Montana, and since I am speaking in my capacity as a private citizen, and property owner in the region affected, it is proper that I should furnish a brief background of my reasons for addressing you on a matter of such importance.

My name is Leverne Hamilton and for approximately half a century I have been an ardent advocate of conservation and the efficient, economical and full development and utilization of our natural resources, one of the most valuable of which is water.

As a member of Montana's Legislature in 1931 I introduced and secured the adoption of a joint resolution calling upon Congress to cause a survey to be made of the Missouri River and its tributaries with a view to development of that stream for flood control and power purposes and I later became interested in similar development in the Columbia River Basin. As a surveyor on the Bureau of Reclamation I have some engineering experience and I have been a resident and property owner in the area which will be affected by the development under S. 1226 for about 14 years. So much for my reason for addressing you on S. 1226.

The provisions of S. 1226 seem to cover all the problems which may arise in the development of this area and I therefore address my comments to the one feature of the bill which I consider of the utmost importance, namely, the choice of a site for the dam, which by the bill is left to the discretion of the Secretary of the Interior.

In the bill two sites are suggested—the Knowles site on the Flathead River and the Paradise site which is several miles downstream below the confluence of the Flathead and the Clarks Fork Rivers. In this connection I desire to enter a strong plea for the construction of the dam at the Paradise site which I am sure is the best location for the efficient, economical, and full development of this area of the basin for the following reasons :

1. The Knowles site, situated above the confluence of the two streams, would provide control of only one of the branches, the Flathead River, while the Paradise site, situated below the confluence of the two streams, would provide adequate control of both streams.

2. If the Knowles site is chosen in preference to the Paradise site it will be only a matter of time until another dam is required to provide adequate control of the other stream and more complete development and utilization of the resources of the valley.

3. If the Paradise site is first chosen, the water backed up by this dam would cover the proposed Knowles site thereby rendering the construction of the Knowles Dam unnecessary. It is therefore easily discerned that the appropriation for the Knowles site if first chosen would be entirely wasted.

4. If on the other hand the Knowles site is first constructed and the Paradise site is not utilized, another dam would later be necessary on the other stream which would cost as much, if not considerably more, than the Knowles Dam, bringing the ultimate cost to as much if not a great deal more than the original cost of the Paradise Dam.

Now as to the cost of the two dams.

The original estimate of the Army Engineers gave the cost of the Knowles Dam at approximately \$221 million and the cost of the Paradise Dam at approximately \$421 million. Later estimates compiled largely from data provided by the Northern Pacific Railway (which we may safely assume to be somewhat prejudiced) place the cost of the Knowles site as \$234.6 million and that of Paradise at \$492 million. This I believe is inaccurate and an impartial estimate by the Army Engineers will show that the cost of the Paradise site can be reduced to the original estimate of \$421 million or even less. Since your committee will have access to these figures it is unnecessary for me to dwell on that subject.

In closing let me repeat that while addressing you as a private citizen and property owner in the region affected, from my contacts with other residents and property owners of that territory, I believe I express the sentiments and opinions of a large majority of those residents and property owners when I urge that for the efficient, economical, and full development and utilization of this great natural resource the Paradise site is the wise and logical location for the dam proposed by S. 1226.

Respectfully submitted.

LEVERNE HAMILTON.

PARADISE, MONT., December 2, 1959.

To Whom It May Concern:

I am against the Paradise or Knowles Dam. It will disrupt too many people and cause them to lose their homes and jobs.

C. E. HERMAN.

PARADISE, MONT., December 5, 1959.

To Whom It May Concern:

The Paradise or Knowles Dam will flood out too many people, causing them to lose their farms, homes, and jobs. I think the dams could be built in the mountains so as not to disrupt so many people.

Mrs. C. E. HERMAN.

PARADISE, MONT., December 7, 1959.

U.S. SENATE INTERIOR AND INSULAR AFFAIRS COMMITTEE,
Washington, D.C.

GENTLEMEN: It does not seem right, to me, that any one could promote or sponsor anything as detrimental to the State of Montana, and its people, as a bill that proposes to build a dam at Paradise or Knowles sites, just to gain a political monument, that will remain a tombstone to the people of western Montana and the State in general.

I oppose these dams and the political strategy that goes along with these dams.

Yours truly,

JACK L. HERMISTON.

PERMA, MONT., *December 10, 1959.*

Senator JAMES E. MURRAY,
Washington, D.C.

DEAR SENATOR MURRAY: I am writing to express my feelings on the proposed Paradise or Knowles Dams. I am definitely opposed to these projects.

I feel it would be a step in the wrong direction for the good of Sanders County and its citizens. I think it would be a disgrace for us to let them destroy highways, railroads, and powerlines and many more things that people have struggled for a long time for.

I also think that the loss of agriculture and livestock would be a big loss to our county. I do not think it is fair for people to be pushed from their homes and ranches. Our taxes, which are already too high, would be still worse if we lose all of this valuable property from our tax rolls.

Yours truly,

JAMES A. HOLLAND.

PERMA, MONT., *December 10, 1959.*

Senator MURRAY,
Washington, D.C.

DEAR SENATOR MURRAY: I am opposed to the building of a dam at Paradise or Knowles. It would be the ruination of our beautiful area, where most of us have struggled to make our homes, cultivate lands, build schools and churches, and roads.

It would not benefit Montana and it would desecrate western Montana.

Sincerely,

J. P. HOLLAN.

PERMA, MONT., *December 10, 1959.*

Senator MURRAY,
Washington, D.C.

DEAR SENATOR MURRAY: I am anxious to protest the building of Paradise or Knowles Dam. We have made our home here since 1914. Struggled to improve and cultivate the land. Struggled to pay taxes to promote all necessary utilities. Struggled to raise our family and give them the advantages necessary to make them good citizens. We love this area.

We feel it most unfair to have our area here desecrated for benefit of Oregon and Washington.

Our Congressmen and Senators should be eager to help save our lands for Montana people.

Building the dam at Knowles or Paradise would ruin the financial status of Sanders County. The loss of lands, highways, bridges, power facilities, and cattle would be a tremendous disadvantage for western Montana.

Please get in our corner and fight this thing.

Sincerely,

Mrs. J. P. HOLLAND.

PERMA, MONT., *December 19, 1959.*

Senator MURRAY,
Washington, D.C.

DEAR SENATOR MURRAY: I am opposed to the building of a dam at Paradise or Knowles. This area has been my home since 1910 when I homesteaded. The years following were not easy as new country development was slow. Just reached the point where I can look back on my accomplishment and consider my life's work almost done. I love this area. I cannot agree to any plan or suggestion to change this area by having a dam built for benefit of Oregon and Washington.

Yours truly,

R. J. HOLLAND.

PERMA, MONT., December 10, 1959.

Senator JAMES E. MURRAY,
Senate Interior and Insular Affairs Committee,
Missoula, Mont.

DEAR SIR: I am opposed to any large dam such as Knowles or Paradise Dam for water storage. I think the dam would be more detrimental than beneficial to all of the area concerned.

MRS. TOM HOLLAND.

Senator JAMES E. MURRAY,
U.S. Senate Interior and Insular Affairs Committee.

DEAR SIR: I wish to go on record as opposing your bill S. 1226.

I have resided in Moiese Valley for 26 years and am a farmer, this bill if passed, would deprive me of all means of supporting myself, it will flood all my land, as I am too old to start all over again.

I believe this bill will be rejected by majority of the people in the valley, directly affected.

Sincerely,

RALPH HOUGH.

PERMA, MONT., December 9, 1959.

Senator JAMES MURRAY,
Washington, D.C.

DEAR SENATOR MURRAY: I am opposed to the Paradise Dam and Knowles Dams.

I am a rancher on Camas Prairie and I think we have enough land under water.

Take a look at all the clay that would wash down and fill up such a dam.

Why build dams for power when they can do the same work with atomic power and for irrigation? We are raising more now than we can use.

Yours truly,

B. W. HOWARD.

STATEMENT OF F. N. HAMMAN, POLSON, MONT., PERSONALLY AND ON BEHALF OF
THE TAXPAYERS ASSOCIATION OF LAKE COUNTY, MONT.

My name is F. N. Hamman. I am an attorney at law residing at Polson, Mont., where I have maintained law offices for 25 years, and practiced law for 35 years, resided in Montana for 46 years, coming here as a young man and I have, therefore, seen much of the development that has taken place within the State of Montana.

I believe in our form of government. I believe and have faith in the State of Montana, its citizens, its officers, and to some extent, I have a high regard for our Congressmen and Senators. I do not wish that this letter be construed as a personal criticism of any of those gentlemen.

When I say that I believe in our form of government, I make that statement with the experience that comes naturally from a study of law and our form of government.

It is not compatible with our form of government that we should have top-heavy, bureaucratic, farflung setup of agencies sapping the natural resources of the country to carry on industrial enterprises which should be conducted by free enterprise. In other words, I mean that the government should not be engaged in business. The fact is to maintain our form of government, the Government should be engaged in the business of government and that the Government should have only enough money to carry on the business of government.

In consideration of the building of the Paradise Dam or the Knowles Dam or either of them, I think that the principles that I have stated are applicable. I am shocked at some of the comments I have heard from some of these loose-tongued people in respect to the Paradise Dam.

It is to be noted that the people who spoke the loudest have not property and no personal interest in the region of the Paradise Dam, as will be perpetually ruined by this flooding.

For more than 10 years, we have been confronted with this subject of Paradise Dam, Knowles Dam, dredging the Flathead River, raising the Flathead Lake. Several years ago, the Army agency stated that the building of the

Paradise Dam was not a feasible project and advised against the building of it.

We were told that the destruction of this great farming area will be compensated by the Federal Government paying to the destroyed counties certain moneys in lieu of taxes. What argument can be more silly? In the first place, it ought to be apparent to any intelligent person that the Government has no money except what it takes from the taxpayers.

What logical or rational reason can be advanced for the flooding perpetually of nearly 60,000 acres of agriculture lands? When we talk about flood control, the fact is we have a controlled flood of this acreage for all times.

What is the situation in respect to this land. Some of this land will be under a foot of water, some under 300 feet. Hence, at least a part of this land will be a bog and mosquito nest probably 9 months of the year.

The talk of industry springing up as a consequence of this dam is another silly conjecture. Where will we put the industry? On the mountain top? Can we build Montana by a farflung course of destruction as this.

Let us examine the record a little further in respect to this farflung Government spending. What did Franklin Roosevelt say about it. He said, "A government is just like a family, it cannot continue to spend more than its income unless by pursuing a course of bankruptcy." That is exactly the situation here. Since 1933 we have accumulated a national debt of \$292 billion, in addition to the debts of each State, county, parish, municipality, and school district. The total is a national debt of \$500 billion.

We are a bankrupt Nation. Do any of these people who purpose to build these dams by the Government, when private industry should build them, think, pause, or have any solution for our economical wrecked condition. No, not one. They proceed blindly down the road to bankruptcy and the facts are, we now spend billions of dollars attempting to better our military strength, but history tells us that military strength has been subservient to economical strength.

We shudder to think, and we do not want to accuse our distinguished Senators or Representatives of having ulterior motives in this blind pursuit, but we do feel, gentlemen, that we have had too much disregard by you, in respect to our unfortunate financial condition of our country. We think that it would be far better for these dams to be built at places where widespread destruction would not be brought about.

What about the heart and souls of the people who reside in this territory, who have spent their lives in building up a home and having raised their families in this broad and beautiful Flathead Valley. Would we just pick up like so many cattle and place elsewhere. To so propose does not seem that our Senators and Representatives and those persons connected with this hearing have the interest of the people at heart.

What further will be the destruction here. Our highways will be destroyed, our railways will be destroyed; bridges, rivers flooded to their sources, several schools will be destroyed and we may say, "Oh, yes; it will be patched up by the Government making substitution at the expense of the taxpayers." Pray, tell me, what industry is going to spring up? What wealth is going to come to Montana from it; what improvement will be made? It is improvement which shall be measured by the greater path of destruction which shall be brought.

We talk about flood control; what are the facts in that respect. At least one of the greatest floods that has ever occurred was since the building of these dams of the Columbia. There are other places where these dams may be built with less destruction, and let us consider these.

We are not altogether opposed to the building of dams, but we do believe that the good people of the State of Montana should be considered, that the sovereignty of the State of Montana should be preserved, and that no invasion be made upon the State of Montana as to its water, its water rights, without an approval of the State.

It is a fact that since 1933, we have come two-thirds down the road to complete socialism. History tells us that the life of a democracy is about 200 years. It also tells us that when a democracy falls, it falls from internal corruption and not outside forces.

We believe that these persons who are shouting to the housetops that Paradise Dam be built, that the Knowles Dam be built, should get off this socialistic bandwagon; should get on their knees and read the Constitution of the United States and of our State and pray to the Almighty God that our form of government be preserved, instead of advocating a course of conduct that is ultimately sure of leading to a complete destruction of our form of government.

SUPERIOR, MONT., *December 29, 1959.*

Senator JAMES E. MURRAY,
Chairman, Senator Committee on Interior and Insular Affairs.

DEAR MR. MURRAY: I am for the passage S. 1226 to be built at Paradise site. I think it will be less cost to us taxpayers to harness the Clark Fork River and the Flathead River together.

The Knowles project alone does not serve enough people and is an extra expense on the Montana people as well as on our Government.

Paradise Dam will be built anyhow on the Clark Fork River within a few short years.

What little land taxable the Paradise would flood wouldn't make only one ranch.

Where does this part of the territory collect in \$2,000 per hour like a project or power dam would?

And I think as far as taxes being lost, will be gained back in a very short time after the dam is built, and is producing electric power.

Recreation facilities, tourists establishments, industry—factories and mills will be built within the area that will compensate for taxes now in existence.

Most of the land that would be flooded is rock cliffs, gravelly, very little timber production or farming production; and very little grazing.

I work for Mineral County and know the territory. Before I came here I came from the Corps of Army Engineers at Fort Peck. I have worked in Fort Peck powerhouse.

I do know Knowles project will not produce as many kilowatts as Paradise. Paradise would produce three times as many kilowatts as Knowles.

I think the Montana people stand to gain the cost in difference by building Paradise Dam instead of building another project like Knowles in a short while. If Washington Power and Montana Power want to build teapot dams, why don't they get off the main river and use adjacent streams?

I can name one, Fish Creek, in this area.

We do not want any of these private concerns coming in and jumping across our State lines and using our water resources. We need the use of our rivers here in Montana.

I live in this county, 1 mile from Montana powerline; and no electricity.

Build up Montana. Keep her resources in Montana for the people that's here.

Yours sincerely,

VEEN HUETH.

HOT SPRINGS, MONT., *December 4, 1959.*

Senator MURRAY.

DEAR SIR: Having been convinced that the building of the Knowles dam will in all probability injure this community and the established homes here, we would like to ask that this matter be reconsidered; 3,500 persons will have to move and reestablish in new places. Will the improvement you envision be sufficient to overcome the problems that this valley will have to face because of it?

Sincerely,

Mrs. CHARLES D. HUGHES.

HOT SPRINGS, MONT., *December 3, 1959.*

Senator JAMES E. MURRAY,

U.S. Senate, Interior and Insular Affairs Committee.

I am very much opposed to either dam, the Paradise or Knowles, to go in.

I think it's very unfair to move people who have lived there all their lives, especially old folks, as that is the only home they know.

Respectfully,

Mrs. RAYMOND HUGHES.

PARADISE, MONT., December 4, 1959.

To Whom It May Concern:

I resent the fact that I would be flooded out of my home by the proposed Paradise Dam, and I do not relish the thought of living on the lower side of a high earthen or cement dam, as the Knowles Dam would be if built.

L. E. HOUBY.
MAUDE HOUBY.

PARADISE, MONT., December 4, 1959.

I am opposed to the Paradise-Knowles Dam project.

DONNA HUTCHISON.

HOT SPRINGS, MONT., December 3, 1959.

Senator MURRAY:

DEAR SIR: I am against the Paradise and Knowles Dams. Although I would not be directly affected by these dams the aftereffect in my mind would probably cause people who live in this neighborhood and myself to look elsewhere for a livelihood due to the fact that our taxes will be higher.

If the Government builds these dams, the Government does not pay taxes; therefore they will have to tax someone else in order to do the same amount of Government employment as they do now, because the Government cannot give something to anyone unless it takes it away from someone else first.

DAVID A. HYRE.

STATEMENT OF THE INTERNATIONAL UNION OF MINE, MILL AND SMELTER WORKERS,
ERNEST SALVAS, EXECUTIVE BOARD MEMBER

This statement is presented on behalf of the International Union of Mine, Mill and Smelter Workers and its Montana local unions: Butte Miners Union No. 1, Great Falls Mill and Smeltermen's Union No. 16, Philipsburg Mine and Mill Workers Union No. 24, East Helena Mill and Smeltermen's Union No. 72, Anaconda Mill and Smeltermen's Union No. 117, Deer Lodge Miners Union No. 834, and Phosphate Mine, Mill and Smelter Workers Union No. 904.

The membership of the above local unions are employed in Montana's mining and smelting industry and they urge the construction of the Federal multi-purpose dam proposed by S. 1226 in the Paradise-Knowles reach of the Columbia River. They very much favor the Paradise site.

A recent publication from the U.S. Department of Labor entitled "Western Regional Report No. 6" issued in August of this year under the direction of Max D. Kossoris, regional director, reports employment trends in the West have been changing since World War II from a service type of employment to manufacturing. Nonagricultural employment in the West has increased more rapidly than in the rest of the Nation. A considerable amount of the equipment being manufactured for the rapidly developing space age is manufactured in the West and accounts for the development of the Pacific Northwest into an important manufacturing area, primarily because of increased employment in the aircraft-missiles-electronics complex of industries. At the same time, since World War II, the proportion of workers employed in mining industries has not shown much increase. Open-pit operations have made possible increased uses of labor-saving devices, adversely affecting employment in the mining industry.

Whereas previously a great deal of Montana's employment opportunities were due to the mining and smelting industry, today we are faced with the problem of diminished employment in the mining industry and an overflow of unemployed workers. During the past 3 years the membership of our Montana local unions employed in the mining and smelting industry has been reduced from approximately 10,000 to approximately 6,000. This reduction of employees in Montana's mining and smelting industry had its greatest impact on Butte where the number of Butte miners was reduced by 3,000 during this 3-year period. The additional reduction was distributed among the smelting operations at East Helena, Great Falls and Anaconda, with the largest reduction being at the Anaconda smelting operations.

This experience during the past 3 years points up the extreme need for additional employment opportunities in Montana. The construction of Paradise Dam would attract new industries here and would diversify our State's industries, and bring about a more stable economy. Paradise Dam would provide the abundance of low cost hydroelectric power needed to attract new industries to Montana. The U.S. Bureau of Census reports Montana's population growth has been considerably less than for the Nation as a whole. The lack of employment opportunities has prevented Montana from growing and adequately increasing its population. New industrial opportunities can be developed through the abundant production of low-cost power at Paradise Dam. Proper conservation and use of Montana's natural resources are imperative in the full development of Montana in its economy and welfare.

The expanded agricultural and recreational facilities created by Paradise Dam would also enhance and expand our State's economy and employment opportunities. The additional growth of Montana's business opportunities brought about by the increase of irrigation and recreation facilities at Paradise Dam will also aid in providing additional employment opportunities and prevent the loss of Montana workers to other States.

Stabilization of river levels would improve the commercial navigation of the waterways as well as making available an abundant supply of water required by existing industries. New industries, too, would be attracted by the industrial water supply and the low-cost power source.

The immense floodwater storage capacity of the Paradise Dam reservoir is an outstanding feature. The need for facilities to impound millions of acre-feet of floodwaters cannot be denied. The benefits to be derived from impounding of devastating floodwaters through preventing loss of life cannot be measured. Millions of dollars in property damage will be saved through floodwater storage at Paradise.

This vast storage of water will not only benefit the Northwest and the Nation by preventing loss of life and property, but will provide an increase flow of water to downstream electric power production units throughout the year by the timely and regulated release of spring floodwaters. This would increase the production of low-cost electric power in an area suffering from a shortage of electric energy and employment opportunities.

Montana's miners and smeltermen definitely feel that construction of the Paradise Dam project will stimulate and encourage Montana's growth and development.

PARADISE, MONT., December 2, 1959.

To Whom It May Concern:

I wish to state very definitely that I am opposed to either Knowles or Paradise Dams on the Flathead or Clarks-Fork Rivers.

Truly yours,

CHESTER L. JACKSON.

PARADISE, MONT., December 2, 1959.

To Whom It May Concern:

I am very much opposed to either the Knowles Dam or the Paradise Dam.

Yours truly,

NETTIE E. JACKSON.

PLAINS, MONT., December 11, 1959.

HON. JAMES E. MURRAY,
Washington, D.C.:

I am opposed to bill S. 1226 relating to the Knowles-Paradise Dam project as I am opposed to unnecessary, excessive, Government spending and the ruination of Western Montana.

PETER A. JACOBSEN,
Saw Shop Owner.

HOT SPRINGS, MONT., *December 3, 1959.*

Senator JAMES MURRAY,
Washington, D.C.:

I have lived in this country for sometime and would hate to see our land go under water, therefore I am very much opposed to the Paradise Dam.

Yours very truly,

JOUNE JACOBSON.

HOT SPRINGS, MONT., *December 3, 1959.*

HON. JAMES MURRAY,
U.S. Senate:

I am opposed to the Paradise Dam as we have lived here for many years. I feel the dams, both the Paradise and Knowles, would just be useless and flood a lot of land which otherwise is tillable.

Yours truly,

MARIE JACOBSON.

HOT SPRINGS, MONT., *December 3, 1959.*

HON. JAMES MURRAY,
U.S. Senate:

I am opposed to the Paradise and Knowles Dams. I have lived here for many years and feel as though these dams would be useless for Montana and also flood land which can be farmed. These dams would also put a lot of people out of their homes.

Yours truly,

R. H. JACOBSON.

INTERMOUNTAIN LUMBER CO.,
Missoula, Mont., *December 14, 1959.*

THE SENATE COMMITTEE ON INTERIOR AND INSULAR AFFAIRS:

Our company opposes S. 1226 for the following reason:

We believe the greatest good for the greatest number of people in the long run is achieved under the free enterprise system. The history of the world's countries shows this to be true. This is because the consumer penalizes the business whose costs are too high by forcing it out of business. This forces a company to work hard to become efficient.

No such pressure exists on a Government business. Therefore, they are inherently unsound and result in an increased burden on the people they are supposed to benefit.

We, therefore, oppose Government going in business.

HORACE H. KOESSLER, *President.*

"CON" PARADISE DAM

THOMPSON FALLS, MONT.

I believe the right of a man to own his own land is violated when, regardless of his wishes, he is forced to sell his land—progress or no progress. This country boasts of its freedom to the world, yet where is that freedom when the rights of the individual are destroyed?

This Government gave the Indians certain rights in its treaty. How can a treaty with this Government be broken so easily?

CHARLES E. JOHNSON.

ST. REGIS, MONT., *December 12, 1959.*

Senator JAMES E. MURRAY,
Senate Office Building, Washington, D.C.

DEAR SENATOR: I am 33 years old, married, and have three sons aged 10, 9, and 3. I am a native of Montana, a veteran of World War II, and for the past 4 years have owned and operated a ranch 1 mile west of St. Regis, Mont. Five years previous to this I leased and operated a ranch in Powell County.

When my family and I moved to St. Regis, we felt there was much more opportunity here than buying a very highly improved ranch in an intensified farming district, where the best you could do is to maintain it. This has proved to be true. In the past 4 years the ranch has been increased from a 50-cow unit to approximately a hundred-cow unit at the present time. I feel certain that there are equally good or better opportunities here in other fields for anyone who is willing to put forth a little honest effort.

I am very much opposed to the building of Paradise Dam or any other so-called multipurpose dam. Why should private industry and free enterprise be discouraged or deterred from growing at the expense of all the taxpayer of our country? I can see no other way, then, that this is in direct conflict with what so many Americans have fought and died for. For anyone who is seriously interested, history has proven that without the incentive to grow and build, each to his own capabilities, there can be no true prosperity. I think the field of agriculture in our country today is the best example one could find of the sorry mess Government control and subsidies can make of an industry at the very high and burdensome price to the taxpayer.

The cattlemen are one of the last solid segments of agriculture to continuously resist Government subsidies and control. I cannot word strongly enough my faith in the programs advocated by the cattlemen's associations at both national and local levels. Unless steps are taken to get the Government out of competition with private industry, whether it be agriculture, electric power, or some other field, they will all go down under the ax of socialism.

The most serious aspect of the Paradise Dam issue itself is the indifference by so many, not only here in St. Regis, but everywhere. These are the people who are so engrossed in the so-called security of next week's paycheck that they place this above everything else. They take neither the time nor effort to look into an issue and form an opinion based on facts. Those favoring a high dam have in many recent publications cleverly led the public to believe that this same indifferent group and themselves are all solidly for Paradise, and that there are only a few hardheads against it. I am sure it is not necessary to enlarge on this, because the majority of the people who have read and heard the testimony at former hearings with an open mind have had to admit that Paradise is a paradise only to those who thrive on ideologies far beyond the realm of practicability.

I submit this in the sincere hope that it will do its small part in an overwhelming victory for the democratic principles and ideals which in the past have been held so high.

Very truly yours,

CHARLES H. M. JENSEN.

RONAN, MONT., December 14, 1959.

Senator JAMES E. MURRAY,
Chairman, Committee on Interior and Insular Affairs, Senate Office Building,
Washington, D.C.

SENATOR: As I will probably be unable to attend the hearing on December 15 in Missoula on S. 1226, may I take this opportunity to voice my objections to the project sought by it.

In my opinion, it will not accomplish the objectives it is supposed to. Further it will encroach on our States rights and the rights of private citizens of the State of Montana.

In spite of the economic benefits claimed by proponents, I am sure that our county particularly (Lake) will be adversely affected economically. It is my opinion that we as Americans should quit weighing everything on economic scales, meaning our pocketbooks, and start waking up to the threat of selling our political heritage of freedom for a mess of porridge or worse.

Please enter my objection to this bill in your files.

Yours truly,

MILLO JENSEN.

DECEMBER 12, 1959.

Senator JAMES E. MURRAY:

We have a farm on Camas Prairie about 13 miles north of Perma, Mont. We feel that either Paradise or Knowles Dam would flood the main avenues of travel in western Montana. Most of the cattle from this area is marketed in Missoula.

Either dam would cut off or make the route to Missoula much farther. We have an easy and natural market for grain in Perma. Either dam would flood Perma and make the marketing of grain much more expensive. We protest the building of either Paradise or Knowles Dam.

RAY JORGENSEN.

DIXON, MONT., December 8, 1959.

We are opposed to Paradise-Knowles Dam as we are not in favor of so much good agricultural land being taken up by proposed dams.

MIKE A. KREZELOK.
BETTY L. KREZELOK.

PERMA, MONT., December 3, 1959.

Senator MURRAY.

DEAR SIR: I am opposed to the Paradise or Knowles Dam because there isn't any sense to it.

EARL KELLISON.

PARADISE, MONT.

To Whom It May Concern:

I write because we don't approve and want the Knowles nor Paradise Dam.

This is our home. Our aged parents have lived here years and to move them now, would be like uprooting an old tree, that had stood for years.

Our loved ones are buried here. Our churches are here. This is only a few reasons, besides the very fertile valley, where we have raised our livelihood.

Seems in all the rocks and no-account soil in the world, somewhere else could be found, to put a dam.

Sincerely,

HELLECE KELLY.

HOT SPRINGS, MONT., December 3, 1959.

Senator MURRAY.

DEAR SIR: I am against Paradise Dam or Knowles Dam because the two counties affected are already short on taxable property because of too much Government-owned land. It has always been known as the best farmland in the bottoms and valleys. These sites will destroy too many farms and homes. With all the mountain valleys we have where the population is light I think a few smaller dams would do the same job. I don't see why Montana has to be under water to help downstream States. This dam would back within 6 miles of my place. I sure don't want a mud flat part time. This not only will destroy property but land like mine close by will be affected.

ARVID KOPP.

HOT SPRINGS, MONT., December 3, 1959.

Senator JAMES MURRAY,
Washington, D.C.:

I am very much opposed to the Paradise and Knowles Dams. I have lived here all my life and as far as I can see a Montana valley will be flooded to help other States—whereas Montana will lose taxable land which we are already short of.

People that will have to move from this valley will have to go to other counties and that will be money lost for the counties affected by the dam.

Very truly yours,

LOREN KOPP.

STATEMENT OF W. GLENN KIRSCHER, STEVENSVILLE, MONT.

I am W. Glenn Kirscher, of Stevensville, Mont. I own and operate a farm south of Stevensville in the Bitterroot Valley. We raise sugar beets, small grains, hay, and beef cattle. I have lived in Montana all my life except for 3 years in military service. I was born and raised in the Canton Valley, which now is under waters backed up by Canyon Ferry Dam.

My grandfather, Joseph Kirscher, homesteaded in this valley in 1870. In 1888 he purchased the ranch on which I spent my boyhood and which now is entirely covered by water. This ranch had about 530 total acres, of which nearly all was good meadowland. We raised sugar beets, hay, and grain on this land, which was irrigated under old water rights.

My father, after graduation from Montana State College, was married and brought his bride to this ranch in 1911. He operated the ranch continuously and successfully until 1939 when I took over its operation. The only exception was that during the war years, 1943-45, he was forced to resume the management while I was in service.

After the war our family took over the operation again. I was intimately familiar with the ranch and its operation until we were forced to sell the land to the Government in 1951.

The meadowland produced about 1 ton of hay per acre each year and in addition carried 150 head of cattle the year around. The irrigated portion raised good crops of sugar beets, grain, and alfalfa hay. It was a vital part of our ranching unit, and when we were forced to give it up, we were out of the ranching business.

When the Bureau of Reclamation came into the Canton Valley to buy land to be covered by water, their idea was to divide and conquer. They took land values over a long period of time, going way back into the drought and depression years, to find a base for their offers. This was a lot different from what the land actually was worth to us or to any legitimate buyer. They completely ignored the inflated economy and the times and the real value of these lands.

Owners of land were threatened with condemnation. This was held over their heads to force them to sign. It was a case of take what we offer you or we'll take you to court. A few signed on the first contact. A second group of Government buyers came in; then another, until all the land was sold. Each time they would offer a few more dollars than they offered before and get a few more signers.

They operated in this manner until all the land was gone. There were differences of as much as 100 percent in the prices paid for lands just across the ditch from each other, lands of equal fertility, and producing the same crops year after year.

The farmers and ranchers in this valley appealed to the Federal Court of Claims in Washington, D.C., in an attempt to get an adjustment on land values which would be fair to all concerned. This effort was completely futile. We got no adjustment and we were out a great deal of money in legal fees and other expenses.

People who expect to gain something from selling land to the Government are due for a rude and brutal awakening. We found out the hard way that Government just does not recognize fairness as we know it in dealing with each other in our daily transactions.

I am completely and unalterably opposed to the construction of either Paradise or Knowles Dam and to the Senate and House bills calling for their construction, S. 1226 and H.R. 5144. There is no place in our way of life for treatment of this kind. As good citizens and taxpayers, we deserve full and fair consideration in any dealings with our Government. This we have not had.

RONAN, MONT., *December 7, 1959.*

Senator JAMES E. MURRAY,
Chairman, Senate Interior Committee.

DEAR SENATOR MURRAY: I am a member of the board of directors of two relatively large companies in Lake County. One of them is engaged in manufacturing dairy products and operating a grain, feed, fertilizer, and farm supply business; the other owns and operates gasoline and farm supply stations. I also own and operate a dairy and stock farm. From all of these points of view, I am deeply impressed with the extreme needs which S. 1226 would meet. The development which it would provide would be immensely beneficial to all interests and institutions in our county. I think it would enable us to transform our backward, underdeveloped area in which the farm population has been steadily declining for years, and which most of our young people must leave as soon as they finish high school into a hopeful community with a bright future. It would do this by harnessing our greatest natural resource, the powerful river

which belongs to the people of the United States, and putting it to work right here for the greatest possible good for all of the people at the lowest possible cost.

In pointing out our extreme local need, I would not detract from the paramount importance of national strength and security to which the bill would contribute so greatly. We must not allow officials of power monopolies to prevent full development in the public interest for the sake of their own special profit and power to dominate. There is more than enough room for both public and private development, provided that it is carried on in such a way as to prevent monopoly, which curtails civil liberties and business opportunity, and to encourage competition and expansion of the economy of our Nation, particularly where it is lagging so seriously, as in Montana.

Respectfully,

EVERETT KRUDDE.

PLAINS, MONT., *December 11, 1959.*

HON. JAMES E. MURRAY,
Washington, D.C.:

I am opposed to S. 1226 relating to the Knowles-Paradise Dam project.

LEILA ALICE KELLY.
RAY KELLY.

PLAINS, MONT.

HON. JAMES E. MURRAY,
Chairman of Committee on International and Insular Affairs:

I believe the Paradise Dam would hinder the community, in using this site. People putting life savings in homes and property, people are aging and are not able to start over and who wants to live below an earth-filled dam?

Also after the work is completed Plains would be a ghost town. I have seen enough from the Yellowstone quake to convince me.

Thank you.

Mrs. HERBERT KENNEDY.

STATEMENT OF PROTEST BY PETER J. KRUDDE, PLAINS, MONT.

I, Peter J. Krudde, rancher in Plains, Mont., Sanders County, within the area of this proposed legislation, am strongly opposed to bill S. 1226, for the following reasons:

1. The two counties affected could not stand the loss of taxes.
2. The loss of the lumber industry now in progress would seriously affect western Montana.
3. The threat of enemy attack through wartime, and natural dam breakage during peacetime, would tend to lower all property value below damsite.
4. A great deal of good hay and grazing ground would be lost to the cattle people of this area.
5. A fluxation of a 10-mile area for damsite doesn't seem feasible or considerate to landowners in the area concerned.

MOIESE, MONT., *December 5, 1959.*

Senator JAMES MURRAY,
Senate Committee on Interior and Insular Affairs.

DEAR SIR: We would like to go on record as being opposed to the bill S. 1226. I lived in Iowa, Illinois, North Dakota, Kansas, and eastern Montana and my husband in North Dakota and eastern Montana before we moved here. He was in the Army before we came here. We were thrilled to find such a wonderful place where the climate and all was so good.

Why cover up good land with water when small dams would do as good. Of course Russia wants big dams.

We don't want to have to move again. As we could never find a place with five springs on it again, and the climate we have here.

Why bury Montana's beautiful scenery?

Sincerely yours,

CLARENCE P. JOHNSON.
FLORENCE E. JOHNSON.

PERMA, MONT., December 10, 1959.

Senator JAMES E. MURRAY,
Senate Interior and Insular Affairs Committee,
Missoula, Mont.

GENTLEMEN: I am opposed to any large dam such as Knowles or Paradise Dam for water storage.

If water storage is needed, put in small dams.

ARCHIE KNERB.

PERMA, MONT., December 10, 1959.

Senator JAMES E. MURRAY,
Senate Interior and Insular Affairs Committee,
Missoula, Mont.

GENTLEMEN: I am opposed to the Paradise or Knowles Dam because it will force many people out of homes and businesses they have built up and want to keep.

More small dams would give the same benefits without hurting so many citizens of the affected area.

RITA KNERB.

DIXON, MONT.

I am for Paradise Dam because this area has very poor soil and is not good for anything. There is no payroll here and each year it is more of a burden on the taxpayers to keep up roads and schools. The young people all move away since there is nothing to keep them here. Construction of Paradise Dam would create jobs and help the economy of the whole State.

CHARLE J. KENNEDY.

STATEMENT OF HAROLD T. KARLSGODT, POLSON, MONT.

Gentlemen, my name is Harold T. Karlsgodt and I reside at Polson, Mont. I own and operate a real estate and insurance business here.

I wish to express to you my personal opposition to Senate bill 1226, as I sincerely believe the majority of the people in Lake County and around Flathead Lake surely do not want this project.

I personally appeal to you as members of the Senate committee on this bill to defeat same in your committee for the following reasons:

1. The project is uneconomical and it is unjust to strap the American taxpayers with this unnecessary, mammoth expenditure.

(a) Electrical energy can be produced much more economically by steam turbines.

(b) Nuclear energy is on the brink of development.

(c) Our flood problems in Montana from the Flathead and Clark Fork Rivers is not a serious problem.

(d) Irrigated land has proven in many cases in our present irrigation project uneconomical to farm.

(e) Necessary relocation costs of present railroad facilities, highways, oil and gas lines and telephone lines, etc., too expensive, and risk the chance of some of these not being rebuilt.

2. Less than 50 percent of the land in Lake County is taxable and we do not want any more land taken off the tax rolls.

3. We do not need this project to encourage industrial development in western Montana. The new industries which have moved into western Montana within the last 5-year period, such as the Diamond Match Co. at Superior, the Pulp Co. at Missoula, the Plum Creek Lumber Co. at Polson and the Dupuis Brothers Lumber Co. at Polson found plenty of electrical power available for their needs.

4. We do not want to take any chances on further fluctuation of water in Flathead Lake, which might follow with the dredging of the outlet of Flathead Lake as recommended by the Corps of Army Engineers. This would result in serious damage to our recreation areas around the lake as well as damages to the many millions of dollars of investment in property on the lake.

5. We are getting along fine with our Indian citizens on the reservation and it's about time the Government quit infringing upon their property rights.

6. The Government owes too much money now and it would be unsound business to venture into this unnecessary, uneconomical project.

In conclusion, I believe that the Columbia Basin deserves much more study and possibly in the next generation if the need of development arrives, there will be a much more economical way that it can be developed to the satisfaction of all people affected by such development.

I wish to thank the Senate committee for permitting me the opportunity to present my testimony, and I surely trust the committee will recommend that bill S. 1226 be killed.

Senator JAMES E. MURRAY:

We, the members of Pablo Local No. 54 of the Montana Farmers' Union, in regular meeting assembled this 7th day of December 1959, respectfully request the Congress of the United States to take favorable action on Senate bill 1226 authorizing construction of Paradise Dam.

CLARENCE KEYSER,
Secretary, Pablo Local, Farmers' Union.

TOWN OF HOT SPRINGS,
Hot Springs, Mont., December 14, 1959.

Senator JAMES E. MURRAY,
Senate Office Building, Washington, D.C.

DEAR SIR: I am in favor of the Paradise Dam for the following reasons: The economic condition of Montana today demands that something be done to bolster the economy of the State. The maximum development of our streams can do more to help this condition than any other means. This has been proven in our neighboring Western States that have steadily progressed while we are going backward each year.

Montana Water for Montana People is a good slogan, but Montana must do something to control and use the water before they can demand their rights.

Paradise Dam will give greatest good for the greatest number for the longest time. Only the large multipurpose dam can accomplish this, and eventually pay for itself.

Yours very truly,

L. P. LOWNEY,
Mayor, Town of Hot Springs.

POLSON, MONT., December 10, 1959.

Chairman JAMES E. MURRAY,
*Senate Committee on Interior and Insular Affairs,
Missoula, Mont.*

DEAR SENATOR AND COMMITTEE: I can find no sound objection to S. 1226. Among the many reasons for advocating its speedy passage I would like to call attention to the fact that the productive population of Lake County has been declining for years and those who are left are finding it increasingly difficult to make a decent living. The amount of half-farmed land and the startling number of vacant houses grow continuously. As soon as they finish high school, or before, the young people go away, mostly to other States, looking for jobs, leaving our underdeveloped and depressed county in the hands of the old folks, discouraged and with too little energy and vision to go out to meet the future and make something of it here.

The Indian birthrate increases rapidly, exceeding their resources. Some of them, with little preparation for such a different environment, go into distant cities. As a result, the Indians, generally less able than the old white people, to deal adequately with local problems and to create opportunity here, become a larger proportion of the population. Such leadership as one finds in the little town is piddling and shortsighted, afraid of great opportunities like building great dams and putting our greatest natural resource to work right here to help us create a future that will appeal to our young people as worth working for. Apparently the less competent and ambitious stay here and with the more vigorous and resourceful tend to leave; we are ingrowing and provincial. I am therefore particularly desirous of the early passage of S. 1226 because of what such magnificent development of our key natural resource will do in the way of human development in our beautiful valley.

The influence of the power company upon our people is negative and restrictive. If it should be allowed to build the little Buffalo Rapids dams that would

bar Federal integrated development in the Knowles-Paradise reach, our outlook would be further limited, our thinking more timid, subservient, and trivial, our condition far worse than it is now. All of Montana in all aspects of life would be more completely dominated by power monopoly officials.

Doubtless the little electric energy it would produce; like that of their other dams in western Montana, would continue to flow away from our backward area to centers where industry is already established, little of our floodwaters would be stored, our recreational attractions not improved. Better, in my opinion, to have no more dams to feed the growth of monopoly.

Respectfully,

C. E. LIVINGSTON,
Supervisor and Former Chairman, Lake County Soil Conservation
Board.

PLAINS, MONT., December 8, 1959.

HON. JAMES MURRAY,
Washington, D.C.:

We have lived in this valley for 12 years now and like it very well. The working conditions are very good. And we can't see where a big dam would do anyone any good. And to a lot of us harm.

The claim is that the fishing and hunting will be improved. Well, it is at its best now. So what more do we want? And if Washington wants more power let them build dams in their own State. It may sound like we are selfish, but it is just being practical.

Mrs. HARRY LARSON.
HARRY LARSON.

PARADISE, MONT., December 12, 1959.

HON. JAMES E. MURRAY:

DEAR SIR: We are opposed to bill S. 1226. Besides being disrupted from our homes we see no great future benefit from this dam for our own State.

The best part of western Montana would be ruined by this project.

Sincerely,

MR. AND MRS. E. C. LIKES.

PARADISE, MONT., December 11, 1959.

To Whom It May Concern:

I am opposed to S. 1226 relating to the Knowles-Paradise Dam project.

Mrs. ERMA LOZEAU.

STATEMENT OF DAVID A. LAWYER, PLAINS, MONT.

I have been a resident and property owner in the Plains Valley for more than 10 years. I am expressing myself on the Paradise Dam, not because I believe that those who are conducting the hearing can be influenced unfavorably by what I say or by what anyone else says, but in the hope that my words may encourage some loyal Americans to resist the sovietization of our beloved country.

Most alert persons realize that a life and death struggle is taking place on the old earth ball between Western Christian civilization based on the Ten Commandments, the U.S. Constitution, and the Magna Carta, and criminal communism, steeped in murder and based on "Das Kapital" and the Talmud and other oriental documents which reduce man to a savage animal.

The final stages of communism are well known. They are mass murder of all opponents. The initial stages are less easily recognized. Primarily they consist of the destruction of liberty and private property. The Communists are expertly organized and are smart, slick operators. After infiltrating the U.S. Congress and the administrative departments like the USDA (proof available), they then proceed, not by revolution which might fail, but by limited but sure objectives. (One step back and two steps forward as their teacher Lenin said.)

One of the limited objectives of communism is to destroy property rights by the Federal Government taking over all land. This is to be accomplished by eviction and simply moving in (take first and talk afterward) in the name of

slum clearance, building dams, sites for Government businesses, rights-of-way, etc. All that is necessary is for present trends to continue and within 50 years the Federal Government will own all of the land area in the United States. They are said to already own nearly half of it.

Some other objectives are recognition of Red China, foreign aid to Communist countries, desegregation, increased Government spending and controls, laws promulgating economic crimes, consolidation of the schools, brotherhood (oh, brother), relaxed immigration, control of radio and TV and cinema, a Communist U.S. Supreme Court, an out-and-out Red U.S. Government, Red clergymen of all confessions, and such things as to advertise and push booze, tobacco, while Russia carries on a campaign at home against these.

And the Communists are winning. A few months ago Montana's so-called delegation to the U.S. Congress (Murray, Mansfield, Metcalf, and Anderson), met and had their picture taken in the U.S. Senate Building, while the Sidney Hillman Award was being given to a Helena, Mont., publisher. Sidney Hillman was an immigrant Lithuanian Jew who made millions by strong-arm organization of the clothing workers of New York City.

According to the newspaper, New York Journal-American (responsible paper), Sidney Hillman always cooperated closely with the Soviet Union and bragged about it. He also occupied the chair sitting beside Earl Browder, Communist leader in U.S.A., and sang the International at a major meeting of the Communist Party in Chicago. Neither friend or foe has the slightest doubt of the color of Sidney Hillman's politics. My children last year brought home from the Plains schools free pamphlets distributed by Sidney Hillman's multi-million-dollar tax-free foundation. Not a single statement in these pamphlets deviated one-thousandth of an inch from known Communist doctrine.

I recently read that in Red China when large Government projects are undertaken hearings are held. Translations from the Russian by the Eastern Law Division of the Library of Congress mention the same in the U.S.S.R. But never, absolutely never, are these hearings held for the honest purpose of finding out what the people want. The purpose of such hearings in Red China, as in the Soviet Union, are the same as the purpose of this hearing, and that is to determine whether or not the previous coercion and propaganda have been sufficient so that the Government can safely go ahead with what the people do not want.

That is what is here taking place, and I predict that if these sinister dam proposals are not checked the planners of our destiny will merely wait a little while and then come again with more Government-financed pressure until they win. They are sure to win, that is unless you guys shake the lead out of your britches and get out and work and campaign for new Montana Senators and Representatives who are not outstanding examples of demagogy and political weakness as regards the future of America.

PLAINS, MONT., *December 9, 1959.*

INTERIOR AND INSULAR AFFAIRS COMMITTEE:

Regarding Senate bill 1226 and any other bills relating to the establishment of dams in western Montana: I wish to state my firm opposition to any or all bills for the building of dams by the Federal Government. I hope that the committee will realize that the majority of the people of this county are never going to change their opinion on this; therefore the Federal Government should stop molesting us with these proposals.

Sincerely,

Mrs. ESTHER M. LAWYER.

McGOWAN COMMERCIAL Co.,
Plains, Mont., *December 11, 1959.*

HON. JAMES E. MURRAY,
Chairman, U.S. Senate Interior and Insular Affairs Committee,
U.S. Senate, Washington, D.C.

DEAR SIR: The writer, a merchant and resident of Plains, Mont., for 45 years, objects to the construction of either Knowles or Paradise Dam for the following reasons:

 Rerouting of the Northern Pacific Railroad thereby removing Plains from the main line.

Flooding Paradise, Perma, and Dixon and taxable lands and reducing the taxable valuation of Sanders County.

The possibility that Plains would no longer be on a main highway.

The writer does not believe that cheap power will attract industry because of the distance from a major market, lack of raw materials, high transportation costs, small labor supply, and high taxes.

Respectfully,

J. F. LEWELLEN.

PLAINS, MONT., *December 8, 1959.*

HON. J. E. MURRAY,
Washington, D.C.

DEAR SIR: I am writing this to give our reasons for opposing bill S. 1226. We live here in this locality because we want to and also because this is where we make our living.

These dams would leave us without the type of jobs by which we make our living which would make it difficult to find elsewhere as the age and education is against my husband.

They would flood out many taxpayers and our tax load is high enough as it is without trying to make up for lost taxes.

If the Government has such a surplus of money to spend why not cut down our Federal tax a little? We alone paid over \$1,000 last year.

The chambers of commerce of this county have been trying to advertise this area as a tourist attraction for sports and so forth. If either of these dams were to be built what is there for the sportsmen except lake fishing and this is mostly for those who have money enough to own lakeside cabins and boats and not for the common laborer which are the ones who are supporting this county for the most part. Besides as I understand it this lake wouldn't even be fit for fishing as the depths would be too deep. Therefore you are taking away many dollars of tourist trade.

As for creating work I don't see where you figure that it would create employment for many local men as the big construction companies bring in most of their men with them. As for bringing in more money to the businesses most of it would be bar trade as the location is close enough to Kalispell and Missoula for people to go there to buy their groceries and clothing, which a lot do because of the difference of price and the assortment to choose from.

As for these people who come in here to work paying taxes they don't have to. If they own trailer houses and cars they can buy a transient license and therefore they don't have to pay taxes but there would be enough children going to our schools that we would have to build a new one and the property owners here are the ones who would have to pay the tax for the building of such schools and they don't pay taxes under these conditions. I know the Government will furnish part of the money for the schools but the amount they don't pay we would have to pay, also after these people leave we would have to pay the additional tax.

Another thing the civil defense has always told us to plan on taking in several thousand people from the west coast in case of enemy attack. There would be no place to put these people and besides a dam as large as either of these would be strategic points for an attack themselves. An attack on this dam and a couple of the larger ones on down river from us would flood out the complete area clear to the ocean.

As for flood control this river is already under flood control. As for the control of floods if the Government would spend some of this money to replant the land as it is logged off the biggest percentage of these floods would cease.

As for power we have a good supply of power and the rates are reasonable and the Montana Power Co. is very courteous to its customers.

As from the standpoint of future industry there wouldn't be space enough for a large industry to build. As it is the present industries need more land which they cannot secure, so where would there be land for other industry that would employ the men left without work besides several hundred more whose ranches and homes you are flooding out. Also where are you going to furnish the Indians with reservation land of equal quality that they now have? Besides if our own Government doesn't honor their treaties how can they expect other countries to honor theirs?

One big reason we like this locality is the climate and employment and the opportunity to raise our children without having to shut them in the minute it starts getting dusk for fear of attacks. If this dam were to be built there would be a certain amount of undesirable people who would come along that a person wouldn't want their children to be with. Besides the ones who would have to pay for the extra police needed would be us and not the ones who have come in with the dam.

RAYMOND J. LEWIS.
GLENN A. LEWIS.

PLAINS, MONT., December 15, 1959.

To Whom It May Concern:

I am opposed to the passage of bill S. 1226 for the following reasons:

1. Because we would lose so much agricultural country.
2. Railroads and highways would have to be moved and would be a terrible expense.
3. We would lose so much of our timber resources.
4. People would be moved out of the beautiful valley just to give other States the benefit of our power.

EDITH A. LODER.

PLAINS, MONT., December 15, 1959.

To Whom It May Concern:

We are opposed to the passage of bill S. 1226 for the following reasons:

1. We are opposed to Government in industry or utilities.
2. Because Government ownership of such means taxation to pay the costs of projects such as bill S. 1226 authorizes.
3. Those who are forced to leave their property have no assurance that can be depended upon that they can get a new location equal to what they lost at a price as low as Government reimbursement will be.
4. Huge dams offer a perfect target for an enemy in time of war.
5. Because by the time Paradise Dam can be completed much more satisfactory means of power production will have been developed, namely solar energy.
6. Our river valleys are far too valuable to cover with water. We must store our water resources in smaller more practical reservoirs in the headwaters of our rivers.

ROBERT R. LODER.
GRACE M. LODER.

PLAINS, MONT., December 15, 1959.

To Whom It May Concern:

I am opposed to the passage of bill S. 1226 because, in the next few years, our advancement in science and the need for all our agricultural lands to meet increasing population will make such projects impractical.

Suppose we look ahead 40 or 50 years. Some experts expect our population to be 350 million people. We are going to have to have room to expand our cities and industries. The river valleys we have left are going to be urgently needed for both agricultural and industrial expansion.

Adequate and efficient railroad lines will be more important than ever to meet the needs of our doubled population. In order to build adequate interstate highways through our mountainous West we will need our river valleys. They provide routes that will enable a much more economical and efficient construction. All of the benefits are going to be lost if we continue to build huge Government dams that eliminate the use of our natural passages.

It certainly doesn't make sense to spend millions for dams today in a power-exporting State and then try to tell us it will bring industry when there is no place left for it to locate, or do you propose to build industry up in the mountains and store our water in the valleys of our major rivers. Anyone who has given it any thought would do it the other way around. Water storage in the headwaters and higher elevations will give absolute control of floods, a rising water table in the lower elevations where pumping has drawn them down—a much safer storage of our valuable water in the event of war, and most important of all we can have our cake and eat it, so to speak—both expansion room and adequate water storage facilities.

Another thing, why pick on Montana? If the downstream States are so progressive why not let them store some water in their own mountains? They—Washington, Oregon, and California—are gifted with their share of high mountains and heavy precipitation. The answer is simple. They think their river valleys are too valuable to put under water. Well, so are ours. So that leaves the headwater storage where it should be.

Do they think we in Montana are too dense to see through their little scheme? Well, I guess there are some that are, we have some Montana proponents with us.

Montana is growing very rapidly and we intend to continue without the hindrance of Government dams if those we elect to represent us do us the honor of representing us in Washington in the manner the majority of those who live in the affected area are instructing them to, and keep in mind that their interest is Montana. Let's keep Montana water for Montana. We expect to grow and develop to the point we will make fullest use of our water rights before it leaves our borders.

ROBERT S. LODER, *Farmer-Rancher.*

LIBBY, MONT.

HON. JAMES E. MURRAY,
Chairman, and Members of the Interior and Insular Affairs Committee of the U.S. Senate.

GENTLEMEN: Local union No. 2581 has nearly 1,000 members and represents most of the working people of Lincoln County, Mont. We are, of course, ardent supporters of Libby Dam in our home locality. However, we do not agree with certain chambers of commerce, etc., who claim to oppose Senate bill 1226 on grounds that they favor construction of Libby Dam first. We realize that the construction of Libby Dam and the construction of Paradise Dam are in no way related and neither are the problems confronting the proponents of both dams such as we are.

Local 2581 wishes to be recorded as a proponent of Senate bill 1226 and at the same time to record our preference for construction at the Paradise site rather than the Knowles site.

In recording our position, we are in accord with the entire labor movement of the State of Montana which favors the construction of both Libby and Paradise Dams at the earliest possible dates for each of the two projects. We believe both to be necessary to the full development of Montana water resources for the benefit of Montana citizens as well as the citizens of the United States residing in downstream States. We do not favor postponing the construction of Paradise Dam on any pretext whatsoever.

Respectfully submitted.

LUMBER & SAWMILL WORKERS LOCAL 2581,
UNITED BROTHERHOOD OF CARPENTERS &
JOINERS OF AMERICA.

By WILLIAM SHAWL,

Business Representative.

To Whom It May Concern:

I am definitely against S. 1226.

MAXINE LYMAN.

PLAINS, MONT., *December 8, 1959.*

HON. JAMES E. MURRAY,
Washington, D.C.

DEAR SIR: I am opposed to the Senate bill 1226 regarding the Paradise and Knowles Dams because to my estimation it will hurt this part of the country.

First, it will flood a lot of ground that is now under cultivation, and will cause those people to give up their holdings and relocate in some other place, which is hard for some to do.

Second, there are a lot of people in this locality that do business in Missoula, including myself. If either the Paradise or the Knowles Dam goes in it will be approximately 120 miles farther to Missoula from Plains, which would be about 240 miles farther round trip by car. It would also eliminate our railroad service through here; then we would be either on a spur or no rail service at

all. If on a spur it would possibly be only once or twice a week, which would make it tough to receive or ship freight or other merchandise. Therefore, it would knock the division point out of Paradise, which would knock a lot of men out of work and the most of them with families. To be out of a job for that cause would mean out of a job—period—for other railroad divisions would have their regular crews and would keep them on. To get other kind of work, it would be very hard for a good majority of the men because of their age and because they have never worked at any other type of work. It is getting so when you go out to get a job, the first question they will ask is: How much experience have you had? And a lot of these fellows have had only railroad experience.

I am very much opposed to the Senate bill 1226, and I hope you will take into consideration the objections I have stated in this letter.

Yours respectfully,

CHAS. A. LYNCH.

HOT SPRINGS, MONT., *December 9, 1959.*

HON. JAMES E. MURRAY,
Washington, D.C.

DEAR SENATOR MURRAY: I am opposed to the construction of the Paradise and Knowles Dams.

I feel that it will be of no benefit to us. Besides the homes and farms that will be lost, the taxes will be prohibitive. There are many, many more reasons as to why I am opposed.

Mrs. CAROL LANE.

HOT SPRINGS, MONT., *December 9, 1959.*

HON. JAMES MURRAY,
Washington, D.C.

DEAR SENATOR MURRAY: I am opposed to the Knowles and Paradise Dams. If some of you people would get out and look over some of the land that these dams would cover, you would see why so many people are against them. This is beautiful country and I would hate to see it all go under water. So come on out and look the place over before you start to dam up the rivers.

The farmers have enough taxes to pay without dreaming up some more for them. I think that the taxes are high enough as they are.

Sincerely yours,

KERMIT LANE.

RONAN SURPLUS & SPORTING GOODS,
Ronan, Mont., December 11, 1959.

Senator JAMES E. MURRAY,
Chairman, Committee on Interior and Insular Affairs,
Senate Office Building, Washington, D.C.

SENATOR MURRAY: The construction of Knowles or Paradise Dam, as provided for in S. 1226, would cause undue burden and hardship on the taxpayers of Lake County who would not be eligible for relocation under the provisions of the bill.

The provision for payments in lieu of taxes are inadequate because of the time limitation. Flathead County benefited from Hungry Horse Dam because it is below the dam; but Lake County is above the site proposed in your S. 1226 and with the 80-foot drawdown on the reservoir it is unlikely that industry will be attracted to Lake County by the dams.

The tax losses would hamper our county government in providing its services and, more important, would seriously affect school district No. 28 in which a large portion of the lands to be inundated lie.

Therefore, I wish to be on record as one of those who are opposed to S. 1226.

Sincerely yours,

R. D. LUCHAU.

MOIESE, MONT.

HON. JAMES E. MURRAY,
Chairman, U.S. Senate Interior and Insular Affairs Committee.

DEAR SIR: I wish to go on record opposing bill S. 1226, relating to the Knowles-Paradise Dam project.

I have lived in the Moiese Valley for 21 years, where my husband and I have farmed. Even though we have a small farm we have made a good living.

I was born at Townsend, Mont., in Broadwater County, at which place lies part of the recently constructed Canyon Ferry Dam. As a child I remember the beautiful Canton Valley which is now flooded.

Ask the people there what they think of Federal dams and how much money they received for their productive lands and the loss of their homes.

Have any of you ever stood before a firing squad, waiting for your very life to be taken away from you? That is the way I feel after fighting all these years.

Sentimental, yes, we are when our homes, loved ones, and our very existence is at stake.

Selfish, no, we believe in free enterprise and do not want Federal control of our water resources.

I do not see that this project is any more feasible at this time than it was in 1948, when the people rejected it.

I humbly beg you consider the feelings and beliefs of the people that will directly be affected.

Sincerely submitted.

JENNIE LAGENT.

PERMA, MONT., *December 11, 1959.*

Senator JAMES MURRAY,
Washington, D.C.

DEAR SENATOR MURRAY: I am opposed to the construction of Paradise Dam as it would certainly change the way of our living. It would increase the taxes. I am also against Knowles Dam.

Yours truly,

ALLENE LORAAS.

PERMA, MONT., *December 11, 1959.*

Senator JAMES MURRAY,
Washington, D.C.

DEAR SENATOR: I am opposed to the construction of Paradise Dam as I don't approve of big dams. I think smaller dams would serve the purpose and do the local communities more good.

Sincerely,

HABOLD LORASS.

STATEMENT OF FLOYD G. LARSON, RONAN, MONT.

My name is Floyd G. Larson. I am news editor of the Ronan Pioneer and have been a resident of Lake County since June 1953. I have resided in western Montana since 1946 where I attended journalism school at Montana State University, graduating in 1950. I worked in Hamilton, Mont., between graduation and my present employment in Ronan. I was born and reared in Westby, Mont., and I am a veteran of 30 months' service, including oversea service in France with the U.S. Army Medical Corps, during World War II, receiving my honorable discharge in April of 1946.

I am a Montanan by birth and remain one by choice. I grew up in the eastern part of the State when it was plagued by drought and worldwide depression so I feel that I can speak with some firsthand experience on the importance of water to the economic well-being of a community. I also feel that my youth on the prairie has given me a deep appreciation of the natural beauty and abundance that God has given western Montana and which too often natives of the area seem to take for granted.

Because the issue before us in S. 1226 is of vital concern to me and my neighbors I am moved to write this statement concerning S. 1226. What I fear most is that this committee will make a decision without independent investigation of

its own into areas which I feel that no one appearing before it will make nor will be included in the standard and routine information made available to the committee by cooperating Government agencies.

Therefore, my statement will take the form of a series of questions which I feel must be answered before the committee can wisely accept or reject the proposal in S. 1226. Because there are hundreds of possible questions that could be raised, I have tried to limit those presented here to what I consider to be basic. I also feel that the answers to many of these questions, while not readily available to myself as a layman, are available to your committee under its basic investigative powers.

I would like, therefore, to submit the following for your consideration and unless these questions can be answered and the public fully informed of the information unearthed by them, the proposal in S. 1226 now under committee consideration should be rejected.

I. Cheap public power has been advanced by the advocates of Paradise Dam as the key to a new era of industrial growth and expansion in western Montana.

(a) Does the committee have for its study and evaluation an analysis of how present industries in the Northwest utilizing public power came into being?

(b) How were these industries financed? Were any started during time of war or national emergency? How much of the costs were written off after the war? How much of the industry received benefits of accelerated depreciation allowances?

(c) How many factors in the location of these industries—other than public power—are attributable to the Federal Government? How many of these factors are still available to new industries which might wish to locate near the Paradise site, should it be built?

(d) Of the aluminum companies engaged in operations in the Pacific Northwest, how many plan expansion in the Northwest in the near future? What has been the pattern of expansion of these companies since the end of the Korean war? In the Northwest? Elsewhere?

(e) In view of the information supplied to answer the above questions, how much of a factor in the overall picture has cheap power really played in the location of new industry in the Northwest?

II. One of Montana's problems in attaining its industrial growth is the distances that separate it from market areas of the products it can produce. It is pretty much accepted that cheap power is largely limited in its consumption to the so-called light metals industry and the inference is made repeatedly by proponents of Paradise Dam that its construction would mean another Anaconda type of development near the site.

(a) What has been the distribution of northwest aluminum production since its inception? What proportion of that production has been directly connected with the Nation's defense needs? What is the Nation's future outlook for aluminum needs both in defense and in nondefense markets?

(b) Has the aluminum industry in the Northwest been operating at peak capacity? How much of the curtailment has been due to lack of power? How much of the curtailment has been due to price factors?

(c) Is the aluminum industry expanding at the same rate today as it did during its infancy? Does the industry plan any expansion in the Northwest or will it be elsewhere nearer to markets?

(d) Are Montana marketing problems given full consideration in such plans?

III. One of the problems confronting this Nation is inflation. It is widely recognized that Government spending—except where essential—contributes to the inflationary trends in our economy.

(a) If Paradise is to be constructed over a 5-year period, what effect will the approximately \$100 million annual appropriation have on the efforts by Government to balance the budget and stop inflation?

(b) Will such an annual appropriation force curtailment of other Federal programs such as economic aid to allies or our own national defense program?

(c) Does the cost of the project reflect all costs such as transmission lines to tie the project into the Bonneville system?

(d) Has the committee considered the inflationary impact of the economy on the State's farmers? Agriculture is in a period of declining income and will not the influx of Federal dollars in the area bring an increase in living costs to all residents of the area—including the farmers?

(e) How much will it cost the Federal Government in special grants-in-aid to communities because of the Federal impact of the project? Are these being charged against the project?

(f) Final allocation of costs to the nonpower features of Hungry Horse Dam have not been made to my knowledge. What is the cost allocation plans for the projects in S. 1126? Have the figures estimated for flood-control benefits, navigation benefits, etc., been thoroughly investigated by an independent agency such as the Bureau of the Budget?

IV. One of the highly controversial features of the proposed bill is the status of Montana's water rights should the project be constructed.

(a) Are Montana's right to divert water for other uses within the State protected?

(b) Are power production and nonpower uses compatible with the projected needs of the area's future growth?

(c) What has been history of State versus Federal Government in the area water rights?

(d) Will the project administrator have veto power over non-Federal water resource developments in the drainage area served by the proposed project?

V. Why is an irrigation study proposed in the bill? Should not the irrigation purpose be established before its inclusion in authorizing legislation of this nature? Isn't this getting the cart before the horse in that proponents can speak about irrigation, yet the study might reveal such irrigation to be impractical or uneconomical?

(a) Should the study be made and lands found suitable for irrigation that are reasonable from the standpoint of costs, what assurances are there that the present owners desire such improvements?

(b) Can Congress be justified in appropriating money or allocating part of the project costs to the irrigation feature if no one desires the benefit? Can irrigation benefits honestly be attributed to the bill in its present form?

(c) Has the committee studied the Tiber Dam irrigation faux pas?

VI. One of the most startling features of the bill is the proposed inundation of over 60,000 acres of valley agricultural land for the reservoir site, plus such acreage as may be necessary to provide public access to recreational facilities.

(a) In the face of population growth predicted for the United States and the world, can we ignore that land, now seemingly plentiful, can be flooded in such vast amounts without concern?

(b) There are alternative ways to produce power other than the hydro method; but are there alternatives to land for food production, living space, etc.?

(c) Has the committee considered watershed development and range and forest conservation programs as alternatives of main-stem river impoundments which are costly in acres and in dollars?

VII. Proponents urged support of S. 1126 as vital to natural resource development in western Montana.

(a) Does the committee have an inventory of the natural resources of the area?

(b) What factor does electric power play in their development, present and potential?

(c) Are there resources that have nonpower needs for water that in development might be in conflict with power uses of water?

(d) What are other factors controlling the development of the area's natural resources other than water?

(e) Can the committee honestly attribute western Montana's economic bottleneck—if one exists—solely to the lack of cheap public power?

SUMMATION

It is my belief that if the committee seeks out the answers to the above questions it will find that the projects proposed in S. 1226 are unfeasible, uneconomic, and undesirable not only for western Montana but for the Nation.

1. It will find that cheap public power was but one of many factors influencing the development of the aluminum industry in the Northwest.

2. It will find that many of these contributing factors no longer exist today and that future growth and expansion will be dictated by non-Federal conditions including the availability of cheap public power.

3. It will find, too, that Federal legislation concerning protection of State's water rights are meaningless in the face of executive orders and other bureaucratic means to circumvent the intent and meaning of the law.

4. It will find that the expenditures involved in S. 1226 will have a detrimental inflationary and economic effect on the Nation and the project area.

5. It will find that potential irrigation benefits of the project are wishful thinking on the part of proponents to justify a land grab of over 60,000 acres of Montana's agricultural lands.

6. It will find that such a vast inundation cannot be justified in the face of our anticipated population growth.

7. It will find that Montana's abundant natural resources await development not because of the lack of public power at subsidized rates but rather because of the availability of cheaper sources elsewhere, plus the relative isolation of Montana from the marketplace.

The proposal before the committee is not a panacea. It is my belief that this proposed cure is worse than the disease which it purports to cure.

I hope that this approach to this issue will be helpful to the committee and that it will reach the same conclusion that I have after having practically lived with this issue for the past 3 years; and that is that Paradise or Knowles Dams are completely unjustified and unnecessary for the future of Montana and, if constructed, would contribute more damage than good to the State's economy.

RONAN, MONT., November 28, 1959.

Senator JAMES E. MURRAY,
Chairman, Senate Committee on Interior and Insular Affairs.

DEAR SENATOR: I am for Paradise Dam because it would be the ultimate development of both the Clarks Fork and Flathead Rivers. There could be no more strategic location, for from here to the sea every generator now in operation or that might be installed in the future would get the benefit of floodwaters stored behind Paradise Dam.

I am for Paradise Dam because it gives a promise of industrial development to the stagnant economy of the three counties affected by the project. It would add to the reserve power needed for the security of the Nation as did TVA and Grand Coulee. Properly developed the reservoir area could be made one of the outstanding tourist attractions of the State.

I am for Paradise Dam because the opponents of the project have offered no plausible substitute plan that would in any degree approach the widespread benefits that could be derived from a multipurpose dam at Paradise.

Sincerely,

J. W. LEVERICH.

HAMILTON, MONT., December 12, 1959.

Senator JAMES E. MURRAY,
Washington, D.C.

DEAR SENATOR: In regard to Senate bill 1226 to authorize construction of multiple-purpose Paradise Dam or the smaller Knowles alternate dam:

It is vital to the people of Montana that more waterpower for electricity be made available for the greatest good for all the people.

I sincerely hope you will support Paradise Dam.

Thank you.

Sincerely,

O. B. LOVELY.

PLAINS, MONT., December 10, 1959.

Hon. JAMES E. MURRAY,
Washington, D.C.

I am opposed to bill S. 1226 regarding Knowles-Paradise Dam because it leaves insufficient support in regards to schools.

GEO. E. MARTIN.

PLAINS, MONT., December 11, 1959.

To Whom It May Concern:

I am against the Paradise Dam because it will disrupt so many people from their homes and still not be of any good directly to the people of Montana.

We have an excellent school district here now and if all the extra people move in, our community is not equipped to handle the extra children and, as a result, our children are going to receive a lower class of education.

The people in this community are self-supporting, by this, I mean they are all employed by mills, railroad, or self-employed. If this dam goes in, what do all these people do? We like things as they are now.

Can you show us where this dam will better any of us? Of course not.

Mrs. WALTER MARTIN.

PLAINS, MONT., December 10, 1959.

Senator JAMES E. MURRAY,
Senate Office Building,
Washington, D.C.

DEAR SENATOR: This is to register my unqualified opposition to S. 1226, and the construction of either Knowles or Paradise Dam.

I am unable to support any of the arguments in favor of building either dam. The good reasons for not building either dam are numerous; among them the adverse effect on the tax base of Sanders County; the flooding of productive land and displacement of many people from their homes and businesses; the adverse effect on highways and railways in the area; the high cost of such a project when the citizens are already suffering unprecedented taxes with no relief in sight.

Respectfully submitted.

ROSS O. MOORHEAD.

DIXON, MONT., December 10, 1959.

To Whom It May Concern:

We, the undersigned, are opposed to the construction of Paradise or Knowles Dams.

R. L. MIDDLEMIST.

ROBERTA MIDDLEMIST.

HON. JAMES E. MURRAY,
Chairman of Committee on Interior and Insular Affairs:

I am entering my protest to Senate bill 1226, Paradise-Knowles Dam.

It would displace so many people who, because of the only work they know will be displaced, and because of their ages will be unable to find employment that will equal what they are now making, to say nothing of the cattlemen's ranches, farms, and towns. It would cause the tax structure of Sanders and Lake Counties to be prohibitive.

The bill, namely, S. 1226, is socialistic. I believe wholeheartedly in private enterprise. That is what has built up and maintained our country. Private enterprises are the ones who keep our States, counties, and cities in money to run their respective governments. After seeing what happened to the towns after Hungry Horse Dam was completed, I would not want to see that happen in our locality.

Montana has a surplus of electrical power, the rates are reasonable, and set by the public service commission. Regardless of who produces power the consumer has to pay for it. When the States, counties, and towns realize as large a portion back from private powers, only a fool wants Government dams.

I wrote up the tax roll for Sanders County for 4 years. I know about taxes and where they come from and what will happen if the Government takes over.

Therefore, I oppose bill S. 1226.

ESTHER M. MORRISON.

PLAINS, MONT., December 8, 1959.

Re House bill 1226.

HON. JAMES E. MURRAY,
Chairman of Interior and Insular Affairs Committee, Washington, D.C.

DEAR SIR: The undersigned, residents of this community, are among the majority of those opposed to the construction of the proposed Paradise or other dams on the Clark Fork or Flathead Rivers affecting the loss of home and property of those who would be in the area upstream from the damsite.

We are of the opinion that the vast expenditure for the line changes of the railway and highways in addition of that of the dam construction would be

entirely out of proportion to any benefit that might be attained from such construction.

It is the opinion of the undersigned that dams constructed on the North or Middle Forks of the Flathead River or a series of smaller dams constructed in other localities would serve to a better advantage for flood control with those now located on the Flathead and Clark Fork Rivers.

Of the many factors involved would be the effect on Sanders County from the loss of revenue due to the displacement of residents affected and the loss of the railway tax.

We feel that the majority too greatly exceeds those in favor of such construction, and we believe that your good offices should use your influence in favor of the majority.

Very sincerely yours,

W. A. MORRISON.
ROSE E. MORRISON.

HOT SPRINGS, MONT., *December 9, 1959.*

HON. JAMES E. MURRAY,
Washington, D.C.

DEAR SENATOR MURRAY: I am opposed to the construction of the Paradise Dam or Knowles Dam.

The doubtful benefits of more power will not offset the loss of homes and farms. Also, the loss of taxes on these places will no doubt make ours higher. We have about all we can carry now.

Respectfully yours,

MRS. EDITH MADDUX.

PARADISE, MONT.

To Whom It May Concern:

We have lived here in Paradise for 30 years and made a living. I have worked now for the railroad long enough to have rights so I can keep working, and now that's going to be taken away from me by building a dam we don't need. I am too old to find other jobs for they won't hire you at my age, and there is a good many like me in Paradise. We have all worked hard to make a home. We would like to know where we will be moved to and what kind of jobs we will have on this rehabilitation that the pros are talking about. It may be nice for some people to look forward to sail their boats but what about we that don't have a boat? Why take the living away from those that have lived here all these years for the benefit of outsiders?

FERN M. MALMBERG.
STEN V. MALMBERG.

PARADISE, MONT.

To Whom It May Concern:

I am opposed to the construction of both the Paradise and Knowles Dams because of the higher taxes we would have to pay, the 65,000 acres of fertile land that would be flooded, and the towns and homes that would be flooded, leaving thousands of people homeless.

WILLIAM E. MARSH.

HOT SPRINGS, *December 9, 1959.*

HON. JAMES E. MURRAY,
Washington, D.C.

DEAR SENATOR MURRAY: I am opposed to the Knowles and Paradise Dams, because I feel our taxes would be higher and that Montana wouldn't get the benefit of the power.

Respectfully yours,

ELMER MADDUX.

PARADISE, MONT., *December 1959.*

To Whom This May Concern:

At this time you people will get together and decide if we here at Paradise must leave our homes and a most beautiful little valley.

Most of the people here, live here by choice and not necessity and some like myself love this valley enough to want to finish our days here. But now it's in your hands to drive us out, against our wishes.

We all know now how the condemned men feel while waiting for the verdict.

We ask, please find it in your hearts, don't put in the Paradise Dam, nor the Knowles Dam.

Let us stay in a beautiful place, and don't destroy the trees and all that God has placed here for us to see and enjoy.

Yours truly,

WILLA MARQUARD.
HUGO MARQUARD.

PARADISE, MONT., *December 4, 1959.*

To Whom It May Concern:

We are opposed to the Paradise Dam and Knowles Dam because we do not see where it would benefit as much as it would destroy. It would put more people out of work than it would employ. It would put us out of our home which we have been building on for many years, and is now nearing completion.

Mrs. H. C. MATHIES.
H. C. MATHIES.

PARADISE, MONT., *December 3, 1959.*

HON. JAMES E. MURRAY,

U.S. Senate Interior and Insular Affairs Committee:

I picked the Flathead Valley as an ideal place to live and have spent the last 11 years building my home and now that I have it paid for I don't want to start finding a new home.

Respectfully,

D. S. McDONALD.

PARADISE, MONT., *December 3, 1959.*

Senator JAMES MURRAY,

*Senate Committee on Interior and Insular Affairs,
Washington, D.C.:*

I am very much opposed to either the Paradise or Knowles Dam.

We plan to make our home on the land we own in the Flathead River Valley for as long as we live. The climate is ideal.

There are many of the people we know that would be hard put to find some suitable place to live elsewhere.

Respectfully,

RUBY McDONALD.

STATEMENT OF D. A. McMICHAEL, PARADISE, MONT.

My name is D. A. McMichael. I am owner and operator of the Paradise Mercantile Co., dealing in groceries, meats, clothing, and general hardware.

I am a member of the Plains Lions Club, Plains-Paradise Chamber of Commerce, past president of the Paradise Rod and Gun Club, and past president of the Sanders County wildlife unit.

I have been a resident, businessman, taxpayer, and property owner in Paradise for the past 30 years.

I oppose your Senate bill S. 1226, relating to the proposed construction of the Knowles-Paradise damsites.

I consider such legislation a definite threat to our taxpaying free enterprise system of government, plus the fact that either of these dams would flood our fertile valleys and farmlands, which provide a great deal to our Sanders County tax base.

In addition, the abandonment of any portion of our present railroad transportation system, which provides a large amount of taxes toward maintaining our present school and education facilities, would be a crippling effect on Sanders County and the remaining taxpayers.

PARADISE, MONT., *November 29, 1959.*

Senator JAMES E. MURRAY,
Washington, D.C.

DEAR SENATOR MURRAY: My rights as a citizen, the rights of the State of Montana and its people are violated by your proposed S. 1226.

Why should the western part of Montana, become a series of Federal storage dams, for the express purpose of storing water for Washington and Oregon to produce subsidized power, at the expense of all taxpayers.

I object to the provisions of S. 1226, relating to the Knowles-Paradise project.

Yours truly,

SYLVIA McMICHAEL.

PARADISE, MONT., *December 4, 1959.*

Senator JAMES E. MURRAY,
Chairman, Interior and Insular Affairs Committee:

I, Clara McNeeley, speaking for myself and my family feel the same way about this Paradise Dam as I'm sure hundreds of others feel. We are very much against it. I would like to go on record as being opposed to Senate bill 1226, or any bill concerning same. Need we say again and again that we do not want this dam in our valley. I actually would be ashamed if I were Senator Murray, to think of destroying our valley by putting it under water and destroying so many homes and means of livelihood for so many people just to accomplish the purpose he wants—a memorial in his name. No doubt this said dam, if it should go in, would be called "Murray Dam," and "Murray Lake." I surely would hate to have it on my conscience. I am sure other people are aware of the same fact that I am, the best climate in the State of Montana is right here through this valley. Again I say I am against the Paradise Dam, against Senate bill 1226, or any bill in accordance with same.

Opposingly,

CLARA L. McNEELEY.

DIXON, MONT., *December 8, 1959.*

Hon. JAMES E. MURRAY,
Washington, D.C.:

I am a landowner and taxpayer, in the area to be inundated, and will be directly affected.

Therefore I oppose S. 1226, relating to the Knowles-Paradise Dam project.

SYLVIA MORRISON.

PLAINS, MONT., *December 2, 1959.*

Senator JAMES E. MURRAY,
Senate Office Building,
Washington, D.C.

DEAR SENATOR MURRAY: On November 23 the Daily Missoulian announced that you had notified them of a hearing to be conducted in Missoula on December 15 on S. 1226, designed to authorize construction of either Paradise or Knowles Dam.

This is to register my opposition to the construction of either of these dams at this time or in the foreseeable future.

Opponents of S. 1226 are told of the lower power rates as a result of such huge Federal projects. This is the kind of deception practiced when TVA was in the making. The starry eyed proponents of public power conveniently forget or cover up the fact that people elsewhere in the United States have to make up in taxes to pay for and maintain these overplanned dams and powerhouses so that a limited area may enjoy these lower rates. Also forgotten are taxes lost to local governments through land taken out of profitable production by being flooded, thousands of people, human beings if you will, displaced from homes many have worked most of their lives to make useful and comfortable; the destruction of a beauty spot which western Montanans have loved for decades—the route of man to and from western Montana since the earliest days.

Opponents of S. 1226 are also told of the vast benefits to flow into the area as a result of industry rushing in to take advantage of so-called cheap and

plentiful power. Now and then an occasional industry may see its way clear to come in on this basis. For industry en masse to be attracted to a region as remote from the huge centers of population (where the bulk of its products must be sold) as Montana is, and to have to confront the resultant excessive shipping costs does not make sense.

Recent press releases announce that BPA is looking for markets for its huge excess of electric power as far away as California. Then why are we bombarded with propaganda to build more powerhouses in the Clark Fork?

I have read everything I could find on the project covered by S. 1226, and talked with many local people on the subject. As a result, my considered opinion is that many of the most vocal proponents of the measure have a personal ax to grind and are looking for large short-term profits they hope to gain from the temporary local boom they expect to result from the construction work if building of a dam is authorized.

This project, if concluded, would be operated by the BPA, known to be dominated by downstream interests.

No one in Congress or in the Government can give Montanans a particle of dependable assurance that they will receive any advantage from the proposed dam.

Very truly yours,

ROSS MOORHEAD.

STATEMENT OF THE MONTANA MERCANTILE Co., WALTER H. McLEOD, PRESIDENT

Montana Mercantile Co. is a firm doing business in merchandising throughout western Montana. It has been in that business since 1885. It has a continuing interest in the overall economy of the area, since the health of that economy determines the level of trade.

S. 1226, which would authorize construction of either Knowles or Paradise Dams, should not be enacted. The language in the bill is vague and indefinite. The location of the dam is not exact. The tax replacement provisions in particular are so written as to be virtually without meaning.

Construction of either of these dams would be most harmful to the economy of this area. It would block off our western Montana valleys, both from normal access of western Montana communities, farms, and ranches, to our trade centers in Missoula and elsewhere, and to the free movement of raw materials to processing plants. In each case this would be very detrimental.

New developments in the timber industry have added greatly to our income, particularly in the last decade. There is more than \$1 million a month being spent in our communities by workers in timber industries. We cannot believe that it is good business or good sense to endanger and hamper this industry which is growing so rapidly and has such a great future.

There is nothing in this proposal to encourage our development and much to cause concern. Whatever damage is done will be permanent. The losses will be severe and of long duration.

This firm is wholly opposed to construction of either Paradise or Knowles Dams.

STATEMENT OF THE MISSOULA WHITE PINE SASH Co., MISSOULA, MONT., A. H. OLSON, PRESIDENT

Missoula White Pine Sash Co., is a lumber firm engaged in the business of producing a wide variety of finished and semifinished products from western Montana timber for sale throughout the United States. We have been in business since 1920 and have enjoyed a continued growth since that time, employing additional workers and adding to our plant and production. With proper opportunity we will continue to expand and contribute to our community.

We are completely opposed to S. 1226 and to construction of either Paradise or Knowles Dam. Both create a problem and a threat to our continued growth and development.

Our operations are of a more specialized nature than those of most timber processors. To build doors, windows, and other products of this type we must have clear timber, free from knots and straight grained. This means we must have a continuing supply of mature pine timber of good quality.

At the present time we are obtaining large supplies of such timber from the Thompson River forests in Sanders County. We must continue to receive this

timber to maintain our production schedules. It is most vital to our entire operation.

Should either of these dams be built we would be robbed of our direct-line transportation which delivers logs from this area to our plant. Relocation of the Northern Pacific Railway main line because of the reservoirs would require a more expensive and longer route for these logs.

If we are forced to seek a timber supply elsewhere we will be restricted, since many areas produce only fir, larch, spruce, or other species unsuitable to our process. We will then have to accept whatever timber is available that we can use, which will be less than if we are able to buy timber where we wish.

Several mills in this area are now supplying us with timber. One of these is the Pitts Lumber Mill at Ravalli. This mill would be eliminated by construction of either Paradise or Knowles Dam, and we are informed by that mill that should this occur it will not relocate and resume operation. This would be a serious loss.

We have a general objection to construction of these dams. The development in the timber industry that has occurred in western Montana during the last decade has been of great value to the area. Construction of either of these dams would drown out river valleys, cut off transportation lines, and eliminate much of our tax base.

Our development has been brought about by private enterprise, working to advance, to enlarge our production and opportunity, resulting in more employment, more tax payment, and increased contribution to the community.

These dams are tax consuming. They place a burden upon the community and upon the taxpayer. They do not add to our economy, but add to our burden of Government support. They propose to compete with private enterprise and force that enterprise to finance its own competition.

RONAN HARDWARE,
Ronan, Mont., December 10, 1959.

Re S. 1226.

SENATOR JAMES E. MURRAY,
*Chairman, Senate Committee on Interior and Insular Affairs,
Washington, D.C.*

HON. SENATOR MURRAY: We wish to enter a protest against the building of Paradise or Knowles Dams.

We draw a great deal of our business from the Moeise Valley and vicinity. We feel that the flooding of this fertile valley, locally known as the Banana Belt of the Flathead, would cause us serious loss.

Yours truly,

MURIEL V. MARTIN,
FRED J. MARTIN,
Owners.

RONAN, MONT., *December 1, 1959.*

SENATOR JAMES E. MURRAY,
*Chairman, Committee on Interior and Insular Affairs,
Senate Office Building, Washington, D.C.*

SENATOR: We, the eight members of the Mission Range Indian Stock Association, protest against the proposed construction of Paradise Dam and Knowles Dam as outlined in S. 1226 as either will flood a lot of our grazing land.

If Paradise Dam is built we would have to cut our herds down as a result of the lack of suitable grazing lands. The lands that will be flooded by Paradise Dam may not have much cash value; but they have a lot of value to us as Indian stockmen for grazing.

We feel that Paradise would hinder our association's growth and the growth of the rest of the tribal associations all along the river from Perma to Polson.

MISSION RANGE INDIAN STOCK ASSOCIATION,
By ALPHE L. BEAUVAIS, *President.*

HOT SPRINGS, MONT., *December 4, 1959.*

Senator MURRAY.

DEAR SIR: I have lived in this valley for 39 years and raised six children who are grown up. Four sons and two daughters have always made a living here and won't want to leave this home now, as this is home and the boys always come home.

Some of this land was homesteaded by Grandfather Malinak (1910) and money can't replace a home (with money). We put up with a lot of hardship, too. We are against both the Paradise or Knowles Dam. To destroy so many good farms is wrong.

Mrs. CONRAD MALINAK,
A Taxpayer.

HOT SPRINGS, MONT., *December 4, 1959.*

Senator MURRAY.

DEAR SIR: I have lived here a short time compared to some "only" 29 years and I love my home and way of life as do my friends and neighbors. I want Montana to stay more or less as it is—without the (either) big dam. I really don't believe it will bring all the "riches" to Montana that those arguing for the dams say it will. The freight and shipping charges are just too high to bring in raw materials and ship products out again. So we will come out the loser in taxes. Also, what profit do we get from sending electricity to Washington and Idaho?

This is our home, Senator, please don't put that Paradise or Knowles Dam—we want to live here for the rest of our lives.

Sincerely,

Mrs. NORA JEAN MALINAK.

PARADISE, MONT., *December 4, 1959.*

HON. JAMES MURRAY,
Washington, D.C.

DEAR SENATOR MURRAY: This is to express my sincere opposition to S. 1226.

Federal construction of either of these large multipurpose dams would completely destroy the work of my husband and I for the past 20 years. My husband's job and seniority of over 20 years at the Northern Pacific tie-treating plant and the income from real property we rent to help put our children through school would all be destroyed. Our five children, one of whom is now attending college on a scholarship, would have their home and education needlessly interrupted and curtailed.

Our community life here, as well as our grade and high school facilities, are exceptional and many typical American taxpaying families would be seriously disrupted by such a large dam.

Sanders County has not enough land left as it is to maintain a sound local government without the taxes received from major public utilities in our county. The Yellowstone Pipeline Co. and the Northern Pacific Railway Co. are among those which would be destroyed or reduced until the taxes they would pay to support Sanders County would be almost nothing.

Let us not destroy something as good as we have in this valley for promises of flood control and what have you. The papers report items every day which prove that powers beyond our human control decide where storms, floods, earthquakes, and other major catastrophes shall strike. The Federal Government really has little control. Whether the moisture will fall during the winter, spring, or fall is beyond our control. The spring rains found our Fort Peck Reservoir filled to capacity a few years ago when it should have been empty enough to help avert the flooding of the lower Mississippi Valley.

We know what we have now; why destroy it for an uncertainty?

Yours truly,

AGNES H. MINEAR.

PARADISE, MONT., *December 4, 1959.*

Senator JAMES E. MURRAY,
Senate Office Building,
Washington, D.C.

DEAR SENATOR MURRAY: I am opposed to Senate bill 1226 which would authorize Federal construction of a dam at the site of Knowles on the Flathead River or the Paradise site on the Clark Fork River.

I do not approve of Federal operation of public utilities. I think that the private power companies can utilize these rivers for the best interest of the people with less inconvenience to them. Their economic operation provides a profit for the stockholders, a tax to the Government, and no tax from the public.

I have lived in the town of Paradise for 34 years. I have been an employee of the Northern Pacific Railroad Co. for more than 25 years. I hope that I may be able to continue working and living here.

Yours truly,

FRED MINEAR.

FAR VIEWS DEVELOPMENT CO.,
Missoula, Mont., December 7, 1959.

Senator JAMES E. MURRAY
Senate Interior and Insular Affairs Committee,
Senate Office Building, Washington, D.C.

DEAR SENATOR: I would like to state again that western Montana needs full development of all its water resources to bring industry into this area, irrigation for dry farms and flood control to handle the spring runoff, and prevent hundreds of thousands of dollars damage to farm buildings and lands each spring.

Industry is needed here to provide good jobs for our high school and college graduates within the State, rather than lose them to other industrialized areas.

In developing our waterpower resources, too, it is important that we reserve first rights to the use of this power within the State of Montana. Your support embracing these ideas will be appreciated by

Very truly,

A. J. MOSBY.

MISSOULA, MONT., *December 15, 1959.*

I wish to reaffirm my statement made at previous meeting in 1958 on the Paradise Dam, that it is my belief that the U.S. Government could not possibly buy for a few million dollars more wasteland, rocks and rills than the proposed area designated.

Resident of Dixon over 30 years.

ALBINA MCTUCKER.

HAMILTON, MONT., *December 13, 1959.*

HON. JAMES A. MURRAY,
U.S. Senate, Washington, D.C.

DEAR SENATOR: As there is to be another hearing next Tuesday on the Paradise Dam site, I decided to raise my voice with the multitude here in Montana that are in favor of the construction of a dam at or near to the proposed Paradise site.

I am in favor of the Paradise site because I believe a dam at that site, constructed to the proper height, would impound more water than a dam at any other site on that watercourse, thereby lessening the danger of floods during times of heavy runoff. Also, the more water there is impounded means more power from turbines, generating electricity for the whole Northwest. Also water for irrigation, instead of letting it go down the river as it does now, and do millions of dollars worth of damage in death and destruction.

Sincerely yours,

HENRY E. MIX,
Dairy Farmer in Ravalli County.

MOIESE, MONT., December 11, 1959.

Senator JAMES E. MURRAY,
Chairman, Senate Committee on Interior and Insular Affairs.

HONORABLE SIR: In 1948 a large meeting was held in Hot Springs, Mont., concerning Paradise Dam. At that time such an overpowering amount of opposition was registered against Paradise that the project was dropped.

In 1957 the Corps of Engineers recommended Knowles-Ninemile Prairie as an alternate, following their Missoula hearing, in hopes that it would not have as much opposition as Paradise. This is opposed as violently as Paradise.

Now we are having more hearings on a project that has been turned down twice by the Corps of Engineers.

It seems the object of the proponents is that if they can't win, wear the opponent out with more hearings, if they are lucky enough to get another large vocal voice on their side. This pounding at one like this reminds me of a concept of the Communist Party; that is to keep pounding and hammering with lots of noise until the opposition is finally overwhelmed. I trust we are not following in any such footsteps.

There is nothing new to add to the record about loss of land, taxes, etc. All of the information has been placed in the record at various times.

In 1936 when Lindbergh flew the Atlantic few people would have dared say that in 25 years man would plan on putting someone on the moon. Things in this day and age move at such a rapid pace, atomic power is the power of future generations. While our Government spends millions on huge hydroelectric projects that in the next 25 years will be practically useless as atomic power will have taken its place.

To finish I wish to say I have farmed here the better part of my life. I came here without anything and have been able to get together 240 acres of good land along with plenty of machinery and stock. There are many like myself in the community and we feel that we should be given a great deal more consideration than outsiders who have nothing to either lose or gain. It is the people of Montana who will suffer, while the people of other States downstream will reap the benefits.

Yours truly,

W. D. MCDANIEL.

MOIESE, MONT., December 11, 1959.

Senator JAMES E. MURRAY,
Chairman, Senate Committee on Interior and Insular Affairs.

HONORABLE SIR: I would like to express my opposition to either Knowles or Paradise Dams.

It seems to me there are too many people pushing this project who don't realize just what they're doing. If it was their homes or their livelihood the shoe might be on the other foot.

I think I'm just as patriotic as any other American when it comes to the good of all, but this looks like just an additional tax burden on the people when the money could be used so much better for other purposes. I'm all for progress but sometimes one can progress too fast in the wrong direction and get something you don't want and it's too late to go back.

I trust you will give us extra consideration because we live here and like it here. Thank you.

Yours truly,

AGNES R. MCDANIEL.

COAST TO COAST STORES,
Ronan, Mont., December 14, 1959.

Senator JAMES E. MURRAY,
U.S. Senate, Washington, D.C.

DEAR SENATOR: I am writing you to voice my opposition to the construction of Paradise Dam, and giving you a few of my reasons for this opposition. They are as follows:

1. I believe the construction of these large multipurpose dams is a creeping form of socialism, and if it is, it cannot be beneficial to our county, State, or Nation. The reason I think this way is, if it were to come to a vote of the American people, these large dams would never be built. I do not mean a vote by a committee, but a general vote by our people.

2. I am one of the taxpayers who had the experience of losing my farm under the Garrison Reservoir, and I have found out what it means to have to move out and have to dispose of everything you have worked for. As far as I can figure, it set me back at least 10 years inasmuch as the 9½ years I was on this place were lost, so to speak, and I had to move my family and myself, and start over. As far as a farmer being able to buy another farm with the money he gets from his land sold to the Government, it is almost impossible. It seems to me that the Government should have to pay the current price for land which is flooded, instead of setting a price on it based on the last 10 or 20 years, etc., as a landowner is not very apt to buy a place today at those prices. Consequently, he ends up doing something else. I only wish that the landowners who will be affected by the Paradise project would take time to talk to those people in the Fort Peck, Mont., and Williston, N. Dak., areas, and find out just how hard it is to settle with the Government, before they decide on selling their holdings here. I am sure that they would be much more hesitant to sell out. I am sure that very few of these people know that a large percent of the landowners under the Garrison Reservoir had to go to Federal court to get a just and fair settlement for their own land. These are the things that I cannot believe in, and I am sure many, many more people do not believe in. We pride ourselves on being a Nation which was built to what it is under the free enterprise system, then find that our Government is doing just the opposite in this matter. What I mean is, the Government sets the appraised value on this land to be flooded, not the landowners who are involved.

3. Further I believe that our water conservation starts at the source, and not downstream as the current trend seems to indicate. I also believe that it is unnecessary to build these immense multipurpose dams to get the amount of power required for our people. I have always agreed that the type of dams that were proposed below Kerr Dam would do the same job at much less expense and hardship to the people of our State.

These are some of the reasons I am writing this letter, Senator Murray, and I sincerely believe it is my duty, feeling as I do, to voice my opposition at this time.

Sincerely,

LESTER O. MADSON.

HOT SPRINGS, MONT., *December 5, 1959.*

Senator MURRAY.

DEAR SIR: I am against Knowles and Paradise Dams. Why destroy our people's homes who have lived here all their lives?

These dams are not going to help Montana people.

Sincerely,

BILL MARKLE.

HOT SPRINGS, MONT., *December 5, 1959.*

Senator MURRAY.

DEAR SIR: I am against Paradise and Knowles Dams. It's going to make it hard for the people that made it their home all their lives. It also will raise the taxes.

And I am against Federal projects.

Sincerely,

JUDITH MARKLE.

Senator MURRAY:

I oppose the Paradise Dam. Reason: Because we're under the floodwaters of the dam.

LA RUE MELTON.

HOT SPRINGS, MONT.

SENATE COMMITTEE ON INTERIOR AND INSULAR AFFAIRS:

I own 2,120 acres on the Little Bitter Root River. The river runs through my homestead, which is 160 acres in T. 20 R. 22 sec. 32. The water will take the heart out of my ranch and make three pastures of it. My house would have about 6 feet of water on the floor. It would cut us off from our summer

range and upset all of our ranch operations. The family and I do not want the Knowles or Paradise Dam. We do not want the Flathead Lake altered in any way.

Sincerely,

W. J. BRYAN MELTON.

HOT SPRINGS, MONT.

Senator JAMES E. MURRAY :

I am protesting the construction of either the Paradise or Knowles Dam. I am against Government construction of such projects because of the great loss in taxes to our State. I see no reason why Montana should be a reservoir to benefit a downstream State.

Sincerely,

LEON MELTON.

HOT SPRINGS, MONT.

Senator JAMES E. MURRAY :

I protest the construction of either Paradise or Knowles Dam. Besides ruining thousands of acres of good fertile land for others, it would put several hundred acres of our best land under water. We have no assurance of getting what our land is worth, if it should be put in, beside losing a lot of taxes that should go to the State if it is Government constructed.

Sincerely,

Mrs. LEON MELTON.

Senator MURRAY :

I oppose the Paradise Dam. Reason : Because we're under the floodwaters of the dam.

MABLENE MELTON.

MISSOULA COUNTY CENTRAL TRADES & LABOR COUNCIL,
Missoula, Mont.

To Whom It May Concern:

The officers and members of the Missoula County Trades & Labor Council have for the past several years favored high multipurpose dams throughout all areas of the United States.

We have gone on record in all investigations and hearings held by Senate committees and the Corps of Army Engineers as favoring the Paradise Dam site on the upper Columbia River.

We believe the Paradise site is the best suited for a high multipurpose dam as it will control not one but two rivers for the use of power, storage, and recreation to Montana citizens.

We trust that every consideration will be given to this matter and recommendations will be made to the Congress of the United States.

Sincerely,

CHARLES M. BALDWIN,
Secretary-Treasurer.

PERMA, MONT., December 3, 1959.

Mr. JAMES E. MURRAY :

I am not in favor of Paradise-Knowles or the Knowles Dams. They would provide a few hundred jobs for a short period of time during the building, but the jobs it would create afterward wouldn't compare with the people it would displace at the time they were built or the generations of people that would make their livelihood in the area that the dam will cover. Find dam-sites like Hungry Horse where no one was displaced.

Respectfully,

N. L. MACKIE,
Section Foreman, N.P. Railway.

PERMA, MONT., *December 10, 1959.*

Senator JAMES E. MURRAY,
Washington, D.C.

DEAR SIR: I am writing you in regard to the proposed Paradise and Knowles Dam projects.

We are opposed to this project as it will flood out many small family-sized farms and small businesses. We ourselves will not be flooded but will be put at a disadvantage by this huge lake because our nearest large town is Missoula, which is either directly or indirectly our livestock and grain market. We also do most of our business in Missoula where our farm implements, etc., are concerned.

This project will be a big loss in our county (Sanders) from a tax value standpoint. We have the backwater of two dams in our county now. They have certainly never done anything to help our schools, roads, or any other county, district, or State functions.

Again may I remind you of the many small farms, ranches, and businesses that will be covered by water. Each of these are small in their part but together are a large part of our Nation.

Yours truly,

JACK MARRINAN.
MARVEL MARRINAN.

PERMA, MONT., *December 10, 1959.*

HON. JAMES E. MURRAY,
Senator from Montana,
Washington, D.C.

DEAR SENATOR: I take this means of voicing my opposition to the Knowles-Paradise Dams. The creation of either of these dams would not only flood the best part of our land, but would also place us farther from shopping points and markets, it would increase our taxes by reason of land being flooded, it would close our schools and in short it wouldn't benefit us in any way.

I, therefore, hope that you will do everything within your power to block the creation of either dam.

Respectfully yours,

N. J. MOGUS.

PERMA, MONT., *December 10, 1959.*

HON. JAMES E. MURRAY,
Senator of Montana,
Washington, D.C.

DEAR SENATOR: I take this means of voicing my opposition to the Knowles-Paradise Dams. The creation of either of these dams would not only flood the best part of our land, but would also place us farther from shopping and shipping points and markets. It would increase our taxes by reason of land being flooded. It would close our schools and in short it wouldn't benefit us in any way.

I, therefore, hope that you will do everything within your power to block the creation of either dam.

Respectfully yours,

Mrs. N. J. MOGUS.

KALISPELL, MONT., *December 8, 1959.*

HON. JAMES E. MURRAY AND MEMBERS OF THE COMMITTEE ON INTERIOR AND INSULAR AFFAIRS.

GENTLEMEN: The Montana State Council of Carpenters, an organization of approximately 8,000 members in the State of Montana, urge your committee to recommend and work for passage of S. 1226, substituting Paradise for the Knowles site if study shows it to be more desirable.

We believe the Paradise site to be more desirable for the following reasons:

1. Paradise will give full development of irrigation and reclamation of arid lands, flood control, conservation of wildlife, recreation, electric power, and provide the basis for economic development of industry both in Montana and in the Pacific Northwest, more so than the Knowles site.

2. The Knowles site still leaves the Clark Fork River uncontrolled during the high-water season and does not prevent total flood control.

3. Annual electric energy, generated at the Paradise site would be about twice as much as the Knowles site.

4. The annual need for recreation is increasing each year. The Paradise site would provide much more needed facilities than Knowles.

5. Paradise would provide employment for workers both during construction and afterward in the many industries that would come into being as a result of an abundance of electrical energy, both in Montana and the Pacific Northwest. Naturally, Paradise would be desirable over Knowles because of the increased amount of electric power generated.

It is our further belief that multipurpose projects using maximum development of the natural resources that belong to all the people of the United States containing provisions for benefits accruing back to the people and with a proviso of self-liquidation of all costs of construction certainly is one of the functions of our great Government, of the people, by the people, and for the people.

Sincerely yours,

MONTANA STATE COUNCIL OF CARPENTERS,
By ROBERT E. HARRIS, *Secretary-Treasurer.*

RESOLUTION OF MONTANA STATE COUNCIL OF CARPENTERS, UNITED BROTHERHOOD
OF CARPENTERS & JOINERS OF AMERICA

Whereas a bill titled S. 1226 providing for the construction of the Knowles Dam project in the State of Montana, hereinafter referred to as "the bill," was introduced in the Senate of the United States, 86th Congress, 1st session, on March 2, 1959, and has been twice read and referred to your honorable committee; and

Whereas section 2(a) of the bill provides an alternative choice of sites which would permit selection of a location at what is known as the Paradise site; and

Whereas section 4(a) of the bill provides for a project planning board giving wide selection of representation in the administration of the project; and

Whereas action by the Congress on legislation to effect creation of the project embodied in the bill is long overdue and is vitally necessary to the welfare and economy of not only the immediate area of the project but contiguous areas and the whole Nation; and

Whereas the stagnant economy and underdevelopment of the western Montana community requires development of its natural resources comparable to other areas of the State and national community in the interest of all its citizenry; and

Whereas the interests of the people of the State of Montana and the Nation demand the maximum development of its natural resources for flood control, navigation, electric power and industrial expansion, all actively concerned with national defense and the general well-being of this and future generations: Be it

Resolved, That Montana State Council of Carpenters (United Brotherhood of Carpenters & Joiners of America) respectfully request and urge that your honorable committee take favorable action at its earliest convenience in recommending passage of the bill; be it further

Resolved, That this convention is on record as favoring the Paradise site instead of the Knowles site in order that optimum use may be made of natural resources which would otherwise be wasted by selection of the Knowles site.

Approved by the delegates of Montana State Council of Carpenters in convention assembled at Helena, Mont., on December 3, 4, and 5, 1959.

(Signed) BERNHARD MERKEL, *President.*

ROBERT E. HARRIS, *Executive Secretary.*

Signed this 5th day of December 1959.

STATEMENT OF THE MONTANA DEMOCRATIC CENTRAL COMMITTEE, GRACE BATES,
VICE CHAIRMAN

Let's not delay further in the vital utilization of our valuable water resources, how better can this be done than by multipurpose dams.

Because of our failure to use our God-given natural resources our young people continue to leave the State for employment and Montana's lagging economy continues to decline (another drop of 7.6 percent in September 1959).

A lagging economy costs far more than the development of these resources; we cannot continue with a "no-new-starts policy," while Russia's rate of development far exceeds the present development rate of the United States.

The following excerpts are from the Montana's 1958 Democratic Party platform:

"We believe natural resources belong to the people and must be managed in the public interest.

"We call for a redoubling of effort to increase the power output of the Nation, particularly hydro power from our great rivers which furnish free fuel in perpetuity so that the Nation may continue to expand its industrial potential.

"We urge Federal construction of a dam at the Paradise site, or such alternate site as may be feasible, which will utilize this natural reservoir to the maximum consistent with other uses and with economic feasibility.

"These projects will contribute to the continued growth and development of Montana, and, in turn, the Nation. They will give Montana a vast regulated supply of water for domestic, industrial, and agricultural use. We maintain that a full share of the low-cost power from these developments must be allocated to Montana for an abundant supply for free, competitive industry, for our homes and farms."

PERMA, MONT., *December 10, 1959.*

HON. JAMES E. MURRAY,
Senator of Montana.

DEAR MR. MURRAY: Will not be able to attend the meeting in Missoula so will write a few lines why I am opposed to either the Paradise or Knowles Dams.

If they build either dam it would knock out our railroads, highways, and pipeline, which help to keep our taxes down as our taxes are too high now, and would flood some of the best land in western Montana and also would ruin some of the best hunting and fishing in the country which I think anybody is entitled to.

I lived here for 48 years farming and stock raising and I like to see it stay the way it is now not flooded with water.

Will appreciate all of your help to this matter.

Yours truly,

JOE F. MUSTER.

PERMA, MONT., *December 10, 1959.*

HON. JAMES E. MURRAY,
Senator of Montana.

DEAR MR. MURRAY: AS I am unable to attend the meeting in Missoula, I will take this way of telling you I am opposed to either the Paradise or Knowles Dam.

Our taxes will be higher and our roads to market will be longer. We will be living on a dead end road and present road to either Missoula or Spokane will be greatly lengthened.

I have lived in western Montana most of my life and have seen it grow, so would now hate to see it all flooded.

Will appreciate all your help.

Yours truly,

Mrs. JOE MUSTER.

STATEMENT OF O. J. MURPHY, PARADISE, MONT.

I am opposed to S. 1226, relating to the Knowles-Paradise Dam project.

It is beyond my comprehension, that our congressional delegates, elected by the people of Montana, to promote the best for Montana, could foster legislation such as S. 1226, which should be more appropriately named "The Rape of Western Montana," to satisfy the greed of public power hungry downstream States.

The political notoriety to be gained, by the sponsors of this bill, cannot in any way compensate the people of Montana, for the devastating effect on our economy.

Reasons for opposing this bill are as follows:

1. Flood control. This can best be accomplished by the construction of small headwater dams, that have proven flood control capabilities, in every instance, almost four to one better than large multipurpose Federal dams, plus this fact, small headwater dams control floods at their source, thus conserving and improving the top soil for greater production.

2. Water storage. Here, again the small headwater dams have proven their superior qualities at water storage, because they impound more water, improve the watershed of the land, and in turn, insure a more adequate flow of water in our streams and rivers during the dry summer months.

3. Ninety-five percent of the acreage flooded by the use of small headwater dams, would be waste land, whereas, the large multipurpose Federal dams flood the rich bottom land.

4. The personnel required for small headwater dams is very small, as these dams require only periodic inspection, probably once in the early spring, and once in the early fall months.

5. Recreation. Statistics prove that wherever small headwater dams have been constructed, big game, small game, water fowl, upland birds and fish, have improved by almost unbelievable margins.

6. Electric power. Although small headwater dams do not produce power at their sites, because of the improved water flow, they would add a great deal to the surplus power that is now produced in the Northwest.

7. Small headwater dams do not disrupt families, towns, utilities, or transportation systems, and if we use construction figures, similar to those used for Federal dams, we can have, adequate flood control, water storage, recreation and power for approximately one-fourth the cost of one Paradise Dam.

PARADISE, MONT., December 10, 1959.

HON. JAMES E. MURRAY,
Chairman, U.S. Senate Interior and Insular Affairs Committee.

DEAR SENATOR MURRAY: I am opposed to Senate bill 1226, relating to the Knowles-Paradise Dam project.

Because I have registered my objections at repeated hearings, on the same dams, namely, the Paradise and Knowles Dams, I have decided to let you use the same old objections, that I have registered at previous hearings, as my objections have not changed, except that, I am more determined to oppose these dams than before, and will continue to object at any future hearings, that may be held on the Knowles or Paradise Dams.

Yours truly,

BESSIE E. MURPHY.

STATEMENT OF O. J. MURRAY, THOMPSON FALLS, MONT.

It is safe to say, that 80 percent and in all probability closer to 90 percent of Sanders County taxable valuation lies in a strip within 4 or 5 miles of the Clark's Fork River and its most important tributaries, the Flathead, Missoula, and Thompson Rivers. That narrow strip of land about 100 miles long in Sanders County is our economic life stream. Here live the majority of our population and here lies the preponderance of the corporate and utility property that yield about 75 percent of all the taxes raised in Sanders County. This is most significant because S. 1226 and its provisions would inundate the greater part of one-fifth of this hundred-mile strip as well as additional land.

Now what is the future? One-fifth of the taxable property in Sanders County is off the tax rolls and in come several thousand transient workers to erect the dam. They will live in trailers and makeshift housing that will add very little to our tax base or in tax-exempt Government housing. This influx of people will require that additional facilities be added to our local and county government, such as: Increased costs to maintain our highways, as they found out in Flathead County with the Hungry Horse project, additions to the county sheriff's force, additional cost for jails and maintenance of prisoners, and other county offices will require additional clerical help. All this at county expense, and it comes at a time when there will be a very substantial decrease in the property to pay the increased taxation. This bill does not tell us that side of the picture or tell us how Sanders County can survive under such conditions. No, they tell us that some time in the future which is beyond the life expectancy of many of

us here now, enough valuation will be added to the tax base to repay for the tax base loss we will be immediately overwhelmed by. To me this is a most flagrant affront to the intelligence of the people of Sanders County.

Is industry going to come to Sanders County and help raise our valuation? Not with the outlook we have. If S. 1226 is enacted as proposed, we face a mighty bleak picture for the immediate future as far as taxation is concerned, and the situation could be infinitely worse. Sanders County could become just a reservoir for the coast. Certainly the tax situation could make Sanders County an intolerable place to live. Let us hope that the proposed bill S. 1226 is defeated, but if not, and either the Knowles or Paradise Dams are built, I hope it is not in my time.

STATEMENT OF DONALD R. NELSON, PLAINS, MONT.

I am violently opposed to the construction of the Paradise Dam, or any other preposterously high dam, designed primarily for the spending of huge amounts of the taxpayers' money.

These dams provide political handouts and so-called "positions" for a few "agitators" who are not capable of making a living in a competitive world and so must sell their souls for jobs that contribute to the enslavement of fellow Americans. Fellow Americans, who continue to work and try to make a livelihood in a country that is supposed to be dedicated to the proposition that its citizens can live in peace and free of fear. The four freedoms are becoming a joke under this type of aggression.

If dams must be built, let them be built by private enterprise and paid for by actual moneys which the project earns and not by the taxpayers of the country.

I have lived in the Plains area for 43 years and have made my home here because I like this area better than any other place I have ever been. I only wish to have the Government continue its primary duty of governing the people and leave business to business people or free enterprise.

STATEMENT OF JOHN R. AND PATRICIA NELSON, PLAINS, MONT.

We are very much opposed to the construction of a high Government-owned dam at Paradise, Knowles, or any other point on the Clark Fork or Flathead River.

We feel that projects of this sort, besides displacing many people from their homes and farms, would place a great burden on the counties involved, and western Montana in general, from decreased taxable property due to the flooding of this large area that is proposed.

We are also opposed to this or any other Government owned and operated project that competes with private enterprise. How can we possibly justify the millions upon millions of dollars we spend in other countries to combat socialism and communism and then support a project such as this?

It is also our belief that the only persons really interested in promoting such a project as Paradise or Knowles Dam are those that hope to profit from the temporary business boom at the time of construction.

For these and many other reasons that have been brought out at previous hearings on these same projects, we are opposed to Senate bill 1226.

STATEMENT OF INEZ NELSON, PLAINS, MONT.

I am definitely opposed to the building of Paradise, Knowles, or any other large multipurpose dam by the Government.

I believe it is a crime and a waste to flood the useful land in these fertile valleys, when the problem of overpopulating the world is already becoming a grim reality. Every available acre of tillable land should be kept intact.

When and if dams are needed in the future, they should be at the headwaters and, built by private enterprise, in places where they do not disrupt the economy of counties and take homes from people.

I do not see why western Montana should become a huge reservoir for downstream interests.

PLAINS, MONT., *December 7, 1959.*

HON. JAMES E. MURRAY,
Chairman of the Committee on Interior and Insular Affairs,
Washington, D.C.

DEAR SIR: We take this means to inform you we are opposed to the construction of a dam at either Paradise or Knowles Dam sites, and especially so by the Government, for the following reasons:

- (1) It is economically unsound, which has already been proven.
- (2) It would destroy some of the most fertile farmland that can be found in Montana.
- (3) We believe at such a time that the power that would be generated by such a dam is vitally needed by our Nation, that it should by all means be constructed by a private industry, as we are all too fast approaching a socialist state already.

Yours very truly,

WARD T. NORTH.
 OLIVE C. NORTH.

Senator JAMES E. MURRAY,
Senate Office Building,
Washington, D.C.:

My wife and I are very much opposed to the building of any large dam on the Flathead and Clarks Fork River that the bill S. 1226 authorizes that will be known as the Murray Dam. It seems very childish for Senator Murray to want to erect a dam which destroys many acres of ranch valley homes and give it his name. What sort of a memorial would that be?

No Government project has ever adequately paid for displaced families nor have they compensated for losses and moving expenses. Why are we to assume that they would start now?

We challenge anyone to show us land which could replace farmland and ranchland that will be flooded that is not already in use.

We have lived on our ranch for 8 years. It took us many years to find this suitable location. Our ranch is not now for sale or has it ever been since we moved here.

We feel the Government would not reimburse us to buy equal carrying capacity on a ranch in any other community.

Industry wouldn't possibly come to a remote area to build factories and such. They have to consider railroads, shipping, etc. The employment the dam building would make would only be temporary, and then places would have to be found for these families.

D. M. NICHOLSON.
 MARTHA NICHOLSON.
 DEL NICHOLSON.

PARADISE, MONT., *December 2, 1959.*

My name is F. E. Nesheim. I am employed as a tie handler at Paradise, Mont., passage of the above-named bill, to build Paradise or Knowles Dam would wreak a hardship on me and all of my fellow employees, because our jobs would be abolished.

Because of this reason and other reasons that would affect the welfare of Sanders County and its citizens, I am against the proposition to build either one of these dams.

F. E. NESHEIM.

VALIER, MONT., *December 6, 1959.*

Senator JAMES MURRAY:

I would like to urge construction of a Federal multipurpose dam at the Paradise Dam site in western Montana. A dam as proposed in Senate bill 1226 would give many benefits to Montana and the county at large, the most important to me being employment by the actual construction of the dam and by the industry it would attract upon completion. I am aware of the many other benefits, as well, and sincerely hope it will be built and soon.

Mrs. VALORIE O. NEDVED.

STATEMENT OF THE PARADISE HOME DEMONSTRATION CLUB, INEZ NELSON,
SECRETARY

The Paradise Home Demonstration Club unanimously voted to go on record as opposing S. 1226, or any similar legislation.

CHARLO, MONT., December 3, 1959.

Senator JAMES E. MURRAY,
Chairman, Senate Committee on Interior and Insular Affairs.

DEAR SIR: I am only one of the many citizens of the State of Montana who support your Senate bill 1226, and who favor building the dam on the Paradise site.

I, for one, believe that development of our water resource, the only inexhaustible resource we have, will benefit not only this county and this State, but the Nation as well.

Paradise will, as will any dam of its size, create new industries, which in turn will help to reduce the enormous number of unemployed. It will give our young people a chance to remain in the State after graduation, rather than seek employment elsewhere.

While there are many more reasons for building Paradise Dam, I am sure they will be covered in other testimony. You have my continued and unwavering support.

Respectfully,

LESTER R. OLSEN.

STATEMENT OF THE LAKE COUNTY FARMERS UNION, MRS. LESTER OLSEN,
SECRETARY

We, the members of the Lake County Farmers Union, at our regular meeting, urge Congress to support Senate bill 1226, with the Paradise site as our preference.

HOT SPRINGS, MONT., December 7, 1959.

Senator JAMES E. MURRAY,
Chairman, Senate Committee on Interior and Insular Affairs.

DEAR SENATOR MURRAY: The construction of Paradise or Knowles Dam is becoming more vital to the economy of western Montana every year. Our declining income from farming, mining, and lumbering makes it absolutely imperative that we find new industry to locate here and provide new jobs for our unemployed workers as well as young people just starting into the labor market.

I feel that the low-cost power, irrigation, and recreational facilities to be brought to western Montana by the construction of Paradise Dam is our best hope for full employment, development, and prosperity.

I sincerely recommend and urge the immediate passage of S. 1226.

Yours respectfully,

H. S. OLSON.

RONAN STATE BANK,
Ronan, Mont., December 11, 1959.

Senator JAMES E. MURRAY,
Chairman, Senate Committee on Interior and Insular Affairs,
Senate Office Building, Washington, D.C.

DEAR SENATOR MURRAY: I would like to state my opposition to S. 1226, which is under consideration by the committee.

Having been very familiar with the economy of this part of western Montana for more than 37 years, I feel qualified to have an opinion.

The Paradise or Knowles project would flood many thousands of acres of valuable land in the valleys of western Montana, would lower the tax base of Lake County, making it very difficult to continue local government service, and would cause disruption and relocation of many of our citizens.

Either of these projects would irreparably damage the existing economy of this area and I feel that the claims of progress by proponents are not sufficient to justify this damage.

Not only would Paradise or Knowles be uneconomic for this specific area, but the expenditure of this huge sum of money would cause undue burden on the taxpayers of all of the United States. It would be far better to let taxing-paying business enterprise fill the need without the expenditure of Federal funds.

Respectfully,

H. E. OLSSON, *President.*

DECEMBER 4, 1959.

DEAR SENATOR: Being as how my property will be flooded by the proposed Knowles Dam, I feel I know more about people's feelings than a politician in Helena or Washington, D.C., or an Army engineer does.

I feel I want my home. It's my home and job, as much as it is my people's job and livelihood and politicians aim to destroy my home and job.

So, I say once and for all, let me keep my home and job on the farm here, and I am willing to let politicians, etc., have their homes and jobs as long as they can do something besides flood me out.

RAY OBERLANDER.

HOT SPRINGS, MONT., *December 4, 1959.*

Senator MURRAY:

DEAR SIR: We are against the dam as it would flood us out.

Mrs. RAY OBERLANDER.

PARADISE, MONT., *December 4, 1959.*

To Whom It May Concern:

I definitely do not want either the Paradise or Knowles Dams to be built. I can only see it as a waste of wonderful country, the most pleasant place of this Northwest for year-round climate.

No one has proven the need of either. We have more electricity than needed, and for flood control a series of small dams would answer just as well and not disrupt the lives of people throughout this valley.

It is time our men in Congress from Montana decide to do something for Montana instead of being so considerate of our neighboring States.

AGNES L. OGDEN.

HOT SPRINGS, MONT., *December 4, 1959.*

Senator MURRAY,
Washington, D.C.

DEAR SIR: I am against the construction of either Paradise or Knowles Dams. I don't see where we can benefit any from any of these dams. In fact we are hindered in ways to transport our cattle to market and other inconveniences.

Yours truly,

HELEN PERKIN.

PLAINS, MONT., *December 10, 1959.*

Hon. JAMES E. MURRAY,
Washington, D.C.:

I am opposed to bill S. 1226 relating to the Knowles-Paradise Dam project.

Reasons are: It would flood production land and displace many people from their homes and businesses.

I am also bitterly opposed to excessive, unnecessary Government spending.

Mr. L. J. PARMETER.

PERMA, MONT., *December 10, 1959.*

Hon. JAMES E. MURRAY.

SIR: I am very strongly against Paradise or Knowles Dams because:

- (1) Loss of taxes to Lake and Sanders Counties.
- (2) Displacement of people.
- (3) The so-called cheap power is a snare and a delusion.

(4) Why should western Montana be a frog pond for downstream powerplants.
 (5) Within 10 years or so big dams for power will be outmoded by atomic power.

(6) So-called irrigation benefits are nonexistent because there is no place to irrigate.

Thank you.

HAL PELLEY.

PLAINS, MONT., *December 9, 1959.*

HON JAMES E. MURRAY,
Washington, D.C.:

I am opposed to bill S. 1226 relating to the Knowles-Paradise project.

CARL PILGERAM.
 LUCILE PILGERAM.

PLAINS, MONT., *November 29, 1959.*

GENTLEMEN: I am opposed to the building of either the Paradise or Knowles Dams as prescribed by the Senate bill S. 1226.

If either of these dams were built, they would result in a total destruction of our tax base in Sanders County, and our county would be forced to become a part of some other county.

We would be better off if they built small headwater dams that would provide adequate flood control and sufficient water storage.

Yours truly,

RUSSELL A. PEKS.

DIXON, MONT., *December 10, 1959.*

Senator JAMES E. MURRAY,
*Chairman, Interior and Insular Affairs Committee,
 U.S. Senate.*

GENTLEMEN: The Dixon Community Men's Club testified at the October 1957 Army Engineers hearing at Missoula in support of the Paradise Dam project. Our group now wishes to reaffirm its position and to urge enactment of S. 1226 in the next session of Congress. Sentiment for this development has grown stronger in this vicinity. We believe S. 1226 will protect and advance all private and public interests and enable us to work toward a much brighter future.

ALBERT C. PAUL,
President, Dixon Community Men's Club.

PERMA, MONT., *December 12, 1959.*

Senator JAMES MURRAY,
Washington, D.C.

DEAR SENATOR MURRAY: I am opposed to this proposed Paradise Dam. If this dam is built, it will affect all of our communications, our railroads, highways, telephone, and telegraph. We can't afford to have all of this affected.

I have always lived in the western part of Montana, and I wouldn't live anywhere else and I don't want to move out to help California, Oregon, or Washington by flooding Montana.

I really don't think this dam will be of benefit for industry as there is nothing in this part for industry as this part is for farming and raising cattle and I'm sure that this dam would not benefit a cow.

I don't think we need it and I don't want to have a mudhole in the backyard.

Mrs. JAMES P. PELLEY, *Housewife.*

PERMA, MONT., *December 12, 1959.*

HON. JAMES E. MURRAY,
Washington, D.C.

DEAR SENATOR MURRAY: I am very much opposed to the construction of Paradise and Knowles Dams. I enjoy the country the way it is without making a pond that is for the benefit of Idaho, Washington, Oregon, and California.

I believe that there would not be enough industry come into Sanders County and Lake County to equalize the taxes of the counties, with the property that would be removed from the tax lists.

I am in favor of building more small dams back in the mountains, that would not disrupt farms, ranches, and homes of the people living in this area.

Why not keep Montana for Montana?

Yours truly,

J. L. PELLEY.

PERMA, MONT., *December 12, 1959.*

HON. JAMES MURRAY,
Washington, D.C.

DEAR SENATOR: Help us preserve, not destroy, our priceless heritage of fertile valleys. Their grass and wheat, the food of future generations, will not grow on barren mountaintops.

We have our roads and utilities and homes. Help us build more and better on the foundations we have established. Do not vote us a future of uncertainty. I am opposed to Paradise Dam, also Knowles Dam.

Yours very truly,

Mrs. J. O. PELLEY.

PERMA, MONT., *December 12, 1959.*

Senator JAMES MURRAY,
Washington, D.C.

DEAR SENATOR MURRAY: Have been asked to give my reasons for opposing the building of the Paradise, or Knowles Dams.

First: As a landowner and having lived in this valley for nearly 50 years I feel that our valley should be left as it now is.

Second: This plan is not to benefit our State of Montana, but to benefit States farther along the river. As for bringing in new enterprises we have mills that take care of our timber and other products.

Third: It seems so unfair that people who have put forth the effort that so many have to provide homes for their old age should be forced to make a new start in strange places. Flooding from either of these proposed dams would take the homes from perhaps 3,500 citizens from this section of the State.

Fourth: The talk of providing recreational facilities. To any who know this part of our State we feel that it would be hard to improve what nature has provided for us.

Fifth: So much of our county would be destroyed that taxes would be so high it would be practically impossible to operate schools and carry on as a county.

Yours sincerely,

BERTHA PELLEY.

PERMA, MONT., *December 10, 1959.*

Senator JAMES MURRAY,
Washington, D.C.

DEAR SENATOR MURRAY: I'm opposed to the Paradise Dam, as I see no need in this destruction of property. I have made my home and my life is on the river at Perma.

Please do not destroy our homes and ranches.

WILLIAM E. PHILLIPS.

PERMA, MONT., *December 11, 1959.*

JAMES E. MURRAY,
Washington, D.C.

DEAR SENATOR MURRAY: I wish to express my reasons why I think this dam should not be built here.

What would Montana or these small towns that are to be wiped out, gain from it. The working jobs would mostly be filled by out-of-State men and the fine Montana men would be out of work in a short time, and after that we wouldn't really gain any power from the dam, and would not gain any money for Montana but would take all profit to outer States.

We and many of our neighbors have worked a lifetime to get what we have, and you and some others would take it away from us overnight. If it were going to help Montana gain and help her to make money in the years to come, help us to pay our State bills and put our men to work for the years ahead, but so far I can't see where it would help any of us in any way.

Yours truly,

Mrs. W. E. PHILLIPS.

P.S.—The dams that I am referring to are the Knowles and Paradise Dams.

PERMA, MONT., *December 12, 1959.*

Senator MURRAY,
Washington, D.C.

DEAR SIR: I'm opposed to the construction of any dams on the Flathead River near Paradise. The cost would be excessive and the damage to western Montana would not be justified.

The dam would do nothing for this State; only provide storage for power-plants downriver. Other storage could be provided at less cost and damage to the State.

A dam here would drown out powersites on the Flathead Reservation and wipe out the National Bison Range.

Very truly yours,

J. M. POND.

PERMA, MONT., *December 4, 1959.*

Senator MURRAY:

I'm opposed to the Paradise or Knowles Dam because it would raise the taxes in my county and ruin the best part of western Montana. Also I think other States would benefit more than Montana.

CLAUDE PROCTOR.

PERMA, MONT., *December 3, 1959.*

Senator MURRAY:

I'm opposed to the Paradise or Knowles Dam because it would raise our taxes in Sanders County and the best part of western Montana would be gone. Also I think other States would benefit more than Montana.

Mrs. CLAUDE PROCTOR.

DECEMBER 4, 1959.

Senator JAMES E. MURRAY,
Chairman, Interior of Insular Affairs Committee:

We, the members of the Paradise PTA would like to go on record in opposition of Senate bill No. 1226, this bill pertaining to the Paradise Dam. We are also in opposition to any bill in connection with, or pertaining to said bill No. 1226.

CLARA L. MCNEELEY, *Secretary.*

PARADISE, MONT., *December 10, 1959.*

To Whom It May Concern:

I take this opportunity to voice my objections to S. 1226, relating to the Paradise-Knowles Dam project.

Building these dams will deal a lot of misery to a great many people, including myself.

I would be out of a job that pays me good money, forced to move out of western Montana, which is one of the few garden spots of Montana and the best climate in the whole United States, to those who crave variety and mild winters.

Sincerely,

CLYDE M. PALMER.

PARADISE, MONT., *December 4, 1959.*

HON. JAMES E. MURRAY,

Chairman of Committee on Interior and Insular Affairs:

I live in Paradise, Mont., by choice; am a taxpayer and housewife. My husband is 61 years old and is the postmaster here. We own our home.

I am bitterly opposed to S. 1226. It is socialistic, and if passed my husband would be out of employment, and we would be unable to purchase a comparable home in a location of our choice for what the Government would give us for our place, and due to his age, my husband would be unable to obtain employment elsewhere.

The Flathead River is already under flood control. Since Kerr and Hungry Horse Dams have been built, there has been no flood damage or disaster on this river.

Excessive, unnecessary Government spending has already depreciated our American dollar, and any further, unnecessary expenditures would just be another added burden on us taxpayers.

We have a surplus of electric power in Montana. The private power companies who are now furnishing us with electric power are efficient and courteous. The rates are fair and are controlled by the public service commission.

This bill would be the ruination of western Montana.

MRS. GLADYS M. PARRISH.

PARADISE, MONT., *December 11, 1959.*

I am opposed to S. 1226, Senate bill concerning the Knowles-Paradise project because:

It would mean relocation of the NP Railroad which could mean losses of jobs for many railroad men.

I don't think that Montana lands should be used as a water reservoir for the benefit of downstream States.

It would add a tax burden to the people of Montana.

I feel that it would affect natural wildlife and fishing.

It would cause many displacements of homes which people have spent years to improve.

MR. D. H. PEARSALL.

MRS. REBA PEARSALL.

PARADISE, MONT., *December 12, 1959.*

To Whom It May Concern:

We the undersigned are opposed to S. 1226, the Paradise-Knowles bill.

As far as Montana is concerned several small privately owned dams would be more beneficial.

NELLIE J. PETERSEN.

LYLE I. PETERSEN.

PARADISE, MONT., *December 11, 1959.*

We are unalterably opposed to the construction of any large dams on the Flathead or Clark Fork Rivers in Montana as proposed in S. 1226.

We chose this valley in which to make our home in preference to any other places we have been. Our health is better here; we are happy to have our own small ranch; and we do not want to be moved to some nebulous community chosen by a committee.

This area is already rich in recreation, natural habitat for wildlife, sites and materials for pulp and paper mills, and smaller powerplants. If the underground water supply is a factor in the proponents argument, it has been proven by conservationists that small headwater dams or reservoirs maintain an even flow much more satisfactorily.

Why destroy good land and people's homes with large dams? We know that within a few years, atomic power will be available at any industrial site it is needed, and much less expensive to the American public.

We do not want Paradise Dam or Knowles Dam under any consideration and; as American citizens with the right of freedom of speech, we use this means to exercise that right.

Mrs. H. W. PICKERING.
H. W. PICKERING.

STATEMENT OF CHARLES E. PORTER, PARADISE, MONT.

I wish to restate my opposition to the construction of either the Paradise Dam or the Knowles Dam as I have done so many times in the past, for many reasons. Chiefly I feel that the "hurt" to so many people that would be driven from their homes, and the flooding of such fertile soil would far outweigh the good that such a project would accomplish.

I also am very opposed to gigantic Federal projects that so waste the taxpayers money.

It is my conviction that smaller dams can be constructed in areas where entire towns with thousands of people do not need to be displaced and driven from their homes and jobs.

DIXON, MONT., *December 7, 1959.*

HON. JAMES E. MURRAY,
Chairman of the Committee on Interior and Insular Affairs:

I am a property owner and taxpayer of Sanders County, and I live in the area directly affected by S. 1226. Therefore I oppose this bill.

Mrs. MAE PRIDDY.

DIXON, MONT., *December 12, 1959.*

HON. JAMES E. MURRAY,
Washington, D.C.:

I am 84 years old; am a member of the Salish-Kootnei Tribe; have lived in the Dixon vicinity for approximately 60 years.

I bitterly oppose S. 1226. We have our own power sites to develop, which would be developed if and when the Knowles-Paradise Dam project is abandoned. We were assured by the Government treaty that we would be able to live peacefully for the rest of our lives and not be molested by any such threat as this bill.

ELI PALIN.

DIXON, MONT., *December 12, 1959.*

HON. JAMES E. MURRAY,
Washington, D.C.:

I am a member of the Confederated Salish-Kootnei tribe of the Flathead Indian Reservation. I was born in the year 1905, was raised in Dixon, which is located in the western end of Sanders County. We have oil and mining potential along with water rights which will be lost if this bill is passed. I am very much opposed to S. 1226.

JOSEPH A. PALIN.

DIXON, MONT., *December 12, 1959.*

HON. JAMES E. MURRAY,
Washington, D.C.:

I am a member of the Salish-Kootnei tribe. I am 77 years old and am the oldest resident of the Dixon community. I was born and reared here and raised eight children here. Four of our children live nearby.

I bitterly oppose S. 1226, not only because it breaks the Government treaty made with our people, that they would never take this land away from us as long as the water flows and the grass grows. We have worked and sacrificed for years to build and maintain our home. We do not want to be flooded out.

Mrs. ANNIE PALIN.

PLUM CREEK LUMBER Co.,
Pablo, Mont., December 10, 1959.

We find after studying the proposal of the Knowles Dam Project Act, that it would be detrimental to our business and accordingly must strenuously oppose its construction.

Our main reason is that we are presently receiving large quantities of timber from the Thompson River country west of the proposed impoundment. Also, we expect to continue depending on that particular area for future timber supply. Construction of this project would eliminate any possibility of our receiving this timber supply from that area due to the increase in transportation costs, which would make it completely uneconomical.

This factor alone could cause a slowdown in our production and eventual laying off of many men who are attributing to the economic growth of this area.

In short, any change or abandonment of existing Northern Pacific track that we now use for inbound and outbound shipments could seriously cripple our operations.

D. C. DUNHAM,
President.

By: J. D. CHRISTOFFERSON.

MISSOULA, MONT., December 14, 1959.

Hon. Senator JAMES E. MURRAY,
Senate Interior and Insular Affairs Committee:

Most of my life has been spent in or around St. Regis, where I was raised and attended 12 years of school, graduating in 1932. In the past 25 years I have seen a great many changes take place around St. Regis and I fail to see where the proponents for Paradise Dam get the absurd idea that St. Regis is about to become a ghost town. At the time I graduated from high school in St. Regis, the entire school system, including all 12 grades, employed 6 teachers, 1 of those being the principal who taught along with the other 5 teachers. At the present time the combined grade and high-school system employs 14 teachers. Does this indicate that St. Regis is becoming a ghost town? Most certainly it does not. About 15 years ago C. G. Bennett established a thriving lumber industry in St. Regis, built a modern sawmill that has operated continually without any loss of time to the employees. The annual payroll from the Bennett mill is in the round figures of some \$300,000 which adds considerably to the new wealth in western Montana. Several years ago the Diamond Match Co. located near Superior, Mont., giving that growing community an added boost in prosperity, and more recently the Waldorf Paper Products came into western Montana creating additional new wealth. Were any of these new industries discouraged from locating in Montana because of the lack of electric power? Should this economy be placed in jeopardy by the construction of a monstrosity such as Paradise Dam for the sake of the downstream States?

Then let us consider the minority group that propose Paradise Dam because it will attract tourists and fun-loving people who like boating and evidently have no other thought in mind but to turn a productive and prosperous country into a recreation area. Now we all know that Montana has sufficient large lakes that will take care of all the tourists wishing to come to Montana for recreational purposes, as well as those of us who live here that care for that sort of thing.

Now, in conclusion, it is my honest opinion that the people who live in this beautiful western part of the State of Montana come down to earth and start pulling together to keep for Montana that which we have that the downstream States are so desperately trying to take from us.

Respectfully submitted.

MARY PLENGER.

KALISPELL, MONT., November 27, 1959.

HON. JAMES E. MURRAY, CHAIRMAN, AND HONORABLE MEMBERS OF THE COMMITTEE
ON INTERIOR AND INSULAR AFFAIRS OF THE U.S. SENATE.

GENTLEMEN: Please record our union as a proponent of S. 1226.

We have long been an active supporter of Federal construction of a multi-purpose dam at the Paradise site. We still favor the Paradise location and consider it preferable to the Knowles site. We consider Knowles a secondary choice, acceptable but not desirable.

Otherwise we are in full accord with S. 1226 in its entirety.
Respectfully submitted.

LUMBER & SAWMILL WORKERS, LOCAL UNION No. 2405, UNITED
BROTHERHOOD OF CARPENTERS & JOINERS OF AMERICA,
By A. H. PAHRMAN, *Recording Secretary.*

KALISPELL, MONT., *December 15, 1959.*

HON JAMES E. MURRAY, CHAIRMAN, AND MEMBERS OF THE INTERIOR AFFAIRS
COMMITTEE, U.S. SENATE.

GENTLEMEN: Our district council is a proponent of Senate bill 1226 but recommends construction of Paradise Dam rather than the Knowles project.

Our district council is composed of 18 local unions with a combined membership of approximately 3,000 and representing an estimated 4,000 to 4,500 workers in the logging, lumbering and related industries of western Montana, as follows:

	<i>Local union number</i>		<i>Local union number</i>
Polson, Mont.....	1909	Missoula, Mont.....	2800
Somers, Mont.....	1965	Missoula, Mont.....	2812
Seeley Lake, Mont.....	2116	Livingston, Mont.....	2925
Kalispell, Mont.....	2405	Hamilton, Mont.....	2933
Helena, Mont.....	2409	Bozeman, Mont.....	3021
Libby, Mont.....	2581	Columbia Falls, Mont.....	3029
Missoula, Mont.....	2685	Bonner, Mont.....	3038
Thompson Falls, Mont.....	2719	Hot Springs, Mont.....	3072
Columbia Falls, Mont.....	2797	Columbus, Mont.....	2446

The vast majority of our members, approximately nine-tenths, live and work in the western Montana counties immediately surrounding, and directly affected by, the proposed Paradise Dam project. These counties are: Missoula, Ravalli, Lake, Sanders, Flathead, and Lincoln.

Five of our local unions are located in Missoula County; one in Ravalli County; one in Lake County and two in Sanders County. The combined membership of these nine locals totals nearly 1,500, approximately half the membership of our council.

At a 1957 convention of our council, composed of more than 40 delegates elected by the local unions, a resolution favoring immediate Federal construction of Paradise Dam was adopted with only one dissenting vote. Ninety percent of the delegates present were from the counties mentioned above. Seventy-five percent were from the counties immediately surrounding the proposed Paradise Dam Reservoir and excluding Flathead and Lincoln Counties.

Nearly every semiannual convention since that time has taken some action, financially or otherwise, to support immediate construction of Paradise Dam.

We notice also that other organizations, where the influence of our local unions is felt, are on record as proponents of Paradise Dam. These organizations include various central labor bodies throughout the areas where our local unions exist.

Therefore, it can safely be concluded that the citizens of the State of Montana who are members of our organization and who reside in the area of western Montana directly affected by the proposed Paradise Dam are preponderantly in favor of its immediate construction.

The reason most commonly advanced in resolutions adopted by our local unions and by our district council is the desire for a stable industrial expansion of western Montana to offset the seasonal and unstable employment opportunities of the logging and lumbering industry upon which much of the economy of western Montana is now based.

We have noted that the only major nonlumber additions to the industrial economy of the State of Montana in the past 20 years or more were made possible by the hydroelectric power and water storage provided by Hungry Horse Dam at Flathead County.

We have noted further that through the entire history of construction of hydroelectric plants by so-called private power interests in Montana, not one important unit of industrial expansion has been provided within the State except to the mining and smelting operations of a firm directly related to the major power producer.

This has led to a stifling of free enterprise in developing the natural resources for which the State of Montana is noted throughout the Nation.

It has led also to a lack of employment security; a lack of diversity in job opportunities and advancement and a lack of any hope for a future within the State of Montana for the sons and daughters of our working people who have ambitions to rise above the limited opportunities afforded within our State.

For example, our working people know of the wide variety of mineral deposits within the State that have gone undeveloped and unused for lack of sufficient firm power at a low enough cost to attract processors and manufacturers to the State.

Vast phosphate and other mineral deposits have gone unused and of no value to the economy of the State with no effort on the part of private power companies to produce enough power to develop them.

With the completion of Hungry Horse Dam and its resultant allocation of power to be used within the State, a major chemical manufacturer was attracted to the State and is now providing employment security to a new community within the State as well as to citizens of nearby communities; the owners of previously undeveloped mineral lands and the workers engaged in the mining and transportation of the minerals.

Our people know also that the aluminum processing plant now located near Hungry Horse Dam and providing year around employment for hundreds of persons in an otherwise seasonally employed and unemployed area would not have been located there through any effort of any private power company.

Our people know that present privately owned, power-producing facilities on the Clarks Fork River and privately owned, power-producing facilities now under construction on the Clarks Fork River are for the purpose of producing power for industrial areas in other States and that there is no means by which that power or the usage of it, can be confined to the State of Montana by any action of the people of Montana or any governmental agency.

Those are the reasons of the rank and file workers in the logging-lumbering industry for their support of Federal construction of Paradise Dam and other dams as well, in order that Montana water, stored in Montana, will be allocated by legislative process to the improvement of Montana agriculture and in order that power generated by Montana water will be allocated by legislative action to industrial expansion within the State of Montana before either water or power are released for downstream areas in other States.

These are the sentiments of the workers in the logging-lumbering industry based upon their experience with seasonal unemployment in their industry and with no other industry to turn to for employment.

These are the sentiments of workers based on their experience with a declining economy in the Montana lumber industry and based upon a rapidly declining source of raw materials for diversified job opportunity within the Montana lumber industry.

These are the sentiments of workers who have tolled a lifetime within the unstable and seasonal economy of the Montana lumber industry; who have raised their children, educated them in Montana schools and colleges, then bid them goodby as they sought opportunities in other States not available to them in the restricted industrial economy of Montana.

We view the Knowles site as an acceptable but not a desirable substitute for Paradise Dam from the standpoint of long-range multipurpose water storage, power generation, and economic development of Montana.

Respectfully submitted.

MONTANA DISTRICT COUNCIL, LUMBER &
SAWMILL WORKERS' UNIONS, UNITED
BROTHERHOOD OF CARPENTERS AND JOIN-
ERS OF AMERICA,

By ROBERT C. WELLER, *Executive Secretary.*

LIBBY, MONT., December 15, 1959.

HON. JAMES E. MURRAY, CHAIRMAN, AND MEMBERS OF THE INTERIOR AND INSULAR AFFAIRS COMMITTEE OF THE U.S. SENATE.

GENTLEMEN: Local Union No. 2581 has nearly 1,000 members and represents most of the working people of Lincoln County, Mont. We are, of course, ardent supporters of Libby Dam in our home locality. However, we do not agree with certain chambers of commerce, etc., who claim to oppose Senate bill 1226 on grounds that they favor construction of Libby Dam first. We realize that the

construction of Libby Dam and the construction of Paradise Dam are in no way related and neither are the problems confronting the proponents of both dams such as we are.

Local 2581 wishes to be recorded as a proponent of Senate bill 1226 and at the same time to record our preference for construction at the Paradise site rather than the Knowles site.

In recording our position, we are in accord with the entire labor movement of the State of Montana which favors the construction of both Libby and Paradise Dams at the earliest possible dates for each of the two projects. We believe both to be necessary to the full development of Montana water resources for the benefit of Montana citizens as well as the citizens of the United States residing in downstream States. We do not favor postponing the construction of Paradise Dam on any pretext whatsoever.

Respectfully submitted.

LUMBER & SAWMILL WORKERS LOCAL 2581,
UNITED BROTHERHOOD OF CARPENTERS &
JOINERS OF AMERICA.

By: WILLIAM SHAWL, *Business Representative.*

SENATE OF THE STATE OF MONTANA,
Helena, December 3, 1959.

HON. JAMES E. MURRAY,
U.S. Senator from Montana,
Chairman, Senate Committee on Interior and Insular Affairs.

MY DEAR SENATOR: We would like to urge the passage of S. 1226 and the construction of the dam at the Paradise site, for the reason that the Paradise site is the one in which we can get full development of this location, we feel that the location of a dam on any other site would be but a piecemeal affair and a development to take only the cream off of the top and to retard the full development of this very precious resource location of which there are too few left in our great State of Montana.

Senator there are many people in every walk of life in Montana that love to shout from the housetops that the great water resources of Montana are its lifeblood and should be developed, but just as soon as someone starts to do the things that they shout about that ought to be done, then these same people are at all times right on the job to try and stop the very things that they say should be done and in the meantime Montana's water flows merrily on to the Pacific Ocean.

Sure, Senator, many of the people that are opposed to this full development at the Paradise site are opposed to it because their own pockets won't be lined in the way that a piecemeal would do for them, sure they tell you and I they are for the development of Montana great water resources but only if they can get rich and line their own pockets in the resources which are the gifts of God for all the people and not a privileged few as they would like to have it.

Senator, the farce that the power combine plays up about the taxes they pay, you know as well as I do, Senator, that the taxes they pay are taken out of the consumer by the rates as fixed by the various State utility commissions and there is always enough provided in these rates to pay the taxes and also there is enough provided in these fixed rates to provide for a good fat salary for the parties who collect these taxes and pass them on to where they belong, but in the finish it is the consumer who pays it all, and it is the consumer who should be given some consideration.

Senator here is hoping for a great Paradise Dam to make a greater Montana, and a better place for all of us to live.

Respectfully submitted.

W. P. PILGERAM,
Former Commissioner of State Lands for Montana, also Former Speaker
of the House of Representatives of Montana (Session of 1935).

RESOLUTION OF THE MAYOR AND COUNCIL OF THE CITY OF POLSON, LAKE COUNTY,
MONT.

Whereas it is proposed, by Senate bill No. 1226, now before the Senate of the United States for consideration, to construct certain dams in the vicinity of the confluence of the Flathead and Clark Fork Rivers, either Paradise Dam on the Clark Fork or Knowles Dam on the Flathead River, and

Whereas the mayor and council of the city of Polson deem the construction of such dams, or of either of them, to be not in the best interest of the State of Montana, or of Lake County, or of the city of Polson, and

Whereas previous city councils of the city of Polson have repeatedly expressed unqualified opposition to the construction of such dams, or of either of them, and

Whereas the mayor and council have reason to believe, and do believe, that the great majority of the people of the city of Polson are opposed to the construction of the said dams, or of either of them: Now, therefore, be it

Resolved, That the mayor and council of the city of Polson, Lake County, Mont., go on record as opposed to the construction of Paradise Dam, or Knowles Dam, or of any other dam or dams in the vicinity of the confluence of the Clark Fork and Flathead Rivers, as proposed in the said Senate bill No. 1226.

POLSON JUNIOR CHAMBER OF COMMERCE,
Polson, Mont., December 14, 1959.

Senate bill 1276—Pertaining to Knowles—Paradise Dam.

SENATE INTERIOR COMMITTEE,
Washington, D.C.

MR. CHAIRMAN AND GENTLEMEN: This is to advise that the directors of the Polson Junior Chamber of Commerce are on record as being unanimously opposed to the above Senate bill.

Very truly yours,

K. A. JOHNSON, *President.*

STATEMENT OF THE POLSON OUTDOORS, INC., POLSON, MONT., DON FARNUM,
PRESIDENT

Polson Outdoors, Inc., a longstanding organization of men, located in and about Polson, whose aim and objective is conservation and propagation of our great wealth of natural resources so that future generations may enjoy, to some measure, the great heritage given to us by nature, and fully realizing that the recreational, and esthetic values of the area may be greatly impaired by the improper planning for the development of our area respectfully submit the following statement.

We oppose the present construction of Paradise or Knowles Dam on the Clarks Fork or Flathead Rivers for these reasons:

(1) As a member of the Montana Wildlife Federation we oppose all dams until the necessary satisfactory evidence has been presented showing the structure to be necessary.

(2) We believe that the true recreational values have not been considered in the planning nor have sufficient safeguards been incorporated to safeguard the recreational and esthetic values of the region; and

(3) We further believe that no new construction should be approved or considered until a constructive plan has been developed with equal consideration being given to the recreational values as to the social and economic.

STATEMENT OF A. L. HELMER, CHAIRMAN, LEGISLATIVE COMMITTEE, POLSON
CHAMBER OF COMMERCE

My name is A. L. Helmer. I reside at Polson, Mont., and am chairman of the Legislative Committee of the Polson Chamber of Commerce. I was authorized and directed by the board of directors at their regular meeting held at Polson, Mont., December 8 last, to make the following statement on behalf of said chamber, relative to S. 1226.

We have been obliged to appear at many hearings, six we believe the total is, in the past 10 or 12 years on this same subject, during which time volumes have been filed before different Federal groups objecting to the proposition, now called Knowles Dam, but with a provision in the bill, that after approval the site may be moved 2 miles up or 8 miles down the river, so, it seems, no matter what it is called, we are still discussing Paradise Dam.

And now a Senate committee, no less. Do you blame us for asking specifically, why subject our people to all of this again?

Why did the Army Engineers, 10 years ago, emphatically state in their report that this was not an economically feasible project and now reverse themselves and recommend that it be built? We have always had a very high regard for the Army Engineers and considered them beyond reproach and most certainly above political influence.

Why did our congressional representatives who were on the ground at the time of the hearing held here on October 21, 1957, sit back and say nothing on the subject? At election time nothing was said because dams were not a campaign issue, but the very minute these men were assured of a job for another term, they seemed to assume that they had some sort of mandate from the people of Montana, so, they came right out in the open to sponsor such legislation as this.

Why should we seriously consider a monstrosity of this nature which would take one-half billion dollars out of the taxpayers' pockets and hundreds of thousands of dollar returns out of the Montana economy which our representatives, at least, should know that Montana cannot afford. And for what?

There is talk about flood control. The engineering records show that we are not serious contributors to downriver floods.

There is talk about much-needed power for the encouragement of Montana industries, when right here now, from Montana production, there are 100,000 kilowatts going begging, which is available for use in Montana to anyone who might need it.

Downriver there is also an overproduction of power and will be for the next many years to say nothing of the additional power coming on the line from two great new Columbia River dams, namely, John Day and The Dalles.

The General Electric Co. statement on a national television program November 29, last, while not discussing this situation as such, did say that 80 percent of our Nation's electrical energy is produced by steam turbine and we have no reason to doubt their statement. We have miles upon miles, upon miles, of coal deposits in this State which are going begging for a user. There is evidence right at Billings, Mont., that thermal powerplant construction costs are one-tenth of the cost per kilowatt of those of the dam proposition we are discussing here today.

They say that the construction of this dam will take 10 years. In an article in Time magazine, December 7 issue, this year, quoting experts, it is stated that just ahead of us is about to be produced nuclear power competitively priced with that of coal. Such a development would most certainly make the proposition before us here obsolete before it could be completed.

And still we sail blithely along, playing politics, throwing taxpayers' money down the drain and displaying a flagrant breach of trust and abuse of confidence of Montana voters.

We think it timely to remember that reports show that over 200,000 voters stayed home from the polls last election time in Montana, and that over 8 million stayed home nationally. Waste is not a matter of party politics, gentlemen, and if the Members of the U.S. Congress have no more regard for the welfare of the people than some of the evidence seems to point up, then, it seems to us that our job is to get busy and rouse up these 8 million complacent people and try to make them concerned enough to join in a real effort to get some different representation.

This seems like a hard thing to have to say, but the facts are that the spenders have had their day in this country, and that we have many more serious problems to face which require considerable belt tightening and sound thinking.

The union leaders have lost sight of the changing times and seem to have failed to realize that we are fighting for economic survival in this country and that the old give me, give me, give me days are gone. If some of our politicians are asleep at the same switch, it would appear that they are in for a sad awakening.

As the expression goes, "We have about reached the end of the limit," waste does not belong in today's picture, and most certainly S. 1226 exemplifies waste at its ultimate.

We are opposed to this proposition in all of its aspects. Thank you.

MOIESE, MONT., *December 11, 1959.*

HON. JAMES E. MURRAY,
Senate Interior Committee,
Missoula, Mont.

DEAR SIR: I am taking this opportunity of again registering my opposition to S. 1226, which is being sponsored by you and Senator Mike Mansfield.

I am a landowner in the area directly concerned, and while I would be willing to relinquish my rights to my home for what would be of benefit to others, or for progress, I do not see that Knowles or Paradise Dams could be honestly classed as "progress" or "beneficial" to this area.

Lake County economy would be ruined by the construction of either of the large dams. It would gain by construction of either or both small ones, and by small I do not refer to tea cup size. I am referring to the power and flood control dam which would be built by Montana Power in conjunction with the Federal Government on the Buffalo Rapids site.

The construction of a big dam would bring a large payroll into the area for a few short years, and the aftermath would be similar to that resulting in the Kalispell area with a falling off of the number employed, rise in welfare cases for county help, and a generally depressed area.

The State of Montana is as of now a beautiful recreational area and does not need the assistance of the proposed reservoir as an additional attraction. Let us develop only that amount of water development required to provide for domestic and industrial needs, for recreation and for watershed protection. Let us conserve what we now have.

Very truly yours,

IVY PEARSON,
Mrs. IVY PEARSON.

RONAN, MONT., *December 11, 1959.*

Senator JAMES E. MURRAY,
Chairman, Senate Committee on Interior and Insular Affairs,
Senate Office Building, Washington, D.C.

DEAR SENATOR: I wish to enter a protest against the construction of both the Paradise and Knowles Dams, on the Clark Fork River.

My opinion is that either of them would be detrimental to western Montana in general, and Lake County in particular, as they would inundate much of our valuable agricultural, grazing, and timber lands.

They would displace many families, and throw a greater tax burden on those who are left. We already have as heavy a taxload as we can bear.

Yours very truly,

L. E. PHILLIPS.

HOT SPRINGS, MONT., *December 4, 1959.*

Senator MURRAY.

DEAR SIR: I am writing you to let you know I am against building the Paradise Dam or Knowles Dam. We already have lot of land in Sanders County that is not taxable.

It also forces many people from their homes who have worked hard to build what they have today. It also divides several people's lands which makes a hardship on them.

Yours truly,

DONALD L. PERRIN.

HOT SPRINGS, MONT., *December 4, 1959.*

Senator MURRAY,
Washington, D.C.

DEAR SIR: I am writing this to ask you to vote against either a Paradise or Knowles Dam. Either of these dams would have several effects that would be harmful to the people of the area.

In the first place many people would be ousted from their homes.

The dam would also deprive the county of much of its taxable property.

Very truly yours,

CHARLES A. PRONGUA.

HOT SPRINGS, MONT., *December 4, 1959.*

Senator MURRAY,
Washington, D.C.

DEAR SIR: I am against the construction of either Paradise or Knowles Dam.

Yours truly,

Mrs. C. A. PRONGUA.

STATEMENT OF DAN POLSON, LONGPINE, MONT.

I am against Paradise or Knowles Dams because either of them would be a terrible waste of time, money, and land. It appears to be mainly a political issue, and also is favored mainly by these big labor unions.

When the day comes that the unions and politicians can rule the rest of our lives entirely, it is time to stop and think the deal over. What does our American way of life really mean? Does it mean domination by politicians who want power and don't care how they get it? Or does it mean that we are free to live our own lives in happiness and comfort without worrying about being ousted at the most convenient opportunity for the bigwigs?

We like this country and it has been good to us, since 1929. The going has been a little rough at times, but we worked and made a go of it, without ever once asking for Government benefits or welfare. We don't believe in stepping on others in order to get our way. The shoe would really pinch if we fought to get a dam in one of those nice valleys in Oregon or Washington. They want this dam for their benefit; why can't we insist on them building a dam there for our benefit—to save our homes?

It is foolish to compare these dams with Hungry Horse, as has been done so often. Hungry Horse didn't flood any good farmland and ranchland, nor any homes to speak of, that we ever heard of.

Perhaps the proponents of these dams would wake up and realize the damage they are fighting to see done, if they were on our side of the fence.

Lake County would have to be eliminated for finance's sake, if these dams are put in. There is a small enough tax base there already.

It would be interesting to check on the proponents and the opponents of Paradise or Knowles Dams. Compare the two sides, and on the side of the proponents you will see almost entirely this class: laboring people who don't really care much what happens as long as they get a big paying job; politicians who want the vote of the laboring people; ne'er-do-wells who can't make a living otherwise and think this dam would dump a fortune into their laps; or people who have a little bit of land and want to leave, and think they will get rich quick on their property by selling it to the Government.

The other side is mainly: hardworking ranch and/or farm people who bought, rented or otherwise obtained their land to make a living for themselves and their families; oldtimers who homesteaded and don't want to ever leave their homes; business people who depend on the trade of the valley and surrounding areas, for a living, and who are smart enough to know there is no use to just live for today and let tomorrow look after itself.

These people lead good lives and they want to continue to do so. There is progress in our area and more coming, but we don't need to flood any of this good country in order to get more.

For nearly 20 years I have been taking my sheep to the St. Joe country in Idaho, and I trail them along the river, through the country that will be under water. In these years, I have established priority on the grazing land on the Idaho line, and I have to have it. There is no chance of finding other summer grazing

land and if this dam goes in, the only thing I can do is sell my sheep. I run 1,250 head, which is a fair amount of mutton and wool for quite a few people. I hire several men in a year's time, for herding sheep, tending camp, hauling hay, putting up hay, and also there is a large crew every spring for lambing, for tagging and shearing sheep, and trailing them to the summer range.

It would be a good idea to have some of the Government officials investigate the feelings of the people who will be directly affected by either of these two dams. This has never been done so far, and the proponents are resorting to such underhanded, dirty work to gain their means, that too many people are being misled, who otherwise would make fair decisions on the matter.

If either of these two dams are such wonderful things to have, then why are the proponents telling so many untruths and misleading the people so badly on the so-called advantages of the dam? Any fairminded person would know the expense alone of the dam would be prohibitive, let alone the damage and destruction it is going to do.

PLAINS, MONT., December 1, 1959.

To Whom It May Concern:

I am opposed to the proposed Paradise Dam because of the effect of depressing property values downstream from the dam. Also, I am opposed account of the effect on railroad employment due to the changes to be made relative to the railroads.

H. E. RATCLIFF.

DECEMBER 10, 1959.

To Whom It May Concern:

I feel that the Knowles Dam is unnecessary at this time. It lacks provisions regarding use of power.

EMERSON RICHARDSON.

PLAINS, MONT., December 9, 1959.

HON. JAMES E. MURRAY,
Chairman, U.S. Senate Interior and Insular Affairs Committee,
U.S. Senate, Washington, D.C.

DEAR SIR: Objections to the construction of either Knowles or Paradise Dam are being presented by the writer. Having been a resident of what is now Sanders County for 57 years, and at one time having been on the board of county commissioners, I know something of economic conditions and how the construction of the dam would affect business in this vicinity.

The main objection to a dam as proposed is that the removal of the Northern Pacific Railway, the towns of Paradise, Perma, Dixon, intervening taxable lands on both the low line and the high line, would cut off approximately 40 percent of the taxable valuation of the county. It is impossible to operate schools, roads, welfare and county government of Sanders County with this loss, without a 40 to 50 percent increase in taxes.

Proponents of the dams are quick to say Sanders County can join another county. But is any other county apt to add to its boundary a bankrupt county. Proponents also say that a dam would bring in manufacturing plants, the taxes of which would take up the deficit in taxes. This has not proved true with other dams, Coulee City, Canyon Ferry, Fort Peck, with one exception, Hungry Horse.

They also state that electric power would be so cheap that industry would be attracted. Besides electricity, material and labor have to be considered. Booneville power is not any cheaper than private companies. Nor is any new manufacturing company going to come into a county where taxes are so high. It is well known fact that Bonneville is asking for an increase in rates.

The arguments put out by the proponents are in most cases wishful thinking, and are not substantiated by the truth. It is also said that new lands will be irrigated. It is not said where these mythical lands are located. Plans for recreation and summer hours are being set forth. With the withdrawal of storage water, I see nothing but mudflats.

Citizens and farmers will be forced to sell their property on a basis of the assessed valuations which are not in line with actual values. Therefore, property

owners who are forced from their homes and lands will not be able to purchase like property elsewhere.

The town of Plains, which has been an active trading center since the advent of the railroad in 1884, would suffer a serious loss. Approximately 80 percent of its business comes from points east. According to tentative plans of the Montana Highway Commission and the Northern Pacific Railway, Plains would no longer be on a through highway or main line railway. Probably a branch of the highway would run into Plains, but as the town would no longer be on a through highway the tourist trade would be nil.

Probably a branch line of the railway would be run into Plains from Weeksville or Eddy. No passenger service would be available. The largest industry in Plains would simply go out of business. Mr. J. I. Diehl of the Diehl Lumber Co., employing approximately 150 men, advises he is absolutely unable to operate successfully on a branch line.

Proponents of the dam claim that a great amount of new business would come into the town. This may be true but at the same time, in would come more stores, cafes, taverns, gas stations, motels, etc., so that there would not be net gain. This was true in Kalispell, while boomtowns like Martin City or Dam Town folded up completely.

Frankly, the writer is unable to see where either one of these dams could help the people or the economy of Sanders County.

Very truly yours,

C. H. RITTENOUR.

PLAINS, MONT., *December 10, 1959.*

HON. JAMES E. MURRAY,
*Chairman, U.S. Senate and Insular Affairs Committee,
U.S. Senate, Washington, D.C.:*

The writer is a merchant and bank official, and has resided in western Montana over 50 years, desires to present his objections to both the Paradise and Knowles Dams.

The writer desires to present his objections to the Knowles Dam:

1. It is unnecessary, as there is sufficient power and flood control in the West. From what we hear, and from what we are told, we would have better water or flood control if the different branches of our Government would work together.

2. It would disrupt the economy of the counties in western Montana. It would displace 4,000 people and inundate 6,000 or more acres of good agricultural land. It would destroy about 35 percent of the taxable valuation of our county, and without it, we could not exist as a county.

3. If it is absolutely necessary to store the water, why not dam the streams nearer their source. Small dams would be a great help for irrigations and ideal for fish and wildlife, and wonderful recreation spots for the people.

4. They tell us that building big dams is progress. It looks to us that it depends on what end of the Columbia River we live. We cannot see why the small towns and lands of western Montana should be sacrificed in order that a few acres of land in Oregon can be irrigated. I am also told that this land, sold at a high price, is not very productive after being irrigated. Why rob Montana to build up Oregon.

5. Montana is a pioneer State, it's resources have not been developed, but it will have its day. If all the proposed dams are built and our water resources diverted elsewhere, it will be a great hindrance in the future development of the State. This is supposed to be a free country for the people and by the people, yet it looks as if the people who have homesteaded the land, made homes and raised a family, do not have anything to say about it.

If we are just thinking about how this will help us personally and not how it will effect Montana and future generations, we are wrong and selfish.

6. Another reason why we oppose the two dams: I think this is the fifth or sixth hearing on the Paradise and Knowles Dam, and each time the opposition has averaged about 95 percent. If the hearings means anything why do they need more hearings? We do not want either Paradise or Knowles Dam.

7. Our country is badly in debt, so why spend \$800 million for a dam that is not needed or wanted.

It looks as if our Congressmen want to force something on us that we do not want but will have to pay for in taxes.

R. A. RUENAUVER,
McGowan Commercial Co.

HOT SPRINGS, MONT., *December 4, 1959.*

Senator MURRAY.

DEAR SIR: I am very much opposed to Paradise Dam because it would destroy many homes that have been built by all hard work. It would destroy a lot of game refuge, fish and a lot of good hunting.

It would also destroy a lot of pasture and hay land that that many ranchers need very badly.

And Montana doesn't gain but such a very little from all these big dams—the power and water are for other States. I do not believe that Montana gains enough to justify the losses. Therefore I am opposed to Paradise Dam, the Knowles Dam or any other small or large dams they may intend to build.

ALICE B. ROBBINS.

HOT SPRINGS, MONT., *December 4, 1959.*

Senator MURRAY.

DEAR SIR: I am opposed to the Paradise Dam, also the Knowles Dam.

Yours truly,

FLOYD ROBBINS.

PLAINS, MONT., *December 4, 1959.*

Senator JAMES E. MURRAY,

Chairman, U.S. Senate Committee on Interior and Insular Affairs.

DEAR SENATOR MURRAY: The undersigned is a farmer-stockman operating a farm some 6 miles southwest of the town of Plains, Mont.

I have read a copy of S. 1226 providing for the construction of the so-called Knowles Dam project and which contains a provision for the selection of an alternate site within a reach of about 8 miles in the area of the Knowles site.

I wish to go on record in the records of the hearings on S. 1226 as being in favor of the legislation including a recommendation that the Paradise site be selected on a basis of the far greater benefits to be derived by a greater area of water impoundment for flood control and some 30 percent greater hydroelectric production. Also that it (Paradise) will afford control of the Clark Fork River for which Knowles does nothing above its junction with the Flathead, a stream already somewhat controlled by the Hungry Horse project.

The extensive hearings on these projects conducted by the U.S. Army Corps of Engineers seems to have developed about every fact, including a majority sentiment in favor of construction of a dam, except the question of whether or not the figures of nearly \$200 million cost for railroad relocations are correct. To many these figures seem grossly exaggerated and taking the Army Engineers' admission that it took the railroad corporation figures for this cost, they are suspected of being in self-interest of the corporation. We believe this item of cost could be reduced if an independent Government investigation or survey was made and which would make a favorable change in the cost and benefit ratio of the project.

Yours very truly,

REIN RESLER.

STATEMENT OF THE INTERNATIONAL HOD CARRIERS', BUILDING AND COMMON LABORERS' UNION OF AMERICA, LOCAL No. 187, GEORGE ROGERS, SECRETARY

This local union consisting of approximately 205 members is heartily in favor of the enactment of Senate bill 1226 for the construction of Paradise Dam on the Clark Fork River of Montana and wish to set forth the following reasons.

The serious situation in regard to unemployment in Montana in recent years has demonstrated the necessity for more and new industries in this region to provide employment for our workers.

The advent of several new industries in the northern part of our State since the completion of Hungry Horse Dam has demonstrated the fact that with the increase of electric power facilities new and greater industries will come into this region, thus providing more employment for all types of workers.

In addition, by the construction of such a large dam adequate flood control will be provided, irrigation will be increased thus providing greater production for our ever-increasing population.

Additional recreation facilities will likewise be furnished thus increasing our tourist trade and giving visitors a better opportunity to view the beauties of our wonderful scenery and provide a real paradise for our people.

In this connection we wish to earnestly express our preference for the Paradise site over the alternative Knowles site since that location will provide adequate flood control and development of both streams, whereas the choice of the Knowles site would control only the Flathead branch of the Clark Fork River leaving a vital and necessary job only half done.

For these reasons we earnestly hope and respectfully urge that your committee, the Congress of the United States, and the Secretary of the Interior will give preference to the Paradise site over the Knowles site in the location and construction of this vitally necessary and useful project.

RONAN PUBLIC SCHOOLS,
Ronan, Mont., December 14, 1959.

HON. JAMES E. MURRAY,
*Chairman, Senate Committee on Interior and Insular Affairs,
Senate Office Building, Washington, D.C.*

DEAR SENATOR MURRAY: The board of trustees of School District No. 28, Ronan, Lake County, Mont., wishes to call attention to the effects the passage of S. 1226 will have on this school district:

1. Due to inundation 12,873 acres of taxable land in the Moiese Valley will be lost as a source of revenue. Of these, 6,668 acres are irrigated land; 5,696 acres are grazing land; and 509 acres are dryland farming. In this same area are improvements with an assessed value of \$596,447. (The above figures are from Lake County officials.)

2. Currently 25 percent of the students enrolled in Charlo High School reside in the Moiese Valley and adjacent areas which will be under water. The people of these areas will be forced to move. The resultant decrease in enrollment in Charlo High School could well make the cost of operation of the school so excessive as to be prohibitive. The closing of the Charlo High School would throw an added student burden on the Saint Ignatius and Ronan High Schools, both of which are presently faced with problems of insufficient space. The decrease in the value of property in the Charlo area as a result of closing the Charlo High School would be another significant effect of the passage of S. 1226 on district No. 28.

For the reasons given above, district No. 28 is opposed to the passage of Senate bill 1226.

Respectfully yours,

BOARD OF TRUSTEES, DISTRICT NO. 28,
By A. L. COOPER, *Superintendent.*

STATEMENT OF J. L. RICHARDS, STATION CREEK ORCHARD, EAST SHORE FLATHEAD LAKE, POLSON, MONT.

My opposition to S. 1226 and its companion, H.R. 5144, I will attempt to state as briefly as possible.

1. FROM THE LOCAL VIEW

The bill provides inadequately for loss of revenue from taxes by local governments, which they will suffer from inundation and condemnation of tax properties which will result with the development of either of the proposed sites.

It proposes to compensate local governments for this loss by taking an average of the last 5 years' tax receipts and adopt this figure as a standard, which amount they will remunerate the local governments in lieu of the tax loss.

This gives no consideration to the growth factor of the communities and their ever-increasing costs of government.

2. DO WE NEED THIS ADDITIONAL POWER DEVELOPMENT?

There is now a surplus of electric power in the Pacific Northwest and an ample supply as far into the future as predictions are reliable.

When and if the needs come for an increase in electric power, private enterprise stands ready and willing to develop it.

That the project is too vast for private enterprise is debatable, as is the logic of developing these huge storage basins, as is proposed. Perhaps smaller units near the source of water supply is the more feasible.

3. CAN WE AFFORD IT?

With the national debt and allied obligations at the staggering figure of near \$750 billion, is it prudent to mortgage America's future further for the development of projects we do not need and have doubtful economic soundness?

4. THIS MYSTIFYING GROWTH CREED

Is this growth factor of such an emergency that it warrants the financing by Government of the construction of these projects with credit cards?

Until those in Government who manage our financial affairs develop the courage and conviction to say "No" to this pressure group of spenders, our destiny is in far greater danger from economic collapse than from the invasion by a foreign power.

STATEMENT OF THE RONAN AREA JAYCEES, RONAN, MONT., ADAM KIRSCH, PRESIDENT

Inasmuch as the Knowles Dam, as proposed in S. 1226, would affect Lake County in the same adverse manner as the Paradise project, we, the Ronan area Jaycees, respectfully refer the committee to testimony submitted by us to the Corps of Engineers, U.S. Army, at the hearing on Paradise held in Missoula on October 21, 1959.

The secretary was authorized on December 3, 1959, at regular meeting to advise the committee as follows:

"We, the Ronan area Jaycees, reaffirm our opposition to any project which adversely affects the economic structure of Lake County. A thorough study of S. 1226 reveals nothing which would in any way alleviate our opposition to Paradise or Knowles Dams."

We hope that the committee will not act favorably upon S. 1226 and that our opinion, which comprises a cross section of young men in our community, most of whom are wage earners, will be helpful to the committee in its deliberations.

CHAMBER OF COMMERCE,
Ronan, Mont., December 7, 1959.

Senator JAMES E. MURRAY,
*Chairman, Committee on Interior and Insular Affairs,
Senate Office Building, Washington, D.C.*

SENATOR MURRAY AND MEMBERS OF THE COMMITTEE: After deliberate discussion, Wednesday December 2, 1959, in Ronan, the Ronan Chamber of Commerce, at its regular monthly meeting, by unanimous vote expressed their opposition to either Knowles or Paradise Dams and to any other dam in that portion of the river described in S. 1226, whether it is to be constructed by the Federal Government or by private enterprise.

Nothing is contained in the bill which would cause the Ronan Chamber of Commerce to alter the position it has taken on all other proposals of this type for development of this stretch of the Flathead River. The damage to the local economy would be tremendous and the gains nebulous at best.

We refer the committee to our testimony submitted to the Corps of Engineers in Missoula on March 10, 1959, when the Knowles project was under their consideration and to our testimony of October 21, 1957, before the Corps of Engineers when the Paradise project was under their consideration.

As the center city of Lake County's agricultural economy, the Ronan Chamber of Commerce is concerned over the complete disregard in S. 1226 for the water rights of Montana and its farmers and ranchers. We are equally appalled with the disregard for the rights of the Flathead Indians and view this bill as an attempt to abrogate the Treaty of 1855 between the Flatheads and the U.S. Government.

Therefore, we reaffirm our opposition to Knowles and Paradise Dams; especially as envisioned under S. 1226, now under your consideration and respectfully request that your committee recommend that this proposed bill be rejected in the interests of the common welfare of Montana and its citizens.

Sincerely yours,

M. S. HARBIN, *President.*
MRS. TELLA LOMAN, *Secretary.*

Attest: Tella M. Loman.

RONAN, MONT., *December 10, 1959.*

SENATE COMMITTEE ON INTERIOR AND INSULAR AFFAIRS.

DEAR SIR: Round Butte Grange No. 126, an organization of farm people living in Lake County, Mont., and comprising a membership of 61 adult persons, hereby renews its objection to the creation of any large dam on the Flathead River which would inundate the large area of farmland known as the Moiese Valley.

We believe that the proposed destruction of this considerable area of our fast-shrinking agricultural land together with the disruption of the economy of some 3,000 persons, the virtual confiscation of lands ceded by solemn treaty to the confederated Salish and Kootenai Indian Tribes, the vast amount of money needed for relocation of public utilities and the construction of such a dam, is not justified by the "hoped for" results to be attained.

This objection authorized at a regular meeting on December 8, 1959.

CLARENCE P. BICK, *Secretary.*

PERMA, MONT., *December 11, 1959.*

Senator JAMES MURRAY,
Washington, D.C.

DEAR SENATOR MURRAY: I should like to voice my opinion on the dam situation. I wish there were time for you to listen to so many of the objections to this dam.

As I understand it we are not to get any of the benefits from this, perhaps it will bring in much-needed jobs for a short time. But when these jobs are done, why then what will we have.

I like this county here very much, and I don't want to see it changed, perhaps I am a little selfish, but I am only one among many who feel the same way.

If this dam were to benefit us then I would say OK, but since I cannot see where it will, I am very much opposed to it.

Sincerely,

DONALD L. ROSS.

PERMA, MONT., *December 11, 1959.*

Senator JAMES MURRAY,
Washington, D.C.

DEAR SENATOR MURRAY: I am very much opposed to either the Paradise or the Knowles Dam.

I have lived in this county all of my life and I am very opposed to having a dam spoil most of the land here.

Most of the people have worked very hard to build up their land and places, and it would certainly be hard to see all of this changed by a dam; a dam which is certainly not going to benefit us at all. Why should we put a dam in here when it is Washington or Oregon that will have all of the benefits of this dam.

It also seems to me that more out-of-Staters get all the work when they are constructing the dam. There are many reasons why I am opposed. These are only a few of the reasons.

A person could go on and on, but it would take too long in a letter.

Yours truly,

Mrs. DONALD ROSS.

PARADISE, MONT., *December 3, 1959.**To Whom It May Concern:*

I am opposed to Senate bill S. 1226 pertaining to the Paradise and Knowles projects.

I can see no need for large dams to flood out towns and the life's work of the people.

FOY D. SEARS.
GENEVIE C. SEARS.

PARADISE, MONT., *December 13, 1959.*

HON. JAMES E. MURRAY,
Washington, D.C.:

I am opposed to S. 1226 relating to the Knowles-Paradise Dam project.

F. GALE SEARS.
SALLY L. SEARS.

PERMA, MONT., *November 11, 1959.*

DEAR SENATOR MURRAY: I am a resident of Camas Prairie, a beautiful little valley near Paradise, so am opposed to the dam going in, around Plains or Paradise, or Knowles. In the first place we raise wheat and stock for a living and these dams will prevent our having an outlet for these two products, to say nothing about how it will raise our taxes.

Very sincerely,

GLADYS SIPES.

PARADISE, MONT., *December 12, 1959.*

I am opposed to S. 1226 relating to the Knowles-Paradise Dam project. my reasons are: I'd lose my job, which is a steady, year-round job; we'd lose our home, which cannot be replaced by "just a house"—it takes years and time to build up a nice home.

ERNIE SANKS.

PARADISE, MONT., *December 3, 1959.**To Whom It May Concern:*

We would like to state that we are very much opposed to the building of either the Paradise or Knowles Dams.

Too many families would have to give up their homes and ways of making their living. Also too much land would be flooded, when smaller dams could be built without so much damage.

ELMER L. SEARS.
Mrs. ELMER L. SEARS.

PARADISE, MONT., *December 8, 1959.*

HON. JAMES E. MURRAY,
Washington, D.C.

DEAR SENATOR MURRAY: I have been living in Paradise, Mont., all my life. My work is here, my home is here, and I want to stay here; therefore I object to the bill S. 1226, presented by you, that wants to flood me out of my home, work, and friends, because our congressional delegation will not adhere to the wishes and welfare of the people of Montana.

Very truly yours,

Mrs. GLADYS SCHUTTER.

PARADISE, MONT., *December 10, 1959.*

HON. JAMES E. MURRAY,
Washington, D.C.:

The board of trustees of school district No. 8 unanimously go on record as opposed to S. 1226. As representatives of the taxpayers of district No. 8 we do not feel this bill protects them. There are no provisions for the education of children who might be in our district if this project is approved, nor is there

provisions for education in any district. We know this burden will fall on the taxpayers of district No. 8. We also know that with the influx of workers on this project that our children will not get the education they deserve.

We unanimously agree that our river should be developed by private industry, who will pay taxes to support our schools. We, therefore, go on record as opposed to either Paradise or Knowles projects.

ROBERT L. FRENCH,
Chairman of Board of Trustees.
D. A. McMICHAEL,
Clerk of District No. 8.

DIXON, MONT., December 8, 1959.

To Whom It May Concern:

We are opposed to S. 1226, relating to the Knowles and Paradise project.

RICHARD L. SMITH.
MARJORIE L. SMITH.

HOT SPRINGS, MONT., December 11, 1959.

Mr. RAY M. LOMAN,
Ronan.

DEAR SIR: I am grateful for the privilege to add my protest and opposition to the Paradise Dam.

So grateful the Corps of Engineers have dropped Paradise from the current review of the 308 report. Camas Prairie was promised irrigation when opened up for homesteaders.

Lawyers, doctors, other good people came, homesteaded, lost all they had—no irrigation.

Now the Governor or Mansfield, Metcalf, and Murray—the three M's—are trying to flood the farmers out. They will pay, they say.

They couldn't pay for starting new lawns, buildings, electricity, modern homes, etc. Besides loss of taxes, food, stock, schools, and community spirit. It is wicked to think of. Seems Paul K. Harlow hangs on, figuring nest egg or something.

Hot Springs is isolated as is—no buses, trains, planes, or transportation to get out if dying—and we have life-giving mineral baths here. Best by test in the United States, second in the world.

They promise roads here. You realize the time they were building this little stretch of road on Highway 28? Were over 5 years getting a road around and in here.

The bathhouses are the payroll here.

Besides the Paradise Dam would do Sanders County farmers or wheat farmers of Chester, Joplin, Cut Bank, etc., no good.

Hungry Horse should furnish Montana with necessary water for irrigation. That's what they need. Thompson Falls and Noxon Dam, what for? Lonepine Reservoir supplies irrigation for Sanders County in Nirada and Lonepine.

I am a widow and will be hated for my stand, so if it is not too cowardly of me, omit my name. But send Metcalf, Harlow over; I'll tell them. Pray and pray this will not happen; the dam, I mean.

Sincerely,

Mrs. J. H. SHAFER.

ST. IGNATIUS, MONT., November 30, 1959.

Senator JAMES MURRAY,
Washington, D.C.

HONORABLE SIR: We are happy that you are conducting another hearing on the Paradise Dam.

We feel that it is imperative that the Columbia drainage system be developed by multipurpose dams if the full potential of the system is ever to be realized.

If we cannot attend the hearing you can be sure you have our moral support.

Sincerely yours,

MERL and BETH SHIPMAN.

DIXON, MONT., December 8, 1959.

To Whom It May Concern:

I am opposed to S. 1226, Knowles-Paradise project.

LAURENCE R. SMITH.

ST. REGIS, MONT., December 7, 1959.

Senator JAMES E. MURRAY,
Senate Office Building, Washington, D.C.

DEAR SENATOR: Montana has been my home for 73 years and I have lived in St. Regis for 45 years of that time; was a logging contractor until 1924 and then went into business here and have continued as such since. Noting by the press that there is to be a Senate committee hearing on the proposed S. 1226, a bill to authorize construction of a Federal dam at the Paradise site or the Knowles site I wish to take this opportunity to oppose the construction of either one of the above dams for a few of the reasons I will mention below.

Western Montana is a mountainous country and the only fertile and livable lands are to be found in the valleys which are located along the rivers and are very fertile, making wonderful farms and communities where hundreds of people live, prosper, and enjoy life as no city dweller could dream of. Now if these dams were constructed, six or seven of these communities would be under water and thousands of acres of rich and fertile lands would be submerged and lost to civilization for all time to come, only the mountains would remain where only timber could survive and all the available timber on these mountains has been harvested; only the second growth left, and it will take years for it to mature to logging size. So after the dam is completed there would not be any employment for the residents and thousands would be compelled to leave and find new homes and livelihood elsewhere.

As this dam is to be primarily a storage dam and will not produce a great amount of firm power, and that for only a short period of the year, I cannot go along with the idea that it would increase the recreation facilities that we now have, as this being a storage dam it will be drawn down each year and leave at least two-thirds of its area without any water, that will be a mudflat that would be unsightly and would not produce any benefits to anyone. Leave our country as it is; we as property owners are satisfied.

I am informed that at this time the Northwest has an ample supply of electricity and will have until 1970, at least; and even now there are several large dams being constructed that will still further increase the electric output to take care of the future needs until 1980; so it is not in the interest of the public to construct a dam at the Paradise or Knowles site as S. 1226 is asking for.

The Paradise Dam as proposed would cost the Government an estimated half billion dollars and at the present state of our Government finances I do not see how we can afford to throw any money away.

The above are but a few of the objections to the proposed dams. I could call your attention to hundreds of reasons why the Paradise or the Knowles Dam should not be constructed if time and space permitted.

Very truly yours,

W. E. SEARS.

STATEMENT OF E. L. SWIFT, MANAGER, AMERICAN CRYSTAL SUGAR CO.

I am E. L. Swift, manager of the American Crystal Sugar Co. plant at Missoula, Mont. Our company processes sugar beets grown in western Montana, producing beet sugar and dried beet pulp, most of which is sold in western Montana. Beets for our factory are grown in Ravalli, Missoula, Lake, Sanders, Broadwater, and Lewis and Clark Counties of western Montana.

At the 1957 hearing, and again in March of this year, we presented testimony as to why we felt Paradise or Knowles Dams should not be built. We do not see the need for so many repetitious hearings, as we cannot believe much new information could be brought out today after so many recent hearings. Our testimony today deals only with the effects of the proposed dam on our western Montana sugar beet industry, and does not include our feelings on the construction of an uneconomical multimillion dollar project that is not wanted here. We have at firsthand seen the effects of the Canyon Ferry Dam and Lake in Lewis and Clark and Broadwater Counties, and know that most

of the farmers and residents of that district wish that dam had never been built. They have had unexpected problems with ice jams and resulting floods, mosquitoes from the mud flats and damage from underground seepage far from the lake. None of the new industry that was expected has appeared in the counties.

At the 1957 hearing by the Army Engineers on Paradise Dam, we testified that construction of the Paradise Dam would do tremendous damage to the growers of beets in the area that would be flooded, as well as to our western Montana beet industry. An even greater effect of the construction of Paradise Dam might be the abandonment of the Northern Pacific Branch line track through Lake County; we felt that Lake County could not exist as a beet-growing district without rail facilities to haul beets to Missoula. Loss of the entire Lake County beet-growing area could well result in the closure of the Missoula plant of the American Crystal Sugar Co., as we know that our largest potential area for acreage expansion in the future would be in the lower Flat-head Valley; loss of that beet area would have serious effects on the economy of western Montana.

Construction of the proposed Knowles Dam would have the same effect on the beet growers and the beet-growing area of the Moiese Valley and along the Jocko Valley to Ravalli as would the construction of the Paradise Dam. The area that would be flooded would take the land out of productive use and the growers would have to move.

In past years we have had up to 1,100 acres of beets in the area that would be flooded by the Knowles Dam, this during the years when we had a capacity acreage of beets in western Montana. Our acreage for the Missoula plant is now down to less than half of our capacity, because of Government restrictions on beet acreage and sale of sugar, and our beet acreage in the Moiese Valley is greatly reduced from the figure mentioned above. If we are to look to the future when we could again plant a capacity beet acreage in western Montana, loss of the area that would be flooded by construction of the Knowles Dam would be a severe blow to the sugar beet economy of western Montana. This would adversely affect all of our beet growers and the economy of the counties in which they produce beets; it would also affect the rail lines that transport the beets, the workmen that operate our Missoula plant, the tax base and, in fact, all of western Montana.

The tax rate in Lake County is among the highest in the State, and if a large part of the producing tax land is taken off the tax roll even after 5 years, it is inevitable that the tax rate for the rest of the county must go up, or the services of the county must be curtailed. The same principle applies to operation of the irrigation district. If the size of the district is reduced by the dam, the cost of operating the project may be reduced too, but not in proportion to the loss of income; the cost per acre to the rest of the irrigation project would probably be increased.

We cannot support the Knowles Dam project or the Paradise Dam project, as we know it would indirectly hurt all of our beet growers, the economy of western Montana and our company.

SCHOOL DISTRICT No. 6,
St. Regis, Mont., December 8, 1959.

HON. JAMES E. MURRAY,
U.S. Senate, Washington, D.C.

DEAR SENATOR: I am writing in protest to the Paradise Dam. I am a "transplanted" Montanan. I settled here following my separation from the U.S. Navy at the conclusion of World War II. I am a Montanan by choice. I chose this State because of its scenic beauty, the outdoor recreation and the straightforwardness of its people. I have adopted this attitude of being straightforward, and it is for this reason that I am writing you. I resent the intrusion of the Federal Government in matters of this type.

I am also a firm believer in the maxim that he governs best, who governs least. As superintendent of the St. Regis schools, I am naturally concerned foremost with the future of our school. If Paradise Dam is built, this fine elementary and high school would have to be destroyed. To duplicate a structure of this type, with today's inflationary dollar, would cost at least \$300,000. Even if the Federal Government were to build another plant at the relocation site, this is a waste of taxpayers' money. Too many Americans today have

adopted the idea that the Federal Government is some vague collection of people that are ready at all times to hand out gifts to the populace. I feel that we pay dearly for every service we receive, and I have yet to find a case in the United States whereby things are given away for nothing.

Vast areas of productive timber lands would be lost if Paradise Dam were to be built. In my estimation, the future of Mineral County depends on the development of pulp and lumber producing mills. The flooding of this area would penalize our future chances of development. We also have vast supplies of valuable minerals which would not be recovered if Paradise Dam were to be built.

I like our country as it is. Won't you help to keep it this way?

Sincerely,

JAMES A. HALL, *Superintendent of Schools.*

RONAN, MONT., *December 14, 1959.*

Senator JAMES A. MURRAY,
Missoula, Mont.

DEAR SENATOR MURRAY: The sum and substance of what I have to say in this letter addressed to you, as a resident and taxpayer in Ronan, Lake County, Mont., is that I am strongly opposed to the building of Paradise or Knowles Dams as proposed in the bills which are now under discussion.

I shall not go into a lengthy discussion of my reasons for this, other than I think that it is certainly not in the best interest of Montana in general and would certainly result in the ruination of Lake and other counties in western Montana. We like it here the way it is and all this talk about economic growth, etc., is just a lot of hogwash.

You, as a Senator, representing the people of Montana, should be the first one to realize the tremendous disadvantage to Montana that this would result in. For the promotion of the economic growth of the coastal area west of here, yes, it would certainly be a good thing, but who are you working for on this, Montana or Washington?

Sincerely,

L. SANDSMARK.

MOIESE, MONT., *December 8, 1959.*

HON. JAMES E. MURRAY,
U.S. Senate,
Washington, D.C.

DEAR SIR: We write this letter in protest against S. 1226.

We have a very productive ranch, located in the Moiese Valley, on which we produce sugar beets, alfalfa hay, and beef type cattle.

The ranch consists of 2,000 acres of land, 600 acres under irrigation or sub-irrigation, and 1,400 acres of grazing land.

This ranch supports three families; 17 people in all, besides the transient help during the growing and harvesting season of beets and hay.

Part of our land lays along the Flathead River and makes a natural nesting place for migratory birds and pheasants.

County, State, and Federal taxes amount to \$5,000 this year. Lake and Sanders County need these taxes.

If Paradise or Knowles Dam is built, it will mean the total destruction of this home we have spent a lifetime building up; in fact our home will be under 100 feet of water.

We feel very strongly that smaller private dams are the answer to flood control, water conservation, and the economy of our beloved western Montana.

Why should we give up our free enterprise way of building up our country, for Federal control of our water resources?

Very sincerely, we protest the building of Paradise or Knowles Dam.

L. O. SMITH.
GRACE E. SMITH.

STATEMENT OF DOUGLAS E. AND JEANETTE H. SMITH, PLAINS, MONT.

We are opposed to S. 1226 or any other proposed legislation that would authorize a Federal dam on the Clark Fork or Flathead River downstream from Kerr Dam.

The bill states that it would provide flood control on the Flathead River, actually you are proposing the flooding forever all of the Flathead River along with approximately 40,000 acres of agricultural land.

We sincerely believe in a plan of small headwater dams in the headwaters of all the streams in Montana, so that Montana will have some benefits from our Montana water.

We also believe in States rights, and that Montana's water rights should be protected.

It is understandable to us that some downstream Congressmen would introduce such a bill. We do not understand why our congressional delegation is so interested in furnishing downstream benefits at the expense of all the people in the Nation and especially the people of Montana.

PLAINS, MONT., December 11, 1959.

Senator JAMES E. MURRAY,
Senate Office Building, Washington, D.C.:

We wish to state our opposition to S. 1226, 1st session, 86th Congress. We are opposed to any dam on the Flathead River or on the Clark's Fork of the Columbia at any site near Plains or Paradise, Mont.

FLORENCE A. SMITH,
*Property Owner and Teacher,
Property Owner and Engineer.*

PLAINS, MONT., December 11, 1959.

Senator JAMES E. MURRAY,
Washington, D.C.:

I wish to state my opposition to bill S. 1226 relating to the Knowles-Paradise Dam project. I have lived in the Plains Valley for 38 years and own approximately 200 acres of fertile productive land. Should bill S. 1226 become a reality I would be forced to move. I also oppose any unnecessary Government spending.

AMY STEPHENS.

STATEMENT OF WESLEY W. STEARNS, PLAINS, MONT.

I. Wesley W. Stearns, stockman in the Plains, Mont., area, strongly opposes this proposed legislation for the following reasons:

1. This project does not fit into the comprehensive plan for the orderly development of the Columbia River Basin. The Kootenai River is totally undeveloped, and the Snake is undeveloped from Ice Harbor to Hells Canyon.

2. The economic and tax loss to western Montana is so great it may eliminate two counties.

3. It would have a very serious effect on the lumber industry of western Montana.

4. It would ruin many good cattle ranch units by flooding hay lands in the river valleys, causing the grazing lands to be nearly valueless.

5. Being an owner of 400 acres of irrigated land with a free water right, it is my firm opinion that the proposed reclamation areas of this project are not feasible, due to types of soil, climate, and market conditions.

6. The recreational benefits on any lake with an 84-foot drawdown are doubtful. Because the Paradise Lake would not be a natural lake, but two long river canyons, the drawdown on the fingers of this lake would be measured in miles, instead of feet.

7. There is only a mild attempt to compensate Montana for the economic and tax loss that this project would cause.

8. Both the engineering and economic feasibility of this project are questionable. The value of the Buffalo Rapids damsites have never been determined. We do not know how satisfactory an 8-mile tunnel through a wet mountain will be on the mainline of a transcontinental railroad. An earthfill dam built over

test holes of flowing water at the proposed site is questionable. No one has assured us that the damsite would not be moved downstream, thus causing much more damage.

9. There is a better method of storing floodwaters in the headwaters of the Clarks Fork River, through small headwater dams, which would benefit Montana as well as downstream interests.

10. This project, if built would be one of the major targets in the Pacific Northwest, in the event of enemy attack. I believe that our stored water, our hydroplants, and our thermo plants should be well distributed throughout the Pacific Northwest.

MOIESE, MONT.

HON. SENATOR JAMES E. MURRAY,
Chairman, U.S. Senate Interior and Insular Affairs Committee.

DEAR SIR: We, as owners (?) of two hundred (200) acres of the best farmland in the Moiese Valley and pioneers of western Montana strenuously oppose bill No. S. 1226.

We would like to ask: Why doesn't the Federal Government use their own land and powersites for this purpose?

We have spent the best of our lives developing our land and building a comfortable home here; our neighbors likewise; do we decide that his land and property would be easier and more profitable for us to operate, very necessary to our prosperity; thus offer him our own price and say "I need your land; you move on?"

Is this America we live in? Do we own the land we have patents on? Why should a nonaggressive Nation practice aggression on its taxpaying public? Is this all the respect and consideration we merit? If so perhaps we should be wards of the Government.

Sincerely,

BONNIE F. STIPE.
PAUL B. STIPE.

MOIESE, MONT., December 11, 1959.

HON. JAMES E. MURRAY,
Chairman, U.S. Senate and Insular Affairs Committee.

DEAR SIR: We would like to add our small voice of disapproval concerning the proposed Paradise Dam. We aren't large farmers, but we make a good living and are raising a large family.

If we thought that the proposed dam would do as much good as what we already have here with our homes and community—none of us would stand in the way of so-called progress.

So please reconsider the position of us common people.

Sincerely,

Mr. and Mrs. LOUIS SPEVAK.

RONAN, MONT., December 12, 1959.

SENATOR JAMES E. MURRAY,
*Chairman, Senate Committee on Interior and Insular Affairs,
Senate Office Building, Washington, D.C.*

DEAR SENATOR: For the last several months much has been said and printed concerning the proposed building of the Knowles-Paradise project. Much of this I have read and listened to so I think we have some basis for our following remarks:

To me this is a most unsound proposition. It will dislodge many peoples from their homes and from the area they choose to live in. The railroads and the highways of Montana will be caused distress, the peoples surrounding this project after completion will be subjected to a most unsightly mudflat where insects of a harmful nature will breed and multiply. Some of the best bird hunting in Montana will be destroyed.

While the building is going on there will be a boom so far as moneys is concerned, the housing situation will be the reverse, and after the construction period is over there will no doubt be severe economic distress, much unemployment, and a most distressing situation generally.

It seems quite easy to say the nice things, but one must be prepared to face the realities of life. It is my opinion that this is a real no-good project for this area of Montana.

Wishing the best of health and happiness.

Very truly yours,

Dr. E. RUSSELL SCOTT.

A. M. STERLING Co.,
Ronan, Mont., December 14, 1959.

Senator JAMES E. MURRAY,
Chairman, Senate Committee on Interior and Insular Affairs,
Washington, D.C.

DEAR SENATOR MURRAY: I wish to oppose Senate bill 1226.

As you know, about 55 percent of the land in our county is Indian land and tax free. A number of farms have been removed from the tax rolls under the Pitman-Robinson Act. True, the State fish and game department pays the county in lieu of taxes but this is only for real estate taxes and does not take into consideration personal taxes or the impact on the community of the removal of the families from these farms and the community.

Now you propose to remove another large block of land from the tax rolls and another large group of families from our community. Why do you propose to do this for the benefit of Washington and Oregon? I thought you were elected to represent the people of Montana.

One of your strongest advocates of Paradise Dam, Mr. S. R. Logan, pointed up one of our strongest arguments against Paradise when he opposed the dredging of the Flathead River outlet. He is a property owner on Flathead Lake and does not want to change the drawdown of Flathead from 10 feet to 20 feet because he knows what it will do to Flathead as a recreational area, yet he advocates a lake with an 80-foot drawdown as a recreational area. He does not own land on this proposed lake. How narrow can one get?

The proposed Buffalo Rapids Dams Nos. 2 and 4 would furnish employment in our county and in our school district No. 28. They would pay taxes to our county and our school district. They would pay rent to our Indians who are residents and nontaxpayers of our county and school district. It would be a furtherance of our capitalistic system which has made this the greatest country on earth.

How can you in good conscience advocate taking land away from people of Montana, who have toiled many years to build their homes here in Montana while supporting you for the U.S. Senate, to support industry in Washington and Oregon?

We hear so much about the damage and loss of life on the lower Columbia. I would think that our Army Engineers would be glad to forget this aspect. Have you seen the area in which the Army Engineers set up Vanport? They built this town in an old riverbed alongside the present Columbia—a place that anyone with eyes should know would flood during high water. Now you want to sell out the people of western Montana so that people can again build and live in the riverbeds of Washington and Oregon.

I do not think that you have given adequate consideration to all of these things, Senator Murray, and I wish that you would think again before selling out the people of western Montana.

Yours truly,

R. T. STERLING.

STATEMENT OF JOANNE SCHMAUCH, DIXON, MONT.

I am in favor of Paradise Dam because there is nothing to attract people to this area. Construction of Paradise Dam would create a great amount of work for many people during the construction of the dam. After the dam is built it would very likely attract industry and commerce to the surrounding areas. Montana has a great potential as a tourist paradise but has not begun to cash in on this yet. I believe that until Montana develops its power resources it will continue to have a high unemployment rate. Many of our educated young people move to other States to make a living, not because they want to leave our beautiful State but because they are forced to in order to maintain any standard of living.

SUPERIOR, MONT., November 28, 1959.

Senator JAMES E. MURRAY,
Senate Committee on Interior and Insular Affairs.

DEAR MR. MURRAY: I urge and recommend passage of S. 1226, dam to be built, as an investment to our Montana people, on the Paradise site.

We need this dam for our use within this State. It will be of help to bring in more industry, factories, and mills needed to give our people more work and make every family self-supporting.

Montana has a shortage of electric power, many of us rural people would like the use of electricity in our homes.

We cannot see where the Knowles Dam would furnish or serve many families. So far, to my knowledge, the check is only 77 families.

By building the S. 1226 project on the Paradise site the electric power would be of service to 700 to 2,000 families or more.

By harnessing both the Flathead and Clark Fork Rivers together is less cost to the taxpayers in the long run, and within a few short years this Paradise Dam would pay for itself.

Why build two dams in a short future and put a higher cost on our taxpayers? Paradise will be built anyway on the Clark Fork within a short time. So why put the Knowles project on us as an extra expense?

What little taxable land the Paradise Dam would flood wouldn't even make one ranch. Industry, recreation concerns, mills, and new homes would bring in more taxes paid than what is being paid now.

I don't see where this land that would be under floodwaters of the Paradise Dam brings in \$2,000 per hour in taxes; it doesn't. I do know an electric power company does collect that much per hour or more serving its people or customers.

We want more industry concerns to come in. Very few people like unemployment; they would rather be working and earn than to set around in leisure and get ornery.

I am one of the owners of the Jack Pine Flats in Mineral County and would like to see things done right, to serve people within our State.

We have tried to get Montana Power to come in. Their cost is too high; they want us to buy their line and still don't own it.

They won't even let us be shareholders after we paid \$1,200 for building the line to our house; which is 1 mile away.

Usually anyone for anything, they own it. To us it looks like, I buy you a gas station and you sell us gas.

We don't want those private little teapot dams or waterholes in here; there are plenty of side streams along our rivers for such. All private concerns know is sell their service out of State. They do us people no good.

Montana people in here want this Paradise Dam built and its service be kept in our State to serve our people and not be sold out of State.

Look what has been done about Hungry Horse Dam. Has it done us rural people any good as was promised? Our answer is "No." There would be more new concerns go up and built to collect more taxes along the lakeshore, which is a betterment to this State.

In a short while the Paradise Dam would be paid for.

If all income taxes collected in the State of Montana was kept here within our State, it would easily pay for projects needed in here. Our working class would like to see their hard-earned money spent here at home to the betterment of their uses.

I am willing to see the passage of S. 1226, construction be built at the Paradise site.

Sincerely,

LAURA C. SCHMIDT, A Taxpayer.

ST. REGIS, MONT., December 8, 1959.

COMMITTEE ON INTERIOR AND INSULAR AFFAIRS.

DEAR SIR: I think and very much urge the passage of S. 1226, not for the people of Montana alone but the people in our neighbor States as well. Why should we, the taxpayers, set back and let the big power trusts come and set down on our doorstep and then tell us, you pay me this or we will not give you power. This bill S. 1226 represents an investment to us, the taxpayers and laymen, so why do our lawmakers hold back. Our majority voice should be of more value than the few power trusts. I do not think with passage of S. 1226 it will

displace any labor from any other place. With the industry that it will create, there are many more it will help and take off the unemployment rolls I am for it and cannot see why any good citizen would not be for it.

Yours,

CARL L. SMITH.

ST. REGIS, MONT., *December 10, 1959.*

Senator JAMES E. MURRAY

DEAR SIR: We wish to support S. 1226 because we believe that it will be a big help to western Montana although our main hope is for Paradise site. We believe it will bring industry to us, making employment for all, especially young folks, who must leave the State for work at the present time.

We need more power at a cheaper rate to induce businessmen to stay here.

Sincerely yours,

PEARL H. SIDES
Mrs. Pearl H. Sides.

RONAN, MONT., *December 11, 1959.*

Senator JAMES E. MURRAY,
*Chairman, Committee on Interior and Insular Affairs,
Senate Office Building, Washington, D.C.*

SENATOR: As a young family man who is a native of Lake County, I wish to protest the construction of Paradise or Knowles Dams as presented in S. 1226, introduced by Senator Mansfield and yourself.

I have been reading pros and cons on the proposed project at Paradise and more recently at Knowles since the Corps of Engineers hearing in Missoula in 1957, and I am convinced the disadvantages of either Federal project far outweigh any advantages advanced by promoters of the projects.

The economic loss to Lake County in taxation alone is enough to make them suspect. Recent expansions of the lumber industry in the county is jeopardized by the cutting of logging supplies in Sanders County from Lake County mills by the reservoirs of either project. These are but a few reasons why I think it would be a tragedy to western Montana's economy and future to construct these dams.

Therefore I hope that your committee will not act favorably on S. 1226 and will drop these proposed projects from further consideration.

Sincerely yours,

ALFRED J. SKOGEN.

ST. REGIS, MONT., *December 14, 1959.*

Hon. Senator JAMES E. MURRAY,
Senate Interior Committee:

I have been a resident of St. Regis, Mont., since 1906, and wish to take this opportunity to register my protest to the Paradise Dam project as well as the Knowles Dam project.

Twelve years ago I was one of the representatives from St. Regis that spoke against the Paradise Dam at the meeting held by the Army Corps of Engineers at Hot Springs, Mont. After the Engineers had discussed Paradise Dam with the group of us attending that meeting they concluded that it was just as they had expected, and Paradise Dam was dropped from their program.

Now, after 12 years of further progress and the establishment of a sound average economy, why are we again faced with the proposed property destruction such as Paradise Dam would create? Those of us who have spent the better part of our lives building homes, businesses, schools, highways, and paying taxes, feel that all this work will have been in vain. Many million man-days of hard work in building up western Montana would be destroyed by the contemplated construction of Paradise or Knowles Dams.

This farming and forest land will continue to produce new wealth for this country until the end of man. The proponents for Paradise and Knowles Dams would have us believe that the construction of either one of these two proposed dams would attract much new industry to Montana. However, I have read many articles recently about the movement of eastern industry established in colonial times to the South, where there is an abundance of cheap labor and

where living conditions are much better because of the warm climate. Why, therefore, in Montana could we expect to attract new industry when we have the same conditions prevailing as far as weather and labor are concerned as they have in the East? New industry has never been discouraged from coming to Montana because of the shortage of electric power. I have seen a great deal of new industry locate in western Montana in the past 20 years and not because of the construction of huge multipurpose dams, either. Much of our new industry has come to Montana because of our abundance of timber and the productivity of our irrigated farmland. As far as I can see, the construction of either Paradise or Knowles Dam would do nothing for Montana but destroy our beautiful western valleys for the benefit of the downstream States.

In conclusion, I would like to express my appreciation to the Army Corps of Engineers for the cordial attitude they have taken on both sides of this issue. I also wish to thank the committee for giving all of us the opportunity of expressing our opinions in this important matter.

Yours truly,

WM. E. SANSOM.

STATEMENT OF H. E. SMITH, COUNTY COMMISSIONER OF SANDERS COUNTY, MONT.,
AND RESIDENT OF HOT SPRINGS

As a county commissioner of Sanders County and a resident of Hot Springs in that county, I appear in opposition to the construction of the proposed Paradise and Knowles projects. In doing so, I want to reemphasize the statements which I have made in previous hearings related to these projects.

At the hearing conducted in Missoula, Mont., on March 9, 1959, by the Corps of Engineers, I noted that the construction of either Paradise or Knowles would impair the tax base for the support of State and local government and would increase the costs of local government as well. A comparison of the trend of tax levies before and after the construction of a similar, tax-exempt Federal project in Flathead County, Mont., clearly justifies my concern.

For example, the 1959 tax levies imposed on property owners in the major cities of Flathead County for all purposes are as follows: Kalispell 169.99 mills, Columbia Falls 166.10 mills, and Whitefish 195.42 mills.¹

In 1952, before the construction of Hungry Horse Dam, the levies imposed for the same purposes were 151.41 mills in Kalispell, 112.53 mills in Columbia Falls, and 124.43 mills in Whitefish.²

These figures mean that in the intervening years between 1952 and 1959 property owners in the three Flathead County cities have suffered extremely heavy increase in their tax burdens. In Kalispell the increase has been 18 mills, or 12 percent; in Columbia Falls 54 mills, or 48 percent; and in Whitefish 71 mills, or 57 percent.

By comparison the increases in tax levies during the same period in the three incorporated places in the county of Sanders have been modest. Between 1952 and 1959, the levy for all purposes in Thompson Falls changed only from 145.69 mills to 146.53 mills, an increase of less than 1 mill. In Plains, the levy total advanced from 125.53 mills to 141.28 mills, or 13 percent. And in my own town of Hot Springs, the levy for all purposes changed from 133.08 mills in 1952 to 137.67 mills in 1959, a difference of only 3 percent.

Just to summarize these figures, they show that tax levies in the three incorporated places in Flathead County went up an average of nearly 40 percent between 1952, before the construction of tax-free Hungry Horse Dam, and 1959, well after its completion.

In contrast, the same period witnessed an average tax increase in the three incorporated places of Sanders County of only 5 percent. These comparisons justify my conclusion that increased costs of local government and heavy increases in tax levies will surely result if the tax-exempt Knowles or Paradise projects are constructed in Sanders County.

The provision in S. 1226 for payments in lieu of taxes, of course, are clearly inadequate since they are limited in time, would not be based on current tax

¹ Montana Taxpayer, September 1959.

² Montana Taxpayer, September 1952.

requirements, and make no provision for the loss in the bonding capacity of school districts and other local governmental units which would follow the removal of great amounts of property from the tax rolls.

My conclusion still is that the construction of either project would be extremely detrimental to Sanders County and the State of Montana.

EXHIBIT 1

Levy comparison

[Tax levy in mills for all purposes]

	1952	1959	Increase	Percent
Flathead County:				
Kalspell.....	151.41	169.99	18.58	12.0
Columbia Falls.....	112.53	166.10	53.57	48.0
Whitefish.....	124.43	195.42	70.99	57.0
Total.....	388.37	531.51	143.14	37.0
Average levy.....	129.45	177.17	47.72	37.0
Sanders County:				
Thompson Falls.....	145.69	146.53	.84	.5
Plains.....	125.33	141.28	15.95	13.0
Hot Springs.....	133.08	137.67	4.59	3.0
Total.....	404.10	425.48	21.38	5.0
Average levy.....	134.70	141.83	7.13	5.0

HOT SPRINGS, MONT., December 4, 1959.

Senator MURRAY,
Washington, D.C.

DEAR SIR: I am against the construction of either a Paradise or Knowles Dam.

Yours truly,

W. G. STELLMAN.

MISSOULA, MONT.

To Whom It May Concern:

We, the undersigned, Marlin Stephens and Sally Stephens, ranchers, are opposed to the bill S. 1226.

We do not believe that the U.S. Government should compete with private enterprises as they are doing in the Paradise Dam issue. We believe that the Government is interfering in too many things already.

We like to live in Paradise and we want to raise our family here. Please let us do so in peace.

MARLIN STEPHENS.
SALLY STEPHENS.

PLAINS, MONT., December 14, 1959.

Senator JAMES E. MURRAY,
Washington, D.C.:

I am opposed to Senate bill S. 1226 or any other bill which proposes a Knowles Dam project or a Paradise Dam. These proposed projects concern the area which will be my livelihood in the very near future, as well as that of numerous friends and neighbors. I do not feel that the proposed dam is necessary for the betterment of western Montana, and in fact I think it would be detrimental as far as fertile farmland, wildlife, and timber opportunity for the residents of the entire area. I feel that such a project is an unnecessary spending of the Federal Government's money.

ANGELA M. STGERMAINE.

STATEMENT OF M. C. SUTHERLAND, THOMPSON FALLS, MONT.

My name is M. C. Sutherland. I am a former chairman of the Sanders County Board of Commissioners and a former president of the Montana County Commissioners' Association. While this is a personal statement, I feel my experience

in public life helps to convince me of the damage that construction of either Paradise or Knowles Dam would do to our county. I am opposed to either and to S. 1226 authorizing that construction.

My interest in public matters still is high, and I am particularly concerned as to the effect that construction of either of these dams would have on our tax income. The best agricultural land, with the highest assessed valuation, in the river valley, would be drowned out by the dam. Besides the loss of the land there would be loss of personal property, which is a source of much tax revenue for our county.

One of the principal sources of tax revenue in this county is the Northern Pacific Railway. Its main line runs the full length of our county, and its tie plant, one of the principal plants operated on the entire Northern Pacific system, is located in our county. The total tax payment by Northern Pacific is approximately \$245,000 a year. Construction of Paradise Dam would require major relocation of the railroad, and loss of the main line mileage and the tie plant would be extremely serious from a tax standpoint. The in-lieu tax provisions of S. 1226 are far from adequate. Tax reclassifications now underway in Montana could easily wipe out these tax replacement provisions. The tax replacement or "in lieu" provisions of S. 1226 are vague. They are a poor substitute for known tax bases and tax income.

I am equally interested in the growth and economy of our county. This is timber country, and our real future lies in development of our forest industries. There are five lumber and timber products plants in this county. They are our heavy employers, and we are looking forward to expansion and new development in processing our timber.

Any dam which would fill our Clark Fork Valley with water will split our timber supplies. It would make access to timber very difficult and expensive. This is the sort of thing that kills our existing industries and keeps out new industries.

One of these mills, the tie plant at Paradise, would be wiped out. The Pitts mill at Ravalli, while out of our county, would be drowned out, too, and it has been a user of timber from the reservoir area for some time. The other mills depend upon timber from the reservoir area or from areas which require transportation through the reservoir area to reach their mills.

Much timber now is moving from the Thompson River area in our county to mills in the Missoula area. If they are forced to find timber elsewhere because they cannot move the timber through the drowned-out area, our county will suffer. This is an area of great promise, for Thompson River can support heavy production for many years.

Our farming and ranching industry will lose its valuable bottom lands above the dam. This will eliminate many productive units by taking away their winter feed supply.

Our county government and other local government is directly responsible to our own people. The administrative board set up to administer this project will not be responsible to the people. This bill would be very harmful to our economy and our tax base. It is not responsible to our local people. I am completely opposed to it.

PARADISE, December 11, 1959.

HON. J. E. MURRAY:

I am opposed to S. 1226, Paradise Dam or Knowles Dam. It is and has been my family home since 1925.

Mrs. B. A. STOUT.

PARADISE, MONT., December 2, 1959.

To Whom It May Concern:

I am very much opposed to the proposed Knowles and Paradise Dam.

This is our livelihood here, our homes are here. I have lived here for more than 25 years and I don't like to have to move elsewhere.

To those that aren't or wouldn't be affected by the proposed dams, they think that it is just fine. I wonder if Eugene Mahoney or Paul Harlow would like to have their livelihood or homes taken away from them? They are not being drowned out, but if they were in our position they sure would squawk.

So I, for one, am greatly opposed to these dams.

Sincerely,

Mrs. YVONNE TOMPKINS.

DIXON, MONT., *December 7, 1959.*

HON. JAMES E. MURRAY,
Chairman of Committee on Interior and Insular Affairs.

DEAR SIR: We live northeast of Dixon and a landowner and a taxpayer and live in the area directly affected by this bill, namely, S. 1226. Our home represents years of hard labor and money to build it up to warrant a good living and we surely have been satisfied after many moves and to settle here it certainly was by choice.

We certainly are opposed to bill S. 1226.

Sincerely,

ANDREW TETEREED.
 GRACE W. TETEREED.

POLSON, MONT., *December 7, 1959.*

Senator JAMES E. MURRAY,
Chairman, Senate Committee on Interior and Insular Affairs.

DEAR SENATOR MURRAY: I see by the paper we are to write and give our views on the Paradise Dam hearing December 15.

I am a farmer living in the Polson area and I am in favor of the passage of S. 1226 or the building of Paradise Dam. I have been over a lot of that country that is to be flooded, and I believe most of the land is not good farming land. That is why I didn't buy in that part of the country 10 years ago.

I have farmed under dikes in the Kootenai River Valley at Bonners Ferry, Idaho. I know what floodwaters do to farmland and buildings.

So I favor all control of runoff water and I believe our Government can do the best job for us.

I believe the construction of Paradise Dam will help bring more industry and wealth to Montana.

More power to you, to create more power for us.

Respectfully,

S. R. TOWN.

THOMPSON FALLS, MONT.,
December 15, 1959.

Senator JAMES E. MURRAY and Senator GRUENING:

DEAR SIR: To save the time of your committee we, the business and professional men of Thompson Falls, Mont., are joining in one brief statement in support of S. 1226.

We have seen that the use in Flathead County of a fraction of the Hungry Horse power reserved to Montana has more than doubled the taxable valuation, provided over 600 jobs in one industry alone, improved local markets and created much new business and general employment in that county. Similar benefits from the low-cost power accrue to Silver Bow County, and Montana Power Co. distributes a large block of the power profitably. Paradise, from the standpoints of river control and cheap power, could be roughly the equivalent of two Hungry Horse Dams. Its recreational and tourist values would also be far greater.

S. 1226 sets a new high level in the protection and advancement of local interests. It guarantees taxing bodies against loss of revenue. It specifies the lowest industrial at-site rate for a distance of 35 miles. It directs compensation and relocation to keep owners at least as well off after as before. It recognizes all of the tribal values affected and authorizes negotiation accordingly.

Many of the dwindling number of farmers who have managed to hang onto their farms must have off-farm jobs in order to make both ends meet. Our wageworkers, together with business and public services, face a disastrous upset when defense industry in the region and military personnel are curtailed, if such large backlogs as self-liquidating Knowles-Paradise Dam are not immediately available. Nearly all of our young people now find it necessary to leave this area when they finish high school in search of employment.

For these reasons and many others, such as national security and threats to our freedom from abroad and from power monopoly at home, we hope for the early enactment of S. 1226.

Respectfully,

John M. Williams, Leslie G. Nelson, Duke M. Sallee, John Gallaber, Martha B. Timlin, B. L. Campen, Dale Johnson, Bud Derrickson, June V. Stephanson, E. H. Stephanson, H. Vaught, W. Vaught, Don Brown, James P. Dean, Helen G. Brown, Parthene Dean, R. Wallaston, Jesse C. Nelson, Gary Dioszt, J. L. Pyatt, Henry L. Gill.

MISSOULA, MONT., December 14, 1959.

SENATOR JAMES E. MURRAY,
Senate Interior and Insular Affairs Committee,
Washington, D.C.

DEAR SENATOR MURRAY: I have been asked by the Committee for Paradise Dam to prepare the following statement for inclusion in the hearing in Missoula on the Paradise-Knowles bill to point up and refute certain misleading arguments being used against the project. In particular, the statement has reference to an article and drawing which appeared in the *Missoulian*, October 11, 1959, the day before you and Senator Kerr took testimony in the university auditorium on the problems of water resources.

I was asked to make this analysis because of my training and experience as an engineer. I am a registered professional engineer in the State of Montana, practicing as a consulting engineer in the fields of radio and television for the past 15 years, with 5 years additional professional experience in research at the National Bureau of Standards. I do not claim qualification as a hydroelectric or flood control engineer, and so my comments will be confined to the simple interpretation of the data and calculations of the Army Engineers who are so qualified.

The large map¹ which occupies some 60 column inches in the *Missoulian* includes no reference to the source of the data, nor does it identify the engineer responsible for its preparation. The chart in the lower left-hand corner of the map, entitled "Not Enough Water for Proposed Federal Projects," is explained in a quotation by Mr. C. P. Fickes, secretary of the UCDC. Mr. Fickes is not a registered professional engineer, and I am informed that he does not have professional engineering training or experience. Without reference to qualified engineering sources, he makes the following statement, apparently on his own: "The solid areas on the annual flow graph indicate the water deficiency for storage purposes during the periods represented." There is no explanation of this statement.

As a matter of fact, it is also pointed out, correctly enough, in Mr. Fickes' quotation that the lowest annual streamflow recorded in the Clark Fork near Plains was about 6.4 million acre-feet, in 1941. This is nearly 2 million acre-feet more than the normal stream requirement of 4.5 million acre-feet needed "to keep the stream wet 365 days a year."

Mr. Fickes' argument, apparently, must be that every winter—no matter whether a high or a low runoff is anticipated—all the proposed reservoirs would be drained to the bottom of the storage facility. If the runoff then turned out to be very low, so the argument goes, the reservoirs could not be filled again. This argument indicates either a complete ignorance of the method of operation of such projects, or a deliberate attempt to confuse the issue and arouse opposition. For, although the rules of operation for flood control and for power regulation are admittedly quite complex and highly technical, it can be stated simply that the amount of water released or stored at any time is closely correlated with the most recent and accurate available forecasts of runoff. Carefully engineered safety factors based on sound statistical analysis are included to allow for deviations from the forecast. Thus, the release of water from the reservoirs is gaged in accordance with the anticipated total flow to (1) provide sufficient space in the reservoir to hold back the spring floods, and (2) to increase the minimum streamflow for more dependable power generation.

¹ Previously submitted in Fickes statement. (See p. 384.)

There is no basis in fact for assuming that the projects would be operated in violation of sound engineering principles so as to be without water during low runoff years.

The chart is deliberately misrepresentative of the facts in another regard, as well. It includes Paradise, Nine Mile Prairie, Spruce Park, Flathead Lake, and Hungry Horse, for a total of 9,575,000 acre-feet, plus the normal stream requirement of 4,500,000 for a total of 14,075,000 acre-feet. Actually, the Army Engineers' proposal suggested three possible combinations of projects to obtain the necessary controlled storage. No one of the three is the combination of projects selected by the UCDO for the example in the chart. It is therefore concluded that this fictional combination of projects was selected out of ignorance of the actual Army Engineers' proposals, or deliberately to make the figures come out the way UCDC wanted in order to prove its alleged case.

As a matter of fact, the actual storage under plan I, including Hungry Horse, Kerr, Paradise, and the Flathead Lake channel improvement, is calculated by the Corps of Engineers to be 8,967,000 acre-feet. Under plan II, Knowles and Nine Mile Prairie are substituted for Paradise, for a total of 8,852,000 acre-feet. Under plan III, both Knowles and Paradise are dropped in favor of Nine Mile Prairie, Buffalo Rapids, and Smoky Range, for a total of 8,450,000 acre-feet. There is no significance whatever to adding the "normal stream requirement" to the total usable storage for comparison with annual streamflow figures. In some years, the storage capacity of the dams might be carried safely downstream two or three times in a single year. In other years, the total flow might be considerably less than the total storage capacity. The only significance of this fact is the importance of a sound program of control.

It is thus apparent that this chart is not only misleading in the conclusions it draws from substantially correct basic information, but it is not in accordance with the proposals of the Corps of Engineers. This is a case of making a big opposition to something not even proposed.

As to the little charts in the other corner of the Missoulian map, there is no source or authority given for the data presented. There is no indication of how it is proposed to achieve the "perfect regulation" of the total flow from some 230 "small dams" to a constant 1 million acre-feet per month at Plains for 7 months of the average year. It is at once apparent that the low runoff year of 1941 would not permit regulation at this value, since there were only 6.4 million acre-feet of total runoff during the entire year.

As a matter of fact, the small dam proposal encounters the same necessity as the Army Engineers' proposals for controlling the release of water in accordance with forecasts of probable total runoff. Improper operation of either proposal would result in serious water deficiencies.

Furthermore, the imagination is staggered at the prospect of attempting to control accurately the flow from 230 dams located several hundred miles apart. No thoroughly engineered proposal has ever been produced to show how this might be done, and what it might cost. Neither has there been any showing based on adequate hydrographic records to substantiate the possibility of regulation of streamflow as claimed in this published and anonymous chart.

It seems to me that a little knowledge is a dangerous thing, particularly when it is used in propaganda to make projects like the Paradise Dam seem to be unworkable. The final gimmick in the propaganda effort represented by this map is that it has been prepared by a careful and experienced draftsman in a thoroughly professional manner, thus taking on an appearance of authority and technical competence. It could not be apparent to the average newspaper reader that the showing is improper, misleading, and without proper engineering support. This is a gross misrepresentation—just like the rigged TV quiz shows, or fraudulent advertising of any sort.

I know that your committee, and the House committee which will study this bill, will not be confused by such tactics. But it is important to recognize that some of the public sentiment which has been brought forth in opposition to the Paradise-Knowles projects has been developed by such demagogic tactics, and should be evaluated in that light.

Thank you for your consideration. With best personal regards,
Sincerely,

ARCHER S. TAYLOR.

MOIESE, MONT., December 12, 1959.

SENATE COMMITTEE ON INTERIOR AND INSULAR AFFAIRS.

DEAR SIR: I wish to voice my opposition to Senate bill 1226, to authorize construction of a dam on either the Columbia or Flathead River. Private power companies stand ready to develop all the power needed in the foreseeable future. They pay taxes that help support the area in which their facilities are located. As far as flood control is concerned, that seems to me to be a problem which could be handled better by such agencies as the U.S. Forest Service and the Soil Conservation, by starting a program to control and conserve water in the headwaters of the region. This bill is too vague in its provisions for protecting the rights of the property owners of the area. Government agencies are notorious for their waste and inefficiency and I have no reason to believe this project would be any different, so I question the estimates on this project. I am a farmer in this area and I am making a good living here. As for relocating the farmers here in western Montana, I know of no land which could be brought under irrigation which would compare with what we have here.

Yours truly,

W. C. THORP.

PLAINS, MONT.

HON. JAMES E. MURRAY,

Chairman, U.S. Senate Interior and Insular Affairs Committee.

DEAR SIR: We, the undersigned, are opposed to S. 1226, 1st session, 86th Congress, relating to the Knowles-Paradise Dam project, because we have worked hard for 15 years to accomplish what we have here, only to have it and our neighbors' property destroyed for the gain of a comparatively few people. And destroyed it will be, because we are fundamentally people of the soil and want to stay that way, and raise our children free from the trials and temptations of any large town. The net gain in irrigation is almost nil. The power generated is not enough to make any great difference in the development of this and surrounding counties to offset the upheaval of us and our neighbors in the area involved.

Sincerely,

ROY W. TOMPKINS.
MAXINE TOMPKINS.

MISSOULA, MONT., December 15, 1959.

Senator JAMES E. MURRAY,

Senate Interior and Insular Affairs Committee.

DEAR SENATOR MURRAY: Please consider this statement in support of Senate bill 1226. We are particularly concerned that the Paradise Dam site be given first consideration. It is our belief that the Paradise Dam project will better serve the orderly, progressive development of the Columbia River program because of the greater benefits of power, water storage, flood control, recreation, and other allied benefits.

We deplore the doctrine of "maintenance of the status quo." Civilizations either march forward or fall behind, a factor the proponents of this doctrine choose to ignore. We owe to ourselves, our children, our Nation, and the world we live in the orderly development of our natural resources before they become depleted and dissipated. To ignore the development of the Columbia River at this time is sheer folly. To wait until later, or to put off planning, or to substitute a make-do compromise is to disregard our responsibilities.

Therefore, we urge your continued support and commendable efforts for the public power projects which will, indeed, insure the greatest benefits to the greatest number of our people.

Respectfully submitted.

LAVERNE W. TAYLOR.
ADELINE BARTRON.

MOIESE, MONT., December 11, 1959.

Senator JAMES E. MURRAY,
Chairman, Senate Committee on Interior and Insular Affairs:

We are opposed to the Knowles-Paradise project.

We have read many articles on the project for both sides so are stating our views with an open mind.

How is it going to help Montana? Perhaps some employment during construction but would it be enough for the 3,000 people forced to leave their homes and living?

Will new industry locate in this area? The power from this dam will be available miles from here so it seems more likely new industry will locate where transportation and other factors are more accessible.

As for a recreation area we can't see that at all. A manmade body of water on this soil will never have long, sloping, sandy beaches. It will be mud and cattails.

This is a pretty and pleasant valley and a fine, thriving community.

We bought our farm here 4 years ago and are just getting it built up to suit our needs. These past 4 years show us that we invested our savings wisely when we purchased this land. We are satisfied here. We are past the age of pioneering and going out to develop wasteland into profitable farmland.

Why put all the farmland in this valley under water in order to get irrigation for dry land elsewhere?

We produce excellent crops here and do our share in the agricultural needs of this Nation.

HELEN THERRIAULT.
FRANK THERRIAULT.

PLAINS, MONT., December 12, 1959.

We are opposed to bill 1226 because of the destruction of property and putting families out of the homes it has taken years to build.

This country does not need the water for irrigation. We feel if the State of Washington needs more water, let them keep tearing up their State which they are doing a good job of, as they are the ones wanting it and will benefit by the dam. As for ourselves we do not care to live below the dam, as the two dams below us do not have a solid enough bottom and both leaking.

IRENE VAN NICE.
GEO. W. VAN NICE.

PLAINS, MONT., December 4, 1959.

Senator JAMES E. MURRAY,
Chairman, U.S. Senate Committee on Interior and Insular Affairs.

DEAR SENATOR MURRAY: I have read a copy of Senate bill S. 1226, which was introduced in the Congress last March 2, and wish to enter this letter in the records of your hearing at Missoula, Mont., on December 15, 1959, as favoring the passage of this bill. I wish also to be recorded as in favor of the selection of the Paradise site as an alternative to the Knowles site on a basis of the greater benefit to be derived from a fuller development of the available natural resources.

All polls of sentiment in this region have shown that the sentiment is in favor of early construction of the project embodied in S. 1226. The reasons for this sentiment have been fully set forth by proponents at the several hearings conducted by the U.S. Corps of Army Engineers and which are undoubtedly available to your honorable committee. To repeat them here would constitute a redundancy burdening to a record already replete with facts and figures to support the reasons and needs for early authorization of the project.

In behalf of not only myself but other fellow citizens entitled to the benefit of the natural resources belonging to them, I strongly and respectfully urge that your committee take early action in recommending passage of S. 1226.

Yours very truly,

CLARENCE C. VACURA.

PLAINS, MONT., December 5, 1959.

Senator JAMES E. MURRAY,
 Chairman, U.S. Senate Committee on Interior and Insular Affairs.

DEAR SENATOR MURRAY: I am a resident of the town of Plains, Mont., and operate an automobile agency and service station business.

I have read Senate bill S. 1226 and am in favor of its early passage. I am also in favor of locating the Dam at the Paradise site instead of Knowles because of the greater benefit in multipurpose development of natural resources which would be wasted by selection of the lesser Knowles site.

I am convinced that the cost of relocation figures of railroads and highways in the reports of the U.S. Corps of Army Engineers could be substantially reduced by a survey made by an authorized Government agency rather than accepting the existing figures which I understand were independent figures furnished by the railroads for location of their lines, and some questionable cost figures in connection with relocation of highways.

Yours very truly,

W. L. VACUBA.

PERMA, MONT., December 13, 1959.

Senator JAMES MURRAY,
 Washington, D.C.

DEAR SIR: We are opposed to the construction of the Knowles or Paradise Dams in western Montana.

We do not feel the construction of such a dam would be fair to the people of western Montana, particularly those in and adjacent to the reservoir area. Everything would be disrupted, besides flooding out the valuable land. It would wipe out the bison range and take from the Flathead Indians a lot of their land. The effect would be drastic for the tribe. The State wouldn't benefit; all we'd have would be a lake to provide power and water for downstream States.

I am more in favor of smaller dams.

MIKE VULLES.
 VLADIMIR VULLES.

ST. REGIS, MONT., December 14, 1959.

DEAR SENATOR MURRAY: We are writing you, as natives of this county.

When the Paradise Dam is built, a great change will take place. New industries and recreational facilities will come in, the future will be ever so much more stable for our children and their children to come. Our small towns will grow into modern cities with the help of the industries that the Paradise Dam will bring to our county and other counties as well.

We will all benefit immensely by this great project.

Yours truly,

Mr. and Mrs. KENNETH WELCH.

PLAINS, MONT., December 10, 1959.

Hon. JAMES E. MURRAY,
 Washington, D.C.:

I am opposed to the bill S.1226 relating to Knowles-Paradise Dam project.

W. B. WILLIS.
 ALICE L. WILLIS.

PLAINS, MONT., December 11, 1959.

Hon. SENATOR JAMES E. MURRAY:

I feel that the Paradise or Knowles Dams would be detrimental to Sanders County. I don't feel that the good that they would do would offset the damage to the county and the people in the county.

Therefore I oppose Senate bill 1226.

RICHARD A. WELTZ.

PERMA, MONT., *December 11, 1959.*

Senator JAMES MURRAY.

DEAR SIR: I am opposed to the building of the Paradise or the Knowles Dam as I feel that it will be a detriment to the communities of surrounding country. I feel that by taking so much land out of production that it will raise our taxes.

Yours truly,

EDGAR WALTER.

PERMA, MONT., *December 10, 1959.*

Senator JAMES MURRAY.

Washington, D.C.

DEAR SIR: I am opposed to the Paradise Dam because I don't see any reason to change our topography just to suit others downstream. Our railroads, markets, mail route, shopping centers, the vast amount just spent on highways would be wasted then we would be taxed again to build new ones—and our Government and local taxes are already a major item in our everyday living.

I therefore am a firm believer in private enterprise and if we must have a dam at least make them smaller, less destructive and built by private enterprise.

Sincerely,

H. S. WEBBER.

PERMA, MONT., *December 10, 1959.*

Senator JAMES MURRAY,

Washington, D.C.

DEAR SIR: We are opposed to the Paradise Dam because it will change our railroads, marketing of cattle and grain, highways to main shopping centers to which new highways have just been or are being constructed; our mail route, which is now daily except Sunday and suits us just right; and because we wish to keep our taxes (which are already out of proportion) down as much as possible.

Sincerely,

MABEL E. WEBBER.

DIXON, MONT., *December 7, 1959.*

Hon. JAMES E. MURRAY:

I am very much opposed to S. 1226. I do not feel the building of Paradise or Knowles Dam would do the country as a whole any good.

FRITZ G. WIPPLINGER.

DELLA M. WIPPLINGER.

DIXON, MONT., *December 10, 1959.**To Whom It May Concern:*

I am against the proposed building of the Paradise or Knowles Dam.

ANNA WIPPLINGER.

CHARLO, MONT., *December 9, 1959.*

Hon. JAMES E. MURRAY.

DEAR SENATOR: I believe that the passage of S. 1226 will be the steppingstone to the greatest progress we have had.

Also to construct a large multipurpose dam at or near Paradise would help Montana throughout, giving us better markets, more tax dollars, and a chance for industrial development.

And where could a dam impounding so much potential power as Paradise be located and destroy as little as Paradise. Practically no merchantable timber will be covered and very little good farmland from Moiese to Superior.

Respectfully yours for progress,

GEO. R. WEST.

STATEMENT OF NELS SANDBERG, PRESIDENT, WALDORF-HOERNER PAPER PRODUCTS CO.

My name is Nels Sandberg. I am president of the Waldorf-Hoerner Paper Products Co., which operates a plant near Frenchtown, west of Missoula. Our operations began in 1956 and are being expanded at the present time, to include a facility to make paper. Thus far, we have been manufacturing pulp.

Our investment in Montana comes to more than \$6 million and we now employ about 45 people. Our expansion will result in employing a total of 120. While that may not seem like a large group of workers, the effect of our operations is to stabilize the timber industry in the western Montana area by virtue of the fact that we utilize what are waste products of the lumber mills in the area and convert them to useful material.

We are informed that had it not been for our plant, many of the lumber mills in the area would have been shut down during the winter of 1957-58. The chips we process come from as far east as White Sulphur Springs and in the future will come from Livingston as well, to Libby on the west and Kalispell and Columbia Falls on the north.

The reason we came to Montana and built our plant was primarily because of the availability of timber. Construction of Paradise or Knowles Dams would have an adverse effect on the accessibility of the products necessary for our operations. The arms of the lake and drawdown of the water would hamper transportation of timber to the mills, as would elimination of existing transportation facilities now making delivery of chips possible.

Our operations have proved to be satisfactory. The timber resources are adequate, and the supply of power and natural gas for our operations is taken care of extremely well by a firm already in the field. The availability of sufficient power never was a matter of prime consideration in the establishment of our plant in western Montana.

Montana is on the threshold of greater development. It is just starting to recognize its capabilities. Montana has ample resources already. These can mean a solid economy in which everyone will share, even if they are not directly concerned with a business such as the wood industry. The existing businesses and industries, if properly cultivated and encouraged, can, with the addition of new ones, help tremendously in adding to the State's economic base.

Western Montana's future hinges largely upon the wealth of timber with which we are endowed. Wisdom dictates that we hang onto what we already have and promote it rather than flood it out and make it unavailable.

For the reasons I have set forth, our company is opposed to S. 1226 and the dam it would build, either Paradise or Knowles.

HOT SPRINGS SENTINEL,
Hot Springs, Mont., December 4, 1959.

Senator JAMES E. MURRAY,
*Senate Office Building,
Washington, D.C.*

DEAR SENATOR MURRAY: I want to take this means of submitting a statement to the Senate Interior Committee concerning the S. 1226 hearing in Missoula on December 15. It will be impossible for me to attend the hearing on that date.

I am in favor of S. 1226, and particularly would like to see the Paradise site chosen as the most economical and practical proposed dam site for this area and the country. I feel that Paradise Dam will do the best job of flood control, provide waters for irrigation and recreation, and provide, indirectly, a more suitable tax base and business climate in the county because of the industry which will ultimately be attracted by the low-cost at-site power.

Seasonal fluctuations cause unemployment and unstable business conditions in this area. Paradise Dam would stabilize conditions, making a more healthy business and labor climate and everlasting benefits. It would provide jobs for our youth who now migrate to faraway places. Federal power in this area would aid business conditions also because of the competition the low-cost power would give to private electric companies.

The Federal multipurpose dam program should be stepped up and completed and the remaining small-dam sites could be left to the private companies. It is the one program which pays its own way.

I would like to point out the results of a survey which was taken by the Hot Springs Sentinel, the Plainsman at Plains, and the Sanders County Ledger at

Thompson Falls in 1957 at the time the Paradise question was brought up in the State legislature. Subscribers were asked whether or not they favored Paradise Dam. Of those who answered, the response was 3 to 1 in favor of it. Indications now are that the ratio would be even greater.

I would urge your committee to support S. 1226.

Yours very truly,

RICHARD C. SHIRLEY.

SULIER SHOE SERVICE,
St. Ignatius, Mont., December 2, 1959.

Senator JAMES E. MURRAY,
Chairman, Senate Committee on Interior and Insular Affairs,
Washington, D.C.

DEAR SENATOR MURRAY: I should like to urge the passage of Senate bill S. 1226 which should result in cheap electric power which Montana needs in order to attract more industry, with consequent increase in employment.

Paradise appears to me to be the best natural site for the dam, rather than Knowles, which can hold the floodwaters of only one river, and would let the Clark Fork go uncontrolled.

At present western Montana's youth must go to other States in order to find jobs, and the production of abundant electrical power is one way of assuring a place for them here at home.

Respectfully yours,

CLYDE V. SULIER.

RESOLUTION OF THOMPSON FALLS LOCAL UNION No. 1639, UNITED BROTHERHOOD
OF CARPENTERS AND JOINERS OF AMERICA

Whereas S. 1226 providing for the construction of the Knowles Dam project containing an alternative provision permitting its location at the Paradise site, and which has been twice read since its introduction on March 2, 1959, and referred to your honorable committee; and

Whereas the matter of construction of a dam at or near this location has been subject to numerous hearings by the U.S. Army Corps of Engineers whose subsequent recommendations clearly indicate the need of water impoundment for flood control, a prime responsibility of the Department of the Army; and

Whereas such legislation as that embodied in S. 1226 is long overdue and vitally needed for the generation of hydroelectric power, flood control, navigation, the expansion of industry, the reinforcement of our national defense, and the general well-being of not only the area of the project but that of contiguous areas and the Nation generally; and

Whereas a majority sentiment of the peoples of those areas are heavily in favor of firm action by the Congress in effecting such legislation: be it

Resolved, That Thompson Falls Carpenters Local Union No. 1639 respectfully petition your honorable committee to take early action in recommending passage of S. 1226 and that such recommendation show that the damsite should be at Paradise instead of the Knowles site.

STATEMENT OF WILL TIDDY, MANAGER, POLSON DIVISION, CASCADES PLYWOOD
CORP.

I am here as a representative of the Cascades Plywood Corp., of which I am the general manager of the Polson division, to oppose Senate bill 1226.

The Polson division is perhaps the youngest and one of the largest new industries in our State, and, incidentally, the only operating plywood company in our State at present. We employ approximately 110 men in our plywood and sawmill operation with a payroll of approximately \$40,000.

The employees of our plant are local men, and about one-fifth of these men come to us from their small-tract farms of our county.

Our payroll is only a small part of the expense of our operation, as considerable more dollars are spent in timber purchases, money paid to loggers for hauling and cutting our timber, which keeps an additional 25 or more men on a payroll that adds to the economy of the community, county, and State.

Our objections are:

(1) Our taxes would be greatly increased as the tax burden from the flooded lands would mean a loss of taxable income by approximately \$700,000.

(2) Our company will be using a large percentage of logs from the Thompson River area and the construction of this dam would necessitate a considerable increase in the cost of transporting these logs to our factory, because of the longer haul involved.

(3) We have been advised by the railroad company that the additional cost of maintaining a relocated line to Polson because of required trestle construction would make the operation of a branch line to Polson very questionable.

It is the company's plan to considerably enlarge the Polson division, doubling its present capacity, but the heads of the company are greatly concerned whether to proceed with approximately \$1,500,000 of expansion in Polson, in view of the possibility of greatly increased taxes and materially increased transportation costs on logs. Also, if the Northern Pacific does not maintain a branch line in Polson, the shipment of our product would be greatly impaired. Personally, I feel that the heads of our company will be inclined to delay any expansion of the Polson division until a decision is reached in regard to Senate bill 1226.

HOT SPRINGS, MONT., *November 27, 1959.*

Senator JAMES E. MURRAY,
*Senate Office Building,
Washington, D.C.*

MY DEAR SENATOR: The Federal development of a multi-purpose dam at Paradise, Mont., is very definitely an act of progress, and it is difficult for me to believe any individual, particularly western Montanans being honestly opposed to its construction.

I have practiced my profession in western Montana for nearly 39 years, and I do, most sincerely, urge the passage of the aforementioned bill S. 1226.

Respectfully yours,

DR. L. T. VAN HORNE.

ST. IGNATIUS, MONT., *December 12, 1959.*

Senator JAMES E. MURRAY,
Chairman, Senate Committee on Interior.

GENTLEMEN: When timbered public lands were converted into national forests and the principles of conservation and sustained yield applied in their management by our Federal Government, there was much resentment and loud cries of "socialism." Now we see that this action stopped rapid waste and destruction and assured perpetuation and steady improvement.

It provided fair rules for orderly use of the forests and public access roads whereby private and competitive enterprise might get at them and prosper in their proper use.

If the national forests had not been established, with Federal control, how much timber would there be now? How many private sawmills would be in operation in Missoula today? Would the remaining lumber business be free and competitive, or ruled arbitrarily by monopoly?

The policy of our American Government has always been to make use of public ownership in forests, land, and water to prevent monopoly, to promote individual home and farm ownership, to stimulate private business and industry, and to provide a framework within which all forms of genuinely free enterprise may function and grow. The threat to genuine private taxpaying enterprise is not from Government development of the rivers but from the tax-free, risk-free power companies, enjoying semigovernmental status, and their increasing ability to penetrate all levels of government, evade antimonopoly laws and deceive the public by posing as private enterprise.

Federal development of the public rivers, like Federal development of the public forests, has fostered and will continue to foster equal opportunity and free enterprise. In these fields public ownership and development has been the people's best protection against monopoly. Monopoly of our rivers quickly undercuts both freedom and prosperity.

The great multipurpose Federal dams, like the Federal forest access roads, are a means for full use of natural resources on fair terms to all. They are a guarantee that our rivers shall not be used to rob the many for the profit

of a few, to waste our river potential, to put dictatorial power into the hands of a few monopoly officials.

S. 1226 seems ideally drawn to do justice to all, including citizens unborn; to protect the people's liberties and promote their prosperity; to make us secure from tyranny from abroad and power monopoly at home.

Let us press for its enactment early in the next session of Congress.

Respectfully,

T. BEN WILLIAMSON.

RONAN, MONT., December 12, 1959.

Senator JAMES E. MURRAY,
Chairman, Senate Interior and Insular Affairs Committee.

GENTLEMEN: I am an enrolled member of the Confederated Tribes. I think the proposed Paradise-Knowles Dam will be an asset to my tribe and all of the people of Lake County. It will bring progress to the valley and its people.

The present system of power distribution does not encourage abundant use. After the first thousand kilowatt-hours, the price advances by 50 percent, which discourages use. Senate bill 1226 would make available here all of the power produced at site and the cost would be so low that it would attract industry and enable us to heat our homes with electricity.

Since I am in the real-estate business here I see the great increase in land values which would result. It would start population flowing into instead of out of this area and provide more taxable wealth to reduce the present tax burden.

Also, I believe strongly in competition and I am opposed to power monopoly.

Respectfully,

ANNA WEIVODA.

PARADISE, MONT., December 12, 1959.

We are taxpayers and homeowners in Sanders County for the past 20 years. We are opposed to the Knowles and Paradise Dams.

HERMAN WAGENIUS.
RUBY WAGENIUS.

PARADISE, MONT., December 7, 1959.

To Whom It May Concern:

My name is Delbert T. Wallin, a tie handler, at the Paradise tie-treating plant.

I am against any bill that wants to build Knowles or Paradise Dams.

I own my home in Paradise, but I do not have any property to sell to the Government for high prices, nor do I want to try to find another job at my age.

Sincerely,

D. T. WALLIN.

PARADISE, MONT., December 6, 1959.

HON. JAMES E. MURRAY,
Washington, D.C.

DEAR SENATOR MURRAY: I am a retired general foreman of the tie-treating plant in Paradise, Mont.

I have been a resident and property owner of Paradise for the past 50 years. This is my home and I want to continue to live here. To those people passing through this town, it is a wide place in the road, or a place to be dammed; to us it is home and a place for our children to live among towering mountains and green forests, the like of which are not to be found in any other place in our country.

The above are some of the lesser reasons that cause me to object very strenuously to your S. 1226, that proposes the Knowles-Paradise Dam project.

C. L. WILLCUTT.

PARADISE, MONT., December 11, 1959.

HON. JAMES E. MURRAY,
Chairman, U.S. Senate Interior and Insular Affairs Committee:

I take this opportunity to register my protest against the proposed Senate bill 1226, relating to the Knowles-Paradise Dam project.

I have lived in western Montana most of my life, and because our population is increasing, I know that we raise something besides jack rabbits and rattlesnakes.

There are several thousand acres of very good cultivated farmland in the near vicinity, and the farmers farming these acres have harvested good crops, year after year.

It is my wish that you use your vote to defeat bill S. 1226.

Yours very sincerely,

E. L. WILLCUTT, Jr.

PARADISE, MONT. *December 3, 1959.*

To Whom It May Concern:

We are opposed to either the Paradise Dam or the Knowles Dam because it will dispossess too many people and do more harm to the area than a series of smaller dams.

We believe that the damage to railroads and highways would be too great for the benefit received. Also the farm and other land covered would be a great loss to western Montana.

E. O. WILLCUTT.

Mrs. L. J. WILLCUTT.

PERMA, MONT., *December 10, 1959.*

Senator JAMES E. MURRAY.

DEAR MR. MURRAY: This is written as one Montanan to another. Naturally we are both interested in the welfare of the people of Montana. The word welfare, of course, means not only a matter of economics but also satisfaction of many other desires.

As a teacher in Sanders County I shall not be able to attend the hearing in Missoula but must resort to this means to discuss the matter. No doubt many people of western Montana have taken definite positions for or against a large dam in the general vicinity of Paradise (regardless of exact site) because of a personal concern. I am not in this category as, personally, I don't expect to be affected too much in any specific manner. I am concerned, however, as to the net effect on the general public in this area and the State as a whole.

As we know, by now, western Montana has stabilized its manner of living, its economies, its use of natural resources, modes of travel, its markets and distribution systems, and its recreational habits and facilities to a degree far beyond predepression days. The question then becomes apparent: Is it wise to attempt any large and sudden change? The people of western Montana that have made it what it is, like what they have. They enjoy the wide open spaces that are not common to industrial areas. They are reluctant to have to change radically their trade and travel habits, to give up their homes and start all over.

We have here already two dams on the Clark Fork and the deer, in attempting to cross the lakes on the ice are breaking through and drowning by the hundreds. We have also seen a great change in the big game situation in the areas of construction caused by the large influx of worker-hunters. Western Montanans have a good way of life. Is it necessary that this be taken from them in the name of "progress"? Is it wise to try to correct some evils by a cure that creates more and worse evils?

Certain persons in this part of the State feel that they will be helped financially by this proposed project. But is it fair that their get-rich-quick schemes have to be so brutal to so many thousands of others who have equal rights.

As Montanans, you and I, let us look to see what Montana gains and loses by such a project. Does flood control on the Columbia help Montana? Does the loss of our enviable position as one of the best stream-fishing and hunting States help Montana? Does it help Montana to have thousands of people cut off from their normal market and trading centers? Does it help Montana to have a large portion of her productive farms and ranches under water? Does it help Montana to have a major bombing target placed in our midst?

My residence in Montana dates back to 1909. I have been in 51 of our 56 counties. I know Montana. I know Montanans. I love both the State and its people as no doubt you do also. Knowing and feeling what we do, how can we be so inconsiderate as to tell these people we are going to force on them something they don't like, don't want, and don't need?

In your capacity as Senator from Montana you have done a wonderful job. I have been one of your most staunch supporters. Do not make me change my opinion of you. Many of my good Democrat friends feel disillusioned. Some are even considering voting Republican because of your previous stand on this question. Don't let us down.

Sincerely,

EDWIN M. YORK.

COLUMBIA FALLS, MONT., December 11, 1959.

Mr. RAY M. LOMAN,
Ronan, Mont.

DEAR MR. LOMAN: Much is being said and written today about the Paradise-Knowles Dam. Let me quote what Edmund Burke said: "The people never give up their liberties but under some delusion." There are a lot of deluded people advocating the proposal for a high Government-constructed dam at one or the other sites mentioned above.

Ever since 1933 this Nation has been overrun with a subversive element infiltrating themselves into every segment of our society as well as into the various branches of our Government exerting their influence in an attempt to overthrow or change our form of Government. The American people have undergone a thorough job of brainwashing. A large percentage of us have been deluded into thinking that all good emanates from the Federal Government.

Our loss of liberty and independence is untold, yet many of us are gullible enough to believe all this propaganda that is being fed us.

I was present at the hearing held in Hot Springs in 1948 but have been unable to attend any of the hearings in the area since. I would like to attend the one scheduled for next Tuesday in Missoula but on account of age and physical condition it will be impossible.

Some of the statements by Paul Harlow are only half-truths and falsehoods. I am personally acquainted with him and have known him more or less for the last 18 or 20 years. I would say that he is being financed by some subversive force using him as a stooge or tool to advance and promote their dirty plot or conspiracy.

In our political setup there are too many who are the stooges of the conspirators. If this hearing turns out like the last one held in Missoula it will appear like the cards are stacked against the opponents of Paradise Dam when a comparatively few that were there to enter their protests were given an opportunity to testify.

I only hope that the Missoula Chamber of Commerce appeal for all members of Senator Murray's committee to be present will result in at least a majority of them being there to get firsthand evidence of what the people of the region are demanding.

Another thing that cannot be overlooked is, take a look at the Columbia River from the Pacific Ocean to the Hungry Horse Dam and what have you. A practical monopoly of one of Montana's natural resources, water; another aspect of it is a monopoly on the damsites. Because of these two monopolies the Federal Government practically has a monopoly on the generation of electricity, and a monopoly is what the conspirators want.

Americans need an awakening from the delusion they are in lest we lose our heritage of liberty and independence.

Yours for a better America in which to live,

JOHN M. YORK.

MOIESE, MONT., December 8, 1959.

Senator JAMES E. MURRAY,
U.S. Senate Interior and Insular Affairs Committee.

DEAR SIR: I wish to go on record as opposing your bill, S. 1226.

I reside in the Moiese Valley and am a farmer and the local rural mail carrier. This bill, if passed, would deprive me of all means of supporting myself and family and flood us out of our home.

I sincerely believe this bill will be rejected by a majority of the people directly affected.

Sincerely,

H. A. ZINI.
K. ESTHER ZINI.

×

4. In 8¹³: K76 pt. 2 ✓
KNOWLES-PARADISE DAM PROJECT

HEARINGS
BEFORE THE
SUBCOMMITTEE ON
IRRIGATION AND RECLAMATION
OF THE
COMMITTEE ON
INTERIOR AND INSULAR AFFAIRS
UNITED STATES SENATE
EIGHTY-SIXTH CONGRESS
SECOND SESSION

ON
S. 1226

A BILL TO PROVIDE FOR THE CONSTRUCTION OF THE KNOWLES DAM PROJECT ON THE FLATHEAD RIVER IN THE STATE OF MONTANA FOR THE PROTECTION AND DEVELOPMENT OF THE FLATHEAD AND COLUMBIA RIVER BASINS; TO PROMOTE THE AGRICULTURAL AND INDUSTRIAL DEVELOPMENT PRIMARILY OF THE STATE OF MONTANA, BUT ALSO OF DOWNSTREAM AREAS; TO IMPROVE NAVIGABILITY AND TO ASSIST FLOOD CONTROL ON THE FLATHEAD AND COLUMBIA RIVERS; TO PROVIDE FOR THE NATIONAL DEFENSE AND WELFARE BY ADVANCING THE INTEGRATED COMPREHENSIVE DEVELOPMENT OF THE WATER RESOURCES OF THE PACIFIC NORTHWEST, AND FOR RELATED PURPOSES

MARCH 29, 1960

PART 2

Printed for the use of the Committee on Interior and Insular Affairs



KNOWLES-PARADISE DAM PROJECT

HEARINGS
BEFORE THE
SUBCOMMITTEE ON
IRRIGATION AND RECLAMATION
OF THE
COMMITTEE ON
INTERIOR AND INSULAR AFFAIRS
UNITED STATES SENATE
EIGHTY-SIXTH CONGRESS
SECOND SESSION

ON

S. 1226

A BILL TO PROVIDE FOR THE CONSTRUCTION OF THE KNOWLES DAM PROJECT ON THE FLATHEAD RIVER IN THE STATE OF MONTANA FOR THE PROTECTION AND DEVELOPMENT OF THE FLATHEAD AND COLUMBIA RIVER BASINS; TO PROMOTE THE AGRICULTURAL AND INDUSTRIAL DEVELOPMENT PRIMARILY OF THE STATE OF MONTANA, BUT ALSO OF DOWNSTREAM AREAS; TO IMPROVE NAVIGABILITY AND TO ASSIST FLOOD CONTROL ON THE FLATHEAD AND COLUMBIA RIVERS; TO PROVIDE FOR THE NATIONAL DEFENSE AND WELFARE BY ADVANCING THE INTEGRATED COMPREHENSIVE DEVELOPMENT OF THE WATER RESOURCES OF THE PACIFIC NORTHWEST, AND FOR RELATED PURPOSES

MARCH 29, 1960

PART 2

Printed for the use of the Committee on Interior and Insular Affairs

UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON : 1960

COMMITTEE ON INTERIOR AND INSULAR AFFAIRS

JAMES E. MURRAY, Montana, *Chairman*

CLINTON P. ANDERSON, New Mexico

HENRY M. JACKSON, Washington

JOSEPH C. O'MAHONEY, Wyoming

ALAN BIBLE, Nevada

JOHN A. CARROLL, Colorado

FRANK CHURCH, Idaho

ERNEST GRUENING, Alaska

FRANK E. MOSS, Utah

OREN E. LONG, Hawaii

HALL S. LUSK, Oregon

HENRY DWORSHAK, Idaho

THOMAS H. KUCHEL, California

BARRY GOLDWATER, Arizona

GORDON ALLOTT, Colorado

THOS. E. MARTIN, Iowa

HIRAM L. FONG, Hawaii

RICHARD L. CALLAGHAN, *Staff Director*

STEWART FRENCH, *Chief Counsel*

NELL D. MCSHERRY, *Clerk*

M. C. MAPES, Jr., *Special Counsel*

SUBCOMMITTEE ON IRRIGATION AND RECLAMATION

CLINTON P. ANDERSON, New Mexico, *Chairman*

HENRY M. JACKSON, Washington

JOSEPH C. O'MAHONEY, Wyoming

ALAN BIBLE, Nevada

THOMAS H. KUCHEL, California

GORDON ALLOTT, Colorado

CONTENTS

	Page
S. 1226.....	492
Agency reports:	
Army.....	499
Budget Bureau.....	498
Comptroller General.....	497
Interior.....	502

STATEMENTS

Butcher, Devereux, editor, National Wildlands News.....	541
Dellwo, Dennis A., Charlo, Mont.....	594
Florance, Reynolds G., Director, Division of Legislative Reporting and Liaison, Forest Service, Department of Agriculture.....	559
Itchner, Lt. Gen. E. C., Chief of Engineers, Corps of Engineers; accompanied by Lt. Col. James A. Vivian, Assistant Chief of Civil Works for Northwestern Divisions; Henry C. C. Weinkauff, Chief, Project Development Branch, Civil Works Division, Office, Chief of Engineers; Milton A. Pearl, Chief, Legislative Services Branch, Real Estate Division, Office, Chief of Engineers; and Bernard J. Witzig, Project Development Branch, Civil Works Division, Office, Chief of Engineers.....	526
Mansfield, Hon. Mike, a U.S. Senator from the State of Montana.....	519
McBroom, James T., Chief, Branch of River Basin Studies, Bureau of Sport Fisheries and Wildlife, Fish and Wildlife Service; and W. E. Ackerknecht, Assistant Chief, Branch of Wildlife Studies.....	555
McDonald, Angus, Coordinator of Legislative Services, National Farmers Union.....	562
McDonald, Walter W., and Walter H. Morigeau, members of the tribal council; and John W. Cragun, lawyer, representing the Confederated Salish and Kootenai Tribes of the Flathead Reservation, Mont.....	576
Metcalf, Hon. Lee, a Representative in Congress from the State of Montana.....	522
Murray, Hon. James E., a U.S. Senator from the State of Montana.....	505
National Audubon Society.....	596
Nelson, H. T., regional director, Boise, Idaho; accompanied by Don Burnett, Chief, Division of Project, Bureau of Reclamation.....	542
Radin, Alex, general manager, American Public Power Association.....	573
Sykes, Robert C., president, District No. 1, Montana State Wildlife Federation.....	590

COMMUNICATIONS

Beebe, J. F., Hot Springs, Mont.: Letter, dated December 11, 1960, to Paul Harlow, Thompson Falls, Mont.....	599
Billings, Gretchen: Letter, dated February 23, 1960, to Senator Murray...	508
Boesch, Mark, Hamilton, Mont.: Letter, dated February 24, 1960, to Senator Murray.....	510
Buchheister, Carl W., president, National Audubon Society: Letter, dated March 24, 1960, to Senator Anderson.....	596
Heinz, Richard P., Polson, Mont.: Letter, dated February 19, 1960, to Senator Murray.....	595
Hirst, Franklin S., Pleasantville, N.J.: Letter, dated March 28, 1960, to Senator Anderson.....	599
Itchner, Lt. Gen. E. C.: Letter, dated April 8, 1960, to Senator Murray, containing a revision in the amount of energy attributable to the Knowles project.....	589
Logan, Frances D., secretary, the Committee for Paradise Dam: Letter, dated March 3, 1960, to Senator Murray.....	512

	Page
Moore, Dr. T. B. and R. H. Gatiss, Kalispell, Mont.: Letter, dated March 24, 1960, to Senator Murray	593
Murray, Senator James E.: Sykes, Robert C.: Letter to, dated—	
March 21, 1960	592
April 12, 1960	592
Shaw, William, business representative, Lumber & Sawmill Workers Local No. 2581: Letter, dated December 15, 1960, to Senator Murray ..	599
Sykes, Robert C., Kalispell, Mont.: Murray, Senator James E.: Letter to, dated—	
March 9, 1960, containing a statement	590
March 15, 1960	591
March 30, 1960	592
Weller, Robert C., executive secretary, Montana District Council, Lumber & Sawmill Workers' Unions: Letter, dated December 15, 1960, to Senator Murray, containing a statement	597

ADDITIONAL INFORMATION

Background of the Problem of the Indians of the Flathead Reservation and Their Damsites	580
Contribution of Hungry Horse Dam, speech of Senator Murray, in the Congressional Record, March 21, 1960	516
"Most St. Regis Residents Favor Dam That Would Mean Relocation of Town," article from the Great Falls, Mont., Tribune, November 15, 1960	505
"Plan to Save the Railroads," article in Fortune magazine, August 1958 ..	565

KNOWLES-PARADISE DAM PROJECT

TUESDAY, MARCH 29, 1960

U.S. SENATE,
SUBCOMMITTEE ON IRRIGATION AND RECLAMATION
OF THE COMMITTEE ON INTERIOR AND INSULAR AFFAIRS,
Washington, D.C.

The subcommittee met at 10 a.m., pursuant to call, in room 3110, New Senate Office Building, Hon. Clinton P. Anderson (chairman of the subcommittee) presiding.

Present: Senators Anderson, Jackson, Bible, Gruening, Moss, Kuchel, and Allott.

Also present: Goodrich Lineweaver, professional staff member, and M. C. Mapes, Jr., special counsel.

The CHAIRMAN (Senator Anderson). The subcommittee will please be in order.

We will hear first from the able and distinguished chairman of the full committee, Senator Murray.

Senator Murray, do you have any statement on this bill?

Chairman MURRAY. I will have a very brief statement later.

The CHAIRMAN. Members of the committee, the hearing this morning is on S. 1226, to authorize construction by the Secretary of the Interior of the Knowles Dam project on the Flathead River in Montana.

An alternative which could be built under the terms of the bill, if the Secretary should so recommend after further study, is the Paradise Dam project on the Clark Fork River below where the Flathead River flows into it.

Hearings were held on S. 1226 in Missoula, Mont., on December 15, 1959, by Senator Gruening, with the assistance of Senator Martin. Those hearings, which have been printed, were intended primarily to permit the people of the Northwest to express their opinions concerning this legislation.

Today's session is primarily for the purpose of obtaining the views of the Federal agencies with an interest in or information about the subject of the bill. Thus, we expect to hear from the Corps of Engineers, the Department of the Interior, and the Forest Service of the Department of Agriculture.

Reports on S. 1226 have been received from the Bureau of the Budget, the Corps of Engineers, and the Department of the Interior, and will be included in today's record immediately after the text of the bill.

The report of the Comptroller General is included in the printed record of the December 15 hearing. Today's record will also include additional statements, material, and correspondence received from interested parties in the Northwest since the previous hearing.

The projects affected by this legislation involve substantial natural resources, including up to one-quarter of the total hydroelectric potential of the State of Montana, and the largest potential water storage site in the Columbia River Basin which can be built without major international problems or serious effects on anadromous fisheries resources.

We hope that the information provided by today's witnesses will assist the committee in making a wise recommendation as to the most effective use of these great resources.

It is also hoped that this hearing will contribute to the clarification of the U.S. position in the current negotiations with Canada regarding the best cooperative development of, and equitable sharing of the benefits from, the resources of the Columbia River above and below the border.

Time this forenoon limits the hearing on this bill to 2 hours, primarily to hear spokesmen for the executive agencies. Should time not permit hearing other witnesses, opportunity will be given them to appear.

Any statements anyone desires to submit will be incorporated in the record.

We will insert the bill and the agency reports at this point in the record.

(The bill and reports referred to follow :)

[S. 1226, 86th Cong., 1st sess.]

A BILL To provide for the construction of the Knowles Dam project on the Flathead River in the State of Montana for the protection and development of the Flathead and Columbia River Basins; to promote the agricultural and industrial development primarily of the State of Montana, but also of downstream areas; to improve navigability and to assist flood control on the Flathead and Columbia Rivers; to provide for the national defense and welfare by advancing the integrated comprehensive development of the water resources of the Pacific Northwest, and for related purposes

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Knowles Dam Project Act".

SEC. 2. (a) For the purposes of promoting the irrigation and reclamation of arid lands, controlling floods, improving navigation, conserving wildlife, providing recreation, generating electric energy, and encouraging economic development, primarily in the State of Montana but also in the rest of the Pacific Northwest, the Secretary of the Interior is authorized and directed to proceed as soon as practicable with the construction, operation and maintenance of the Knowles Dam project (including facilities for generating electric energy) in the Clark Fork-Flathead River Basin, substantially in accordance with the physical plans set out in the Columbia River Review Report of the Corps of Engineers completed during the Eighty-sixth Congress: *Provided*, That should subsequent investigation prior to the commencement of such construction indicate the desirability of removing the project location to any site between two miles upstream and eight miles downstream from the site recommended in such review report, the alteration of such plans to conform to such removal, upon the recommendation of the Secretary of the Interior, is further authorized.

(b) As used in this Act—

(1) The term "project" means the Knowles Dam, the appurtenant reservoir, power facilities and administrative offices, and the land area adjacent to the reservoir which may be necessary to carrying out the purposes of this Act;

(2) The term "project area" means the area of the State of Montana in the vicinity of and directly affected by the project;

(3) The term "Board" means the Knowles Project Area Planning Board created by section 4(a) of this Act;

(4) The term "Administrator" means the Knowles Project Administrator appointed in accordance with section 4(b) of this Act;

(5) The term "fund" means the Knowles project area planning and development fund created by section 5 of this Act;

(6) The term "Secretary" means the Secretary of the Interior; and

(7) The term "local government" includes all tax-supported bodies, including school districts, irrigation districts and improvement districts.

Sec. 3. (a) In order to promote the economic growth and development of the State of Montana and of downstream areas, and to facilitate the most efficient use of the hydroelectric energy from the project, the project power facilities shall be integrated into the Federal Columbia River power system, and the full amount of at-site firm power production attributable to the project, or such portion thereof as is required from time to time to meet loads under contracts made within this reservation, shall be made available for use within the State of Montana.

(b) Electric energy available from the project not required for the operation thereof or for associated irrigation projects shall be marketed by the Secretary in accordance with the laws relating to the disposition of power from Bonneville Dam, except that all revenues allocable to irrigation projects authorized herein, or hereafter in accordance with this Act, shall be disposed of in the manner provided by the Federal reclamation laws, and the radius from the project power plant within which the "at-site" power rate is available shall be thirty-five miles.

(c) The Secretary is authorized and directed to supply and transmit from the Columbia River power system the necessary construction power for the project.

Sec. 4. (a) There is hereby created the Knowles Project Area Planning Board to come into existence at the time the first planning funds are appropriated for planning of the project under this Act and to continue until completion of the project or so long after such completion as its duties may require, but not in excess of two years. The Board shall consist of the following officials or their designated representatives: The Governor, the president of the Senate and the speaker of the House of Representatives of the State of Montana, a representative of the Montana State Planning Board, the Regional Director of the Bureau of Reclamation (region 1), the Regional Director of the Bureau of Sport Fisheries and Wildlife (region 1), the Regional Director of the National Park Service (region 2), the Regional Forester of the Forest Service (region 1), the Area Director of the Bureau of Indian Affairs (Billings Area Office), the Division Engineer of the Corps of Engineers (North Pacific Division), a qualified representative of each of the three counties in which land will be inundated by the project, to be selected by the county commissioners of each such county, and one outstanding conservationist from the State of Montana, to be chosen by the above members of the Board at its first official meeting. The members of the Board shall receive no compensation for their services except a subsistence allowance of \$15 per diem for time actually spent in traveling and performing their duties as members of the Board, and reimbursement of actual transportation expenses including an allowance for use of privately owned automobiles at a rate not to exceed 9 cents per mile. The Board shall be responsible for planning and assisting the readjustment and development of the project area for the maximum benefit of the people of the State of Montana and especially the people of the project area, including but not limited to the relocation of communities and community facilities, the resettlement of residents, the development of recreation facilities, and the preservation and development of fish and wildlife resources within the project area. To the fullest extent possible the Board shall coordinate its functions with the engineering and construction planning of the Bureau of Reclamation and the activities of the Secretary under section 3(c) of this Act. It shall meet upon call of the Administrator or at such times and places as may be determined by the Board at any meeting thereof.

(b) There is hereby created the position of Knowles Project Administrator, to commence with and continue during the existence of the Planning Board. The Administrator shall be the administrative officer of the Board and shall be appointed by the President with the advice and consent of the Senate for a term of four years. He shall receive a salary at the rate of \$15,000 a year and shall be reimbursed for expenses (including travel and subsistence when away from his office) incurred in the performance of his duties under this Act. The Administrator shall not, during his continuance in office, be engaged in any other business, but shall devote himself to the performance of the duties of his office and shall maintain his office in the vicinity of the project. He shall work closely with the Governor and public officials of the State of Montana and any subdivisions thereof which may be affected by the project, and with the interested

agencies of the United States, and shall make an annual report of operations of the Board to the Secretary at the end of each fiscal year. He shall be responsible to the Board for expenditures from the fund in carrying out the purposes for which it is created and shall make expenditures from the fund only after their approval by the Board. He shall cause to be kept at all times complete and accurate books of accounts for the fund, which the Comptroller General of the United States shall audit with personnel of his selection at such times as he shall determine, but not less frequently than once each fiscal year.

SEC. 5. The Secretary is hereby authorized and directed to allocate from funds appropriated for the project sums not to exceed a total of \$5,000,000 for a fund to be known as the Knowles project area planning and development fund. The fund shall be made available during the existence of the Board. The Secretary shall allocate to the fund the sum of \$100,000 from the first year's planning appropriation and such amount from subsequent appropriations as shall be necessary and shall be requested by the Administrator, up to the full amount authorized for it. The general purpose of the fund shall be to facilitate and promote the readjustment and development of the project area for the maximum benefit and enjoyment of the people of the State of Montana and the Nation, and particularly for the benefit of the people of the project area. It is specifically intended and shall be used to defray the expenses of the Board and the expenses and salaries of the Administrator and such staff members as he may appoint with the approval of the Board, in an amount not to exceed \$150,000 in any one fiscal year, and to provide for the establishment of recreation and park facilities, fish hatcheries, wildlife refuges, and any similar developments which the Administrator, with the advice of the State of Montana and the Board may find necessary and desirable to implement the enjoyment, utility and beautification of the project area. No part of the fund shall be used to satisfy any claim or claims against the Government (except claims submitted under title 28, United States Code, section 2672, arising from acts or omissions of employees of the Administrator or the Board) or to defray any direct expense arising out of or resulting from the construction of the project, except the functions of the Administrator and the Board and except as provided herein. But it is the intention of the Congress that the Board and the Administrator shall have wide discretion as to the proper means and most beneficial manner of carrying out the general purposes of the fund stated above.

SEC. 6. With the approval of the Board and the Secretary, the Administrator is authorized and directed to purchase or condemn and to improve suitable land in the immediate area of the Knowles Dam for a new townsite to replace the portions of those towns which will be flooded by the project, and to plat and provide for the appraisal of lots in such new townsite and to exchange and convey such lots at their appraised value in full or part payment for property to be flooded or acquired for the construction and operation of the project as requested by the displaced owners of such property, and to sell for not less than their appraised valuation any lots not used for such exchanges, except that no substantial number of such lots shall be conveyed to any single individual, corporation, or association other than to local governmental agencies as herein provided until the requirements of all individuals desiring such exchanges have been met. The Administrator shall assist the development of the new town and any communities relocated as a result of construction at the project in any reasonable manner, and in furtherance of this function is authorized to convey to the local governmental agencies involved in such development, without compensation, such land within the townsite as may be required for the establishment and operation of municipal offices and facilities, including schools, parks and such utilities as may be authorized by its articles or bylaws. Title to land acquired by the Administrator under this section shall be taken in the name of the United States of America and payment therefor shall be made by the Secretary after his approval of such purchases, from funds appropriated for the project. Expenditures under this section shall not be charged to the fund.

SEC. 7. (a) The Secretary is authorized and directed to negotiate a contract with the Confederated Salish and Kootenai Tribes of the Flathead Indian Reservation in Montana providing for (1) the conveyance to the United States of all right, title, and interest of such Indians in and to all tribal, allotted, assigned, and inherited lands required for carrying out the purposes of this Act, (2) the payment of just compensation for lands and improvements and interests therein so conveyed, and (3) final settlement of all claims of whatever nature arising out of the construction of the project.

(b) No contract negotiated under subsection (a) shall take effect unless or until it has been (1) ratified by Act of Congress, and (2) ratified in writing by a majority of the adult members of the Confederated Salish and Kootenai Tribes within nine months after the date of enactment of the Act ratifying such contract.

(c) In the event that the contract negotiated in accordance with subsection (a) fails to obtain ratification within the period provided in subsection (b), just compensation shall be judicially determined by proceedings instituted by the United States in the United States district court for the district within which the lands in question are situated.

Sec. 8. (a) The Secretary is authorized to proceed in accordance with the provisions of this Act and applicable Federal reclamation laws to make a study and report to Congress on irrigable arid lands in the Clark Fork-Flathead Basin in the State of Montana which can be benefited by financial and other assistance from the project, including existing projects which may be benefited by the provision of supplementary water thereto, including in such report the construction costs of the proposed irrigation works allocable to various functions, the operation and maintenance costs of such works, the amount of construction costs allocable to irrigation which the irrigators may reasonably be expected to repay, the amount of such costs in excess of that which the irrigators can repay which the Secretary proposes shall be recovered from power revenues, and a complete financial analysis of the repayment program, together with all other data reasonably required to enable the Congress to pass upon the economic feasibility of the proposed works. Except as provided in subsection (c) of this section, any such reclamation works proposed under this study may be undertaken only after the Secretary has submitted a report and findings thereon under this subsection and section 9(a) of the Reclamation Project Act of 1939 (53 Stat. 1187) and only if the works so reported on are thereafter specifically authorized by Act of Congress.

(b) All construction costs of any reclamation works subsequently authorized and undertaken by the Secretary in accordance with subsection (a) of this section which are determined to be beyond the ability of the irrigators to repay as provided in said subsection (a) shall be charged to and paid from net revenues derived from the sale of power from the project which are over and beyond those required to amortize the power investment in the project and to return interest on the unamortized balance thereof. Power and energy required for irrigation pumping for the irrigation developments referred to in this section shall be made available by the Secretary from the project powerplant and other Federal plants interconnected therewith at rates not to exceed the cost of such power and energy from the project, taking into account all costs of the project which are determined by the Secretary under the provisions of the Federal reclamation laws to be properly allocable to such irrigation pumping power and energy.

(c) The Secretary is authorized and directed to make a study of the potential irrigation developments within the Clark Fork-Flathead Basin to determine which of such developments may be best adapted to the replacement of the farmland to be acquired by the Government in connection with the construction of the project, such study to commence at the time of the commencement of detailed planning of the project and to be financed from the funds appropriated for such planning. To the extent determined by him to be necessary to provide farms for all farm families displaced by the project at least equivalent to those from which they have been displaced, the Secretary is further authorized and directed to acquire and provide irrigation facilities for lands best adapted to the purpose. Such construction shall be commenced at the time of the commencement of the construction of the project or as soon thereafter as necessary to permit timely relocation on such newly irrigated lands of the families displaced at the time of their displacement. The portion of the cost of such construction which is allocated to irrigation but is beyond the ability of the water users to repay shall be charged to and paid from net revenues derived by the Secretary from his sale of power from the project, which are over and beyond the amounts required to amortize the power investment therein and to return interest on the unamortized balance of said investment.

(d) Notwithstanding any other provision of law, exclusive preference to purchase the lands brought under irrigation in accordance with subsection (c) of this section shall be given for such term as the Secretary shall determine to be reasonable to persons whose lands are required in connection with the con-

struction, operation and maintenance of the project, and any such persons, whether tenants or owners, whose lands are so acquired shall be given such notice and opportunity to exercise such preferential right as the Secretary shall determine to be reasonable, with first priority to displaced farm families and owners. The Secretary is authorized and directed to reimburse the owners and tenants of lands acquired for the construction, operation and maintenance of the project for the reasonable expenses incurred by them in the process and as a direct result of moving themselves, their families, and their personal property from said lands, which reimbursement shall be in addition to, but not in duplication of, any payments otherwise authorized by law: *Provided*, That the total of such reimbursement to the owner and tenants of any parcel of land shall not exceed 25 per centum of its fair value as determined by the Secretary. Reimbursement under this subsection shall be made only upon application therefor, supported by an itemized statement of expenses incurred, submitted to the Secretary within one year from the date upon which the premises involved are vacated.

Sec. 9. In allocating the cost of the project to its various functions under section 9(b) of the Reclamation Project Act of 1939, the Secretary shall allocate to flood control such part of the total cost of the project as is justified by an average annual value of flood control storage in the Columbia River Basin of one dollar per acre-foot. Operation of the reservoir for flood control purposes shall be in accordance with the regulations prescribed by the Secretary of the Army pursuant to section 7 of the Flood Control Act of 1944 (58 Stat. 890).

Sec. 10. In order to render financial assistance to the local governments which may lose tax revenues due to the acquisition by the Secretary or Administrator for the purposes of this Act, of land and properties in the project area which were previously subject to local taxation, the Secretary is authorized and directed to pay to such local governments, from funds appropriated for the construction of the project during such construction and from power revenues after the commencement of generation at the project, sums equal to the average of the taxes received from such lands and properties during the five years preceding their actual removal from the tax rolls as a result of acquisition by the Secretary, such payments to any such local government to continue until the value of the taxable property within its jurisdiction shall equal 125 per centum of such taxable value at the time of such acquisition: *Provided*, That such payments are intended to hold said local governments harmless for net tax revenues lost as a result of the construction of the project and shall therefore be reduced by the amount of taxes paid upon any such properties which have been relocated or replaced at the expense of the Federal Government, and by the amount of any reduction in the cost of local governmental services resulting from the construction of the project.

Sec. 11. The Secretary is authorized and directed to pay from funds appropriated for the project the fair costs of relocation of, or to purchase for their fair value, improvements whose removal is necessitated by the construction of the project, including railroad facilities, highways, oil and gas pipelines, telephone, telegraph and electric power facilities, and other public or private improvements, whether located on lands of the United States or the State of Montana or on private lands in the project area. Payments may be made pursuant to this Act to persons, firms or corporations who shall establish to the satisfaction of the Secretary that they are entitled to receive the same, and who shall sign vouchers and contracts for such payments upon forms approved by the Secretary: *Provided*, That the amounts so paid shall not exceed the reasonable value of the improvements purchased or relocated, as the case may be.

Sec. 12. In acquiring land required for the construction or operation of the project the Secretary is authorized and directed to purchase or condemn such areas around the Knowles Dam Reservoir in excess of land actually to be inundated by the reservoir as may in his judgment and the judgment of the Board be necessary and desirable to provide initial public ownership of sufficient lakeshore frontage and adequate adjacent areas for recreation, fish and wildlife preservation, parks and other public facilities and facilities for the development of water-borne commerce, and to assure adequate public access to the reservoir and optimum public beneficial use and enjoyment of the project area. The Secretary is further authorized to deed to the State of Montana or local governments, in consideration of their maintenance for public purposes, such areas around the reservoir as may be agreed between the Board, the governmental unit involved, and the Secretary to be desirable in the furtherance of such public purposes. At any time after completion of the project when in the opinion of

the Secretary adequate land has been reserved or conveyed for such public purposes, the Secretary may, by competitive bids publicly announced, sell or lease any additional lands acquired under this Act which in his judgment are no longer necessary in carrying out the purposes of this Act.

SEC. 13. Title to all lands acquired by the Secretary or the Administrator for the purposes of this Act shall be taken in the name of the United States of America. In purchasing such lands the Secretary and the Administrator are directed to pay the fair value thereof. In determining what constitutes fair value the standard shall be that the owner of any such property shall be at least as well off economically after such transaction as before it. Any liens held by the United States against land acquired for the purposes of this Act are hereby forgiven as of the effective date of such acquisition.

SEC. 14. In constructing, operating and maintaining the project and the associated reclamation works herein authorized, the Secretary shall be governed by the Federal reclamation laws (Act of June 17, 1902, 32 Stat. 388, and Acts amendatory thereof or supplementary thereto), except as otherwise herein provided. The Secretary and the Administrator shall have such powers as may be necessary or appropriate for the exercise of the powers herein specifically conferred upon them and for carrying out the purposes of this Act.

SEC. 15. There are authorized to be appropriated such sums as may be necessary to carry out the purposes of this Act.

COMPTROLLER GENERAL OF THE UNITED STATES,
Washington, May 29, 1959.

HON. JAMES E. MURRAY,
Chairman, Committee on Interior and Insular Affairs,
U.S. Senate.

DEAR MR. CHAIRMAN: Further reference is made to your letter of April 29, 1959, requesting our report on S. 1226 to provide for the construction of the Knowles Dam project on the Flathead River in the State of Montana and for related purposes.

The proposed legislation would authorize the Secretary of the Interior to construct, operate, and maintain the Knowles Dam project, including facilities for generating electric energy, in the Clark Fork-Flathead River Basin, Mont., in accordance with the physical plans contained in the "Columbia River Review Report of the Corps of Engineers" prepared by its North Pacific Division, June 1958, pursuant to a resolution of the Senate Committee on Public Works dated July 28, 1955.

Section 3(c) authorizes and directs the Secretary to supply and transmit from the Columbia River power system the necessary construction power needed for the project. In this connection it is suggested that clarifying language be added to require the Knowles project fund to pay the Columbia River power system currently for power received upon billing by the power marketing agent; such payments to be considered a construction cost of the project.

Section 4(a) establishes the Knowles Project Area Planning Board to be comprised of 14 members; 8 of these are to be officials or residents of the State, who, it should be noted, when voting as a bloc, have sufficient numerical strength to control the activities of the Board. We note further, that no method is prescribed for selection of the representative of the Montana State Planning Board who is to be a member of the Knowles Project Area Planning Board. We recommend that consideration be given to amending the bill to specify the method of selection.

Section 4(b) specifically requires the Comptroller General to audit the books of account of the Knowles project area planning and development fund established by section 5 of the bill "not less frequently than once each fiscal year." Since the Budget and Accounting Act of 1921 (31 U.S.C. 53) as implemented by the Accounting and Auditing Act of 1950 (31 U.S.C. 87) already imposes upon the General Accounting Office the duty of auditing Federal fund accounts such as here involved, it is suggested that the last sentence of section 4(b) be eliminated from the bill.

Section 5 authorizes the establishment of the Knowles project area planning and development fund in an amount not to exceed \$5 million to defray administrative expenses, to "facilitate and promote the readjustment and development of the project area," and to provide, without limitation, such recreation and park facilities, fish hatcheries, wildlife refuges, and similar developments which the

Administrator, at his discretion, may find necessary and desirable. We believe it advisable that some type of limitation or restraint be placed upon this wide authority and recommend a revision of the third sentence of the section along the following lines:

"The Secretary shall allocate to the fund the sum of \$100,000 from the first year's planning appropriation and such amounts from subsequent appropriations as he shall deem necessary and as shall be requested by the Administrator with the approval of the Board, up to the full amount authorized for it."

Section 6 authorizes the Administrator to replace towns flooded out of existence by the Knowles project at Government expense and to sell any lands acquired therefor in excess of specified uses. No provision is made for disposition or use of the receipts from such sales. It appears desirable that the section clearly stipulate a disposition for such funds, which otherwise appear to be for covering into the Treasury as miscellaneous receipts.

Section 8 authorizes the Secretary to make a study and report to the Congress on irrigable lands within the basin which can be benefited by assistance from the project and provides certain cost criteria to be included in said report to enable the Congress to pass upon the economic feasibility of any proposed works. No provision is made for allocation of the costs incurred by the Board in conducting this study. We believe that investigation expenses of this type should be included in cost allocations and repayment requirements.

Section 9 of the bill provides that the Secretary shall allocate to flood control such part of the total cost of the project as is justified by an annual value of flood control storage in the Columbia River Basin of \$1 per acre-foot. We have no information which would enable us to make a determination of the reasonableness of this formula. We believe that allocations of multiple-purpose project costs to purposes including flood control should be made on the basis of the estimated benefit to each purpose involved.

Section 10 covers payments in lieu of taxes on acquired property with a provision that such payments shall continue until the value of the taxable property within the jurisdiction of any local government affected shall equal 125 percent of the taxable value within such jurisdiction at the time of acquisition. Value has been defined in many ways. To avoid possible misinterpretation, we suggest that the word "assessed" be inserted before the word "value" on line 20, page 15, and the word "taxable" be eliminated from the subsequent line.

Section 13 provides for Federal acquisition of lands needed for project purposes at a fair value which shall leave the owner of the property at least as well off economically after the transaction as before it. The apparent intent of the section is to save the owner from economic loss as the result of a Federal taking of his land for the purposes of the project. We believe, therefore, that the words "at least" should be eliminated from the text since they would apparently give the Administrator authority to allow such owners perhaps unwarranted profits in land transactions with respect to the project. This section would also forgive any liens held by the United States against land acquired for the purposes of the bill. We have no information as to the reason such liens should not be set off against the purchase price of the lands concerned.

Sincerely yours,

JOSEPH CAMPBELL,
Comptroller General of the United States.

EXECUTIVE OFFICE OF THE PRESIDENT,
BUREAU OF THE BUDGET,
Washington, D.C., February 24, 1960.

HON. JAMES E. MURRAY,
*Chairman, Committee on Interior and Insular Affairs,
U.S. Senate, Washington, D.C.*

MY DEAR MR. CHAIRMAN: This is in reply to your letter of March 3, 1959, requesting the views of the Bureau of the Budget on S. 1226, a bill to provide for the construction of the Knowles Dam project on the Flathead River in the State of Montana for the protection and development of the Flathead and Columbia River Basins; to promote the agricultural and industrial development primarily of the State of Montana, but also of downstream areas; to improve navigability and to assist flood control on the Flathead and Columbia Rivers; to provide for the national defense and welfare by advancing the integrated comprehensive development of the water resources of the Pacific Northwest, and for related purposes.

This bill, if enacted, would authorize the construction of the Knowles Dam project in Montana by the Department of the Interior. The bill would also (a) create a new organization called the Knowles Project Area Planning Board vested with broad planning functions in the project area, (b) establish a Knowles project area planning and development fund to finance the expenses of the proposed Board from Federal appropriations for the project, and (c) establish special standards for the project with respect to fish and wildlife and recreational development, flood control benefits, payments in lieu of taxes, and compensation for project lands.

The review report of the Chief of Engineers on the Columbia River Basin, which will include consideration of the Knowles Dam project, has not been received by the Bureau of the Budget under the procedures set forth in Executive Order 9384. Until this report is received from the Department of the Army, together with the views and comments of the concerned States and Federal agencies, the Bureau of the Budget has no basis for appraising the merits of the project.

Accordingly, the Bureau of the Budget recommends that consideration of legislation to authorize the Knowles Dam project be deferred until a project report is submitted to the Congress in accordance with established procedures.

Additionally, the provisions of S. 1226 referred to in (a) through (c) above involve major questions of overall public policy with respect to Federal-State relationships in water resources development activities and the organization, financing, and evaluation of Federal water resources programs. These provisions would constitute departures from customary legislative authorizations for water resources projects in accordance with existing laws and procedure. So far as we are aware there are no special circumstances in this case which require the unusual financial and organizational arrangements proposed by the bill.

Sincerely yours,

PHILLIP S. HUGHES,
Assistant Director for Legislative Reference.

DEPARTMENT OF THE ARMY,
Washington, D.C., February 26, 1960.

HON. JAMES E. MURRAY,
Chairman, Committee on Interior and Insular Affairs,
U.S. Senate.

DEAR MR. CHAIRMAN: Reference is made to your request for the views of the Department of the Army with respect to S. 1226, 86th Congress, a bill to provide for the construction of the Knowles Dam project on the Flathead River in the State of Montana for the protection and development of the Flathead and Columbia River Basins; to promote the agricultural and industrial development primarily of the State of Montana, but also of downstream areas; to improve navigability and to assist flood control on the Flathead and Columbia Rivers; to provide for the national defense and welfare by advancing the integrated comprehensive development of the water resources of the Pacific Northwest, and for related purposes.

S. 1226 would authorize the Secretary of the Interior to construct and operate the Knowles Dam project substantially in accordance with the physical plans set out in the Columbia River Review Report of the Corps of Engineers completed during the 86th Congress, for the purposes of irrigation and reclamation, flood control, navigation, wildlife conservation, recreation, power, and encouraging economic development.

The Department of the Army is giving consideration to the development of the Clark Fork-Flathead Basins in a current review investigation of the main control plan for the Columbia River Basin being made pursuant to a resolution adopted by the Senate Committee on Public Works. In his proposed report, the Chief of Engineers has recommended authorization of the Knowles project. He has recently transmitted his proposed report to the interested States and Federal agencies for comment as required by the provisions of section 1 of the Flood Control Act approved December 22, 1944 (58 Stat. 887). It is suggested that your committee may desire to defer consideration of authorizing legislation pending submission of the review report to Congress.

At such time as you deem it appropriate to give consideration to authorizing legislation, it is also suggested that the committee may wish to consider a general bill which would provide for authorization of the project and for construc-

tion and operation in accordance with existing laws and procedures, as is customary for projects of this type. In any event, the enclosed comments with respect to certain special provisions in the proposed bill are furnished for your consideration at that time.

The estimated cost of the Knowles project, based on studies made in connection with the Columbia River Review Report and on 1958 prices, is \$234,910,000 with an initial installation of four main generating units and provisions for four additional units.

The Bureau of the Budget advises that there is no objection to the submission of this report.

Sincerely yours,

WILBER M. BRUCKER,
Secretary of the Army.

COMMENTS ON SPECIAL PROVISIONS IN S. 1226, TO PROVIDE FOR THE CONSTRUCTION OF THE KNOWLES DAM PROJECT ON THE FLATHEAD RIVER IN THE STATE OF MONTANA FOR THE PROTECTION AND DEVELOPMENT OF THE FLATHEAD AND COLUMBIA RIVER BASINS; TO PROMOTE THE AGRICULTURAL AND INDUSTRIAL DEVELOPMENT PRIMARILY OF THE STATE OF MONTANA, BUT ALSO OF DOWNSTREAM AREAS; TO IMPROVE NAVIGABILITY AND TO ASSIST FLOOD CONTROL ON THE FLATHEAD AND COLUMBIA RIVERS; TO PROVIDE FOR THE NATIONAL DEFENSE AND WELFARE BY ADVANCING THE INTEGRATED COMPREHENSIVE DEVELOPMENT OF THE WATER RESOURCES OF THE PACIFIC NORTHWEST, AND FOR RELATED PURPOSES

The proviso in section 2(a) of S. 1226 would, upon recommendation of the Secretary of the Interior, permit moving the project location to any site between 2 miles upstream and 8 miles downstream from the site recommended in the review report if subsequent investigation prior to commencement of construction indicates that this would be desirable. The downstream location would include the Paradise Dam site located on the Clark Fork 4 miles downstream from the mouth of the Flathead River. Since the Paradise project has been estimated to cost about \$492 million, or \$257 million more than the Knowles project, the committee may wish to consider whether the unusually broad discretionary power which would be authorized by the proviso in section 2(a) should be retained in the bill.

Section 4(a) of S. 1226 would create a Knowles Project Area Planning Board, the principal function of which would be to plan and to assist in the readjustment and development of the project area, including the relocation of communities and community facilities, the resettlement of residents, the development of recreation facilities, and the preservation and development of fish and wildlife resources. With respect to the creation of the Board, it is not believed that such a specialized organization would be necessary since the Department of the Interior (as well as the Department of the Army) has in the area an organization which is experienced in handling similar activities at comparable projects.

Section 4(a) of the bill would provide broad general authority to the Knowles Project Area Planning Board with respect to the development of recreation facilities and preservation and development of fish and wildlife resources within the project area. Section 12 of the bill would authorize and direct the Secretary of the Interior to purchase or condemn such areas around the Knowles Dam Reservoir in excess of land actually to be inundated by the reservoir as may, in his judgment and the judgment of the Board, be necessary and desirable in the interests of recreation, fish and wildlife preservation, parks, and other public facilities and facilities for the development of waterborne commerce, and to assure adequate public access to the reservoir and enjoyment of the project area. The provisions concerning fish and wildlife go beyond the latest expression of congressional policies expressed in Public Law 85-624 which prescribes the procedures to be followed in considering fish and wildlife matters. For example, section 3(c) of that act provides that before properties are acquired for wildlife conservation, the probable extent of such acquisition shall be set forth, along with other data necessary for project authorization, in a report submitted to the Congress, or in the case of a project previously authorized, no such properties shall be acquired unless specifically authorized by Congress. The Department considers that the policies and procedures specified in Public Law 85-624 should not be superseded by the provisions of sections 4(a) and 12 of the bill, and as a general principle, that the other provisions contemplated should be authorized only pursuant to detailed studies and report to Congress showing costs to be incurred and justification of the proposed improvements.

The Department also considers that it would be preferable in the case of recreation to await the results of the study being undertaken by the Outdoor Recreation Resources Review Commission being accomplished in accordance with the act of June 28, 1958 (72 Stat. 238). The foregoing objectives could be accomplished by deleting section 12 of the bill; inserting the word "and" after the word "facilities" in line 25, page 5; and deleting the part of the sentence on lines 1, 2, and 3, page 6, after the word "residents."

Section 9 of the bill provides that flood control storage in the project shall be evaluated for cost allocation purposes on the basis of an average annual value of flood control storage in the Columbia River Basin of \$1 per acre-foot. It is considered desirable that, rather than using a basinwide unit value of storage, the proposed legislation should provide that the flood control benefits of the project shall be estimated by the Chief of Engineers to provide a basis for cost allocation.

The Secretary of the Army and the Chief of Engineers have long been concerned with the problem of individuals and communities affected by water resource development projects and the attainment of procedures that will assist them to make necessary adjustments that will lessen the impact of the projects. It is recognized that provisions in sections 6, 8, 10, 11, 12, and 13 are designed to assist both the local communities and former owners and tenants dislocated by the project. However, it has been the experience of this Department that the problems involved occur, to some extent, in all acquisitions by the United States and are not confined to this type project.

With respect to the plight of former owners and tenants, it is recognized that just compensation as determined by the courts for the taking of private property for public use does not always fully compensate owners and tenants for all of their losses. However, we believe that it would be in the national interest not to continue the piecemeal modification of procedures but that rather there should be created a commission charged with no other responsibility than the study of the adequacy of compensation in all Federal land acquisitions. The Department of the Army, on behalf of the Department of Defense, by letter dated August 21, 1959, implementing the aforementioned position, advised the chairmen of the Committee on Public Works, House of Representatives, that it favored enactment of H.R. 1066, 86th Congress, a bill to establish a commission to study the adequacy of compensation for real property acquired by the United States, which would accomplish that general purpose. Should the committee determine that the impact of the project to be authorized by S. 1226 is such that special consideration must be given immediately to these problems, without awaiting an overall study, it is suggested that consideration be given to the following specific factors in the bill:

1. The proposal to authorize the acquisition of a new townsite (lines 23-25, p. 8; and lines 1-3, p. 9) would provide greater assistance than is presently being provided for towns flooded by other projects.

2. The proposed exchange of lots in the new townsite for property being acquired for the project (lines 3-8, p. 9) represents a new concept. There is a deep-seated tradition in our law to assess only money damages rather than to provide for replacement in kind for land taken.

3. The provision in lines 8 to 14 of page 9, for the sale of lots not used in exchanges, is also a new concept in that it indicates a basic authorization for the acquisition of land not actually required for the project. Furthermore, lands not required for project purposes can be disposed of under existing legislation through the General Services Administration.

4. The authorization in lines 14 to 22 of page 9, for assistance in the development of the town and for the conveyance of land without compensation for establishment of municipal offices and facilities does not take into consideration the scope of existing facilities being displaced and would appear to be in addition to the provision for relocation of such existing facilities under section 11, page 16, and the authority to transfer land for public purposes under section 12, page 17.

5. The exclusive preference in lines 21 to 25, page 13, and lines 1 to 6, page 14, for displaced owners and tenants to purchase irrigated lands, insofar as owners of town lots are concerned, appears to be an additional preference to be given them in the purchase of lots at a new townsite.

6. The provision in lines 6 to 21, page 14, for reimbursement of certain moving costs is similar to the authority of the military departments and also to the authority granted the Secretary of Interior by the act of May 29, 1958 (72 Stat. 152), which would appear to make the provision unnecessary in S. 1226.

7. The language in lines 7-21, page 16, provides broader authority for the relocation of improvements than that recently granted to the Chief of Engineers in projects of this Department under the act of July 3, 1958 (72 Stat. 297, 303). The authority of the Chief of Engineers is limited to relocate, protect, alter, or modify any structure or facility owned by an agency of Government being utilized for a governmental purpose. Moreover, the provisions of S. 1226 would not only apply to private utilities but is so broad as to possibly include privately owned improvements other than utilities or other similar facilities.

8. The standard proposed to determine fair value (line 25, p. 17; and lines 1-3, p. 18) represents the ideal concept that an owner shall be "made whole." However, in the absence of legislative guidelines to assist in establishing rules for evaluation thereof, this Department would be unable to establish rules for its field offices to make uniform determinations that an owner is "at least as well off economically" after Government acquisition of his property as he was before. This would also involve payment for many factors not now considered compensable under court interpretations of just compensation and would, in the final analysis, require judicial-type determinations, some of which may be speculative, as to how one piece of property was fitted into the estate of an owner or tenant who held other interests.

DEPARTMENT OF THE INTERIOR,
OFFICE OF THE SECRETARY,
Washington, D.C., March 23, 1960.

Hon JAMES E. MURRAY,
Chairman, Committee on Interior and Insular Affairs,
U.S. Senate, Washington, D.C.

DEAR SENATOR MURRAY: This responds to your request for the views of this Department on S. 1226, a bill to provide for the construction of the Knowles Dam project on the Flathead River in the State of Montana for the protection and development of the Flathead and Columbia River Basins; to promote the agricultural and industrial development primarily of the State of Montana, but also of downstream areas; to improve navigability and to assist flood control on the Flathead and Columbia Rivers; to provide for the national defense and welfare by advancing the integrated comprehensive development of the water resources of the Pacific Northwest, and for related purposes.

The provisions of the bill would authorize the Secretary of the Interior to construct, operate, and maintain the Knowles Dam project, "substantially in accordance with the plans set out in the Columbia River Review Report of the Corps of Engineers completed during the Eighty-sixth Congress * * *." Provision is made for establishing the project site at any point between 2 miles upstream and 8 miles downstream from Knowles Dam site selected by the Corps of Engineers, if further investigation should indicate that construction at such other site would be desirable. This would permit the possible construction of the project at the site of the proposed Paradise Dam.

The Knowles Dam project has been recommended for construction by the North Pacific division engineer, Corps of Engineers, in his report of June 1958 entitled "Water Resource Development of the Columbia River Basin," which is a review of House Document 531, 81st Congress. A proposed report of the Chief of Engineers has not yet been submitted to us for review in accordance with the provisions of the Flood Control Act of 1944 and interagency agreements. Since we have not made a review of any such proposed report of the Chief of Engineers, we are unable to present any views with regard to the engineering and economic feasibility of the proposed project and, therefore, we are unable to make any recommendations at this time with regard to the enactment of legislation which would authorize construction of the project.

We call your particular attention to the fact that this is a Corps of Engineers proposed project and we know of no compelling reason why the Bureau of Reclamation should be the construction agency, if the project is authorized. The Bureau of Reclamation has not participated in the formulation of the Corps' plan for this dam. Of course, if it should be the will of the Congress, we would have no objection to assignment of this responsibility to the Bureau of Reclamation.

However, there are a number of provisions of the bill on which we can now comment. Sections 4 and 5, for example, would provide for a Knowles Project Area Planning Board which would apparently be an autonomous body "respon-

sible for planning and assisting the readjustment and development of the project area * * * including but not limited to the relocation of communities and community facilities, the resettlement of residents, the development of recreation facilities, and the preservation and development of fish and wildlife resources within the project area." The Board would be composed of 4 representatives (3 of them ex officio) of the State of Montana, 6 designated Federal officials, 3 representatives of the counties immediately affected by construction of Knowles Dam, and a 14th member (an "outstanding conservationist from the State of Montana") to be selected by the other 13. The Board would have at its disposal \$5 million to be paid over to it by this Department as requested by the Board.

It seems to us that these provisions are so defective in a number of important respects that they should either be very substantially revised or dropped completely:

(1) It is very doubtful that the Congress can properly presume to cast the duty of serving on a Federal Board upon designated State officials. Since, in addition, the bill makes no provision for substitute members in case any of these officials or their representatives refuses or is unable to take on these duties and does not specify what proportion of the Board shall constitute a quorum, the Board might find itself unable to function if any of these ex officio members declined to serve.

(2) The provision for appointment of three members by local county commissioners is probably in conflict with the constitutional provision (art. II, sec. 2, clause 2) that "the Congress may by law vest the Appointment of such inferior Officers, as they think proper, in the President alone, in the Courts of Law, or in the Heads of Departments," but that otherwise the appointment shall be made by the President with the advice and consent of the Senate.

(3) A large majority of the Board would be composed of State and Federal officials already holding positions which, while they are of great importance, are no guarantee of competence to carry out the functions which the Board would be given.

(4) The Federal officials designated in the bill are all subordinate to Cabinet officers, but the bill would apparently require them to act as independent agents. This, we believe, is undesirable and introduces confusion into the Executive establishment.

(5) The financing of the Board's activities by giving it a blank check (subject only to a top limit of \$5 million) against this Department's appropriations is quite unacceptable. If the Board is to be created at all, it should be responsible both financially and otherwise to the President, the Congress, and the head of the construction agency.

(6) Virtually all of the proposed functions of the Board are within fields of activity of existing State and Federal agencies, either directly or as incidents to their primary assignments. Although it may be that an advisory board would be desirable and helpful in achieving coordination of the activities of these various agencies, there is no need of which we are aware for creating a special body to carry out these tasks in the case of this project.

Section 7 of the bill deals with the acquisition of Indian lands needed for the project. While this Department would, of course, in the event of project authorization seek to obtain a fair and equitable contract with the tribes, to rule out, as the bill seems to, the usual methods of acquisition in the event that a mutually satisfactory contract cannot be negotiated seems unwise. The provision for the institution of a suit for just compensation in case the negotiated contract fails of ratification as provided in the bill fails to spell out how the Government will have acquired the use of the land. We suggest the necessity of a revision of this section in at least these respects.

The Flathead Indian Tribal Council is opposed to the grant of authority to condemn tribal land (Resolution No. 1017, Mar. 11, 1959). The desirability of locating a project in a place that requires the use of Indian lands is a question that should be considered if Congress authorizes the project.

Subsections (c) and (d) of section 8 of the bill deal with providing irrigated lands as a substitute for farmlands inundated by the reservoir. The principle of these subsections is not objectionable but their terms are, we believe, too rigid to be incorporated in law in the absence of a reasonably clear understanding with respect both to the cost of providing the necessary works and to the demand there may be for them. Our experience with a somewhat similar provision in connection with the Canyon Ferry unit of the Missouri River Basin project suggests caution in the water. In addition, we point out that

these subsections, by giving a preference right both to owners and to tenants (p. 14, lines 2 and 3), may in fact require more replacement lands than is intended.

With respect to the preference right of the Flathead Indian Tribe to purchase substitute irrigable lands in the Clark Fork-Flathead Basin for the tribal lands acquired by the Government, the bill should clearly indicate that the limitation of reclamation law on furnishing of project water to no more than 160 irrigable acres in single ownership will not apply to lands purchased by the tribe pursuant to this preference right as long as the lands remain tribal lands.

The latter part of the same subsection (d) contains provisions for payment of moving expenses of owners and tenants of lands acquired for the project. The act of May 29, 1958 (Public Law 85-433) grants this Department general authority to make such payments in an amount not to exceed 25 per centum of the value of the lands acquired for project purposes. We suggest the desirability of handling payments for moving expenses under the general authority rather than provisions peculiar to individual project proposals, except in the case of Indians who would be displaced. The Federal Government has a special trust responsibility toward the Indians and their property which would include, in the case where the Government decides to take their lands in connection with a lawful activity, a responsibility with respect to the relocation of displaced Indians. In recognition of this special relationship, we believe the bill should be amended further to authorize the Secretary of the Interior to pay to the displaced Indians the reasonable cost of relocating and reestablishing themselves under circumstances comparable to those from which they would be displaced, without regard to the limitation contained in the act of May 29, 1958, supra, on the amount of such payments.

The provisions of section 10, which deal with payments in lieu of taxes, are open to question on several scores, including the requirement that payments shall continue "until the value of the taxable property within its (i.e., any local government's) jurisdiction shall equal 125 per centum of such taxable value at the time of such acquisition" and the fact that they do not take into account payments made under existing law such as those to school districts by the Department of Health, Education, and Welfare.

Section 13 proposes to rewrite the fair market value standard on the basis of which land acquisition by Federal agencies ordinarily proceeds by substituting "the standard * * * that the owners of any such property shall be at least as well off economically after such transaction as before it." It leaves unclear whether this new standard is applicable only to negotiated purchases or whether it is also applicable to condemnation actions. In either event, we suggest the undesirability of thus tampering with established and, as far as we are aware, generally satisfactory practice. Such tampering is especially uncalled for if provision, whether in the exact form called for by the bill or in some other form, is made for providing substitute irrigated lands for persons who are displaced.

Section 13 also provides that, upon acquisition of land acquired for the project, all liens against it held by the United States shall be "forgiven." The effect of this could be duplicate payments to the landowner—he being paid the fair market value of his land plus forgiveness of Federal liens.

We believe that the provisions of section 9 should be clarified with respect to the allocation of costs to all project purposes and that it should be modified so as not to require that the allocation for flood control purposes be computed on the basis of evaluating the average annual value of flood control storage at \$1 per acre-foot. While this figure for convenience is frequently used for illustrative purposes in the Columbia River Basin area, it ought not be frozen in authorizing legislation.

The reservation of "the full amount of at-site firm power production attributable to the project" for use in Montana, which section 3(a) proposes, when taken together with the preference customer provisions of the Bonneville Project Act, which would otherwise be made applicable by section 3(b) to the sale of power generated at Knowles Dam, will result in certain problems in administration, and we should be reluctant to see this type of provision enacted. The provision in section 3(b) with respect to the area in which the Bonneville Power Administration at-site rate shall apply is one that we believe should be eliminated.

In addition to the above comments, the following minor changes in the bill are suggested for your consideration:

(1) Page 2, line 3—change “conserving wildlife” to “providing for the conservation and development of fish and wildlife”.

(2) Page 4, lines 7-8—change “revenue allocable to irrigation projects” to “revenues required for assistance to irrigation projects”.

(3) Page 8, line 13—insert after the word “submitted” the words “and settled”.

(4) Page 16, line 24—change “purchase or condemn” to “reserve or acquire”.

(5) Page 17, lines 4 and 5—change “fish and wildlife preservation” to “conservation and development of fish and wildlife, including replacement of land areas and structures of the National Bison Range which would be inundated or rendered useless by the project”.

(6) Page 17, line 14—after the word “purposes” add the words “but this provision shall not be deemed to alter any requirements or procedures established under the provisions of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C., sec. 661, et seq.)”.

The Bureau of the Budget has advised that there would be no objection to the submission of this report to your committee.

Sincerely yours,

FRED G. AANDAHL,
Assistant Secretary of the Interior.

The CHAIRMAN. Senator Murray, we will hear from you now.

STATEMENT OF HON. JAMES E. MURRAY, A U.S. SENATOR FROM THE STATE OF MONTANA

Chairman MURRAY. Mr. Chairman, my colleagues will tell you of the need for this legislation and the ways in which S. 1226 is designed to benefit local citizens and develop fully our resources.

I want to report on the local support for the bill.

One of the most difficult problems in dam construction, as you well know, is working out satisfactory arrangements for people who will be flooded out. Usually, because they must completely change their way of life, they are the main opponents.

Yet the residents of St. Regis, who will have to relocate if Paradise Dam is built, are, nevertheless, overwhelmingly for the dam. An article about this support in the area appeared in the Great Falls Tribune, for November 15, 1959. The headline of the article, which I shall place in the record, states that:

Most St. Regis Residents Favor Dam That Would Mean Relocation of Town.

This information was obtained through a house-to-house poll, which showed that supporters of the project outnumber its opponents in a ratio of 5 to 2.

(The article referred to follows:)

[From the Great Falls (Mont.) Tribune, Nov. 15, 1959]

MOST ST. REGIS RESIDENTS FAVOR DAM THAT WOULD MEAN RELOCATION OF TOWN

RESIDENTS THINK DAM WOULD ATTRACT INDUSTRY

(By Ed Christopherson)

St. Regis is a quiet little unincorporated valley town of an estimated 400 population 75 miles west of Missoula on U.S. Highway 10. It has three bars, a State liquor store, five restaurants, four filling stations, two groceries, three motels, and a post office. On a typical day you can hear the hum of the Bennett Lumber Co. sawmill, which employs 75, the brisk ring of the school bell (enrollment of 210 in 12 grades), and the roar of trucks churning their way along the newly paved highway that doubles as Main Street.

Capt. John Mullan finished his famous roadway, which ran through here, in 1858. There was some lumbering, mining, and settling in the interim, but the town's next boom came in 1889, when the Northern Pacific Railway pushed a line through to Coeur d'Alene, Idaho. In 1908-9 the Milwaukee Railroad built through St. Regis, and the NP extended its line north, through the Clark Fork cutoff as a main line to Spokane.

The town boomed, with dozens of saloons, and a population in the thousands. The Anaconda Copper Mining Co. had its big sawmill at St. Regis. During prohibition, its side gulches made it a prominent holdout against the Federal enforcement men. But nothing seemed to last. Anaconda moved its sawmill to Bonner to get away from the problem of blue mold, which was spoiling its lumber.

Somehow St. Regis continued to exist on the few railroad jobs, some sawmilling, and as a way stop for those who passed through. As if endowed with a feeling of impermanence, there were no brick buildings in St. Regis.

"You can't exactly say our town's dying," one citizen said, "but its growth is awfully darned slow."

In addition to the highway and two railroads, two rivers—the Clark Fork of the Columbia and the St. Regis—run through or alongside this settlement.

These rivers may hold the key to St. Regis future—to a burst of solid prosperity that can last for a good 7 years, and to the ultimate moving of the town, new industry, and the flooding of its present site.

This will happen when the proposed Paradise Dam is built on the Clark Fork at a site some 30 miles downstream. The dam will bring 40 feet of water over Dilly's Kitchen and the post office—30-plus feet deep at the school.

Understandably this makes Paradise Dam a controversial subject in St. Regis. It's been so for more than a decade—since the Army Corps of Engineers held its first hearing on the subject in St. Regis in 1948. Since then, the intensity of the dam as a conversation item has risen and dropped according to the feeling of progress toward its accomplishment.

The topic of the dam became a hot one again last winter with the announcement of a hearing in Missoula by the Army Corps of Engineers on plans for water development projects—including Paradise Dam, and an alternative Knowles—to be built in the Columbia Basin. When a couple of guys claimed that all of St. Regis was against the Paradise Dam project, which would flood it, sawmill worker Kermit Welch decided to find out just how folks stood on the subject.

He took a poll. In doing so, he took two sheets of paper, one for the pro-Paradise Dam people to sign, one for the agingers. So as not to influence signers, he took the list to the most influential citizens last. By the time he was through, he'd visited every house in town. When he counted up the signatures, he had the surprising total of 128 in favor and only 51 against.

This better than 2½ to 1 majority in favor of the dam that will flood their town was a surprise both to Welch and most St. Regis residents.

"St. Regis today is a one-industry town in a one-industry county that's perpetually living in a mild depression," County Commissioner Mondell Bennett says. Bennett lives in St. Regis, where he's been in the conifer-seeding nursery business.

"Every summer tourists come through here and look at our attractive valley and the evergreen mountains that border it and exclaim at their beauty. 'But what do you do for a living?' they ask."

It's a good question. Outside the 2 or 3 months of tourist traffic in the summer, sawmilling and logging keep the town going. Economically it's bleak. "We don't even have much of a relief load," Commissioner Bennett says. "When out of a job, however much they like it here, folks just give up and move on."

This lack of enough employment to keep the town thriving is evident in the rents, which run from \$35 to \$60 a month. Recently one ex-St. Regis resident has been trying to sell a modern house which would go for \$12,000 anywhere. Currently the price is down to \$6,500, with no takers.

"The building of Paradise Dam looks like just about the only chance St. Regis and Mineral County ever have of amounting to anything," Mondell Bennett says. In his job on the top county governing board, he deals with the impossible problems of a county with a total of only \$3,750,000 taxable valuation, and a budget of \$750,000, 83 percent of which comes from taxes on the two railroads which run through the county.

"If one of the railroads pulled out, or if they combined lines, we'd have trouble continuing to exist as a governmental unit," Bennett says.

"All of this points up the need for a broader tax base. When I think of this problem, I can't help thinking of the way Hungry Horse Dam, the industry it brought, and the activity it touched off, helped boost Flathead County's taxable valuation \$37 million in 10 years. This means an increase in homes, industry, jobs—each year with a taxable valuation equal to our county's total valuation. Hungry Horse Dam, and the low-cost power it produced, brought this about.

"We feel that Paradise Dam would do the same thing for our area. Cheap power would bring in medium, or heavy industry the way it's done in Columbia Falls. It would help the lumber industry, too—providing a lake to float logs in that would run from below Kerr Dam in Polson to Superior. And just think of the recreation industry the new lake would bring. It'd be terrific. Just selling and servicing the boats on the new lake would support several new businesses."

What would happen to the present town of St. Regis?

In their preliminary surveys, the Army Engineers chose a 4-mile flat, a several-hundred-acre fertile benchland area about a mile east of the present town, and well above the proposed dam's high-water level.

Bennett points out that in similar situations, as in the construction of Garrison Dam in North Dakota, the engineers laid out a modern, well-planned community of Newtown to replace the settlements it flooded. Property and business owners were compensated, and given the privilege of moving their present structures or building new ones in the brandnew community.

Most St. Regis folks feel that in this way Paradise Dam will bring them a better life. The new town will be certainly free of many disadvantages of the present town—such as the problems of flooding basements in the spring, the way cesspools are dug next to wells, the lack of telephones (the half a dozen they have are the crank, stand, and holler variety that are antique collectors' items), and the feeling of impermanence that shows up in the town's buildings.

"It will be a good thing if they do flood this town," Ward Elder, foreman of the Bennett Lumber Co., who favors Paradise Dam, says. "The property lines are so mixed up in the present town that if the land ever were worth anything we'd all go broke suing each other to prove where our houses belonged."

Of course, everyone in St. Regis doesn't favor the building of Paradise Dam. Charles Bennett, owner of the C. G. Bennett Lumber Co., and father of probable Olympic qualifying skier Eleanor Bennett, opposes it.

So does Bill Sears, who came to St. Regis first in 1907, when you crossed the river by ferry, and the road to Wallace wasn't much more than a mud track. He worked as a logging contractor before they'd invented the word "gyppo," started a garage in 1922, the heyday of the Model T, and invested in other St. Regis businesses. Sears has earned a reputation as the local "wheel," and the guy who Governor Aronson stops in to see whenever he's in the vicinity.

"We're hoping against the dam," Sears says, "We don't want to lose this country. What would there be to relocate St. Regis for? If I could get my money, I'd sell out and leave. I wouldn't want to stay 10 minutes."

Chuck Dilly came to St. Regis as a "steel walker," a structural ironworker on a highway bridge project, a few years back. Today with his wife Babe, he runs "Dilly's Kitchen," which is typical of much local business.

"In the summer tourist season we work 16-hour-a-day shifts. In the winter, except when we're feeding a construction crew, things are dead. We think the dam would do a lot to bring us year-round business and a better town," Mrs. Dilly says.

Ernie Stathan, who runs a service station that shares a building with the post office, feels that "without the dam, and the new industry it brings, we'll never be any better off than we are now.

"Paradise is the logical place for the dam. It'll be one of the best things ever done for the State of Montana."

Chairman MURRAY. Paradise Dam was an issue in the 1958 campaign in Montana. All seven legislative candidates from the area who had testified in favor of Paradise Dam were elected. Of the seven candidates who had testified against Paradise Dam—at the Corps of Engineers hearing in Missoula—only two were elected.

Candidates who favored the dam carried the towns of Dixon, Perma, and Paradise, which would be flooded out by the dam.

All the businessmen in Dixon, and a majority of the residents of this town, signed a petition in support of S. 1226.

Additionally, three weekly newspapers in the immediate area of the two damsites conducted reader polls on Paradise Dam. These papers were the Plainsman, published at Plains by Don Coe; the Sentinel, published at Hot Springs by Dick Shirley, and the Sanders County Ledger, published at Thompson Falls, by K. A. Eggen-sperger.

The results of all three newspaper polls showed 2 to 1 support for Paradise Dam.

I do not deny that there is opposition to construction of either Paradise or Knowles Dam. Some of it is sincere. Some is motivated by the Montana Power Co., which likewise opposed Hungry Horse Dam, which Congress was nevertheless wise enough to authorize.

As chief sponsor of S. 1225, I shall welcome any suggestions for improvements which the subcommittee and witnesses make.

For instance, the Department of Interior and some conservation groups have suggested that replacement range should be provided for that portion of the National Bison Range at Moiese which would be flooded out. I agree.

In fact, some weeks ago I asked the Department of the Interior to investigate possibilities of adding to the Bison Range and also requested investigation of a possible additional bison range in eastern Montana.

With your permission, I would like to place pertinent correspondence in the hearing record, along with the Great Falls Tribune article I referred to, a speech I made recently on the Senate floor regarding S. 1226, and letters in support of the project from Mrs. Frances Logan, secretary, Committee for Paradise Dam, Charlo, Mont.; Mrs. Gretchen Billings, columnist for the People's Voice, Helena, Mont., and Mark Boesch, writer and conservation leader from Hamilton, Mont.

Mr. Chairman, as you well remember, our majority leader, Senator Lyndon Johnson, spoke about resource development in New Mexico last month, and at that time he said that the time to get on with the job of development is now.

Passage of S. 1226 and subsequent construction will be the best boost for industry, business, and farmers in recent Montana history, and the benefits will flow to many other States as well.

I urge the subcommittee to report the bill promptly and favorably. Thank you.

The CHAIRMAN. Thank you, Senator Murray.
(The material referred to follows:)

FEBRUARY 23, 1960.

Senator JAMES E. MURRAY,
Senate Interior Committee,
Senate Office Building,
Washington, D.C.

DEAR SENATOR MURRAY: I would like to go on record again for construction of Paradise Dam in western Montana.

My interest in western Montana is more than just casual. Harry and I have 40 acres near Thompson Falls; my grandparents homesteaded in Plains; my parents are retired there; I roamed the valley as a kid; I would like to be able to make a living there now. Harry was raised there and went to school in Thompson Falls.

Multipurpose dams such as this are vital to the welfare of the Nation and will contribute to the welfare of the region and the State.

I have great sympathy for those who will be physically disturbed by the dam, and would urge the greatest possible consideration for the interests of everyone involved.

I respect the opinions of those who are sincerely opposed to public construction of power dams, but I believe they are of limited vision and will ultimately be the cause of the destruction of the very things they feel they are fighting for.

Most of us recognize those people who are willing pawns of the private utilities; our concern is for those who fail to search deep enough for the truth and unwittingly fall prey to private utility propaganda.

We should be concerned with those who are going to have to be relocated in the damsite area; however, the same people who make great issue of this point also fought Hell's Canyon and not a living soul was disturbed there. Many of these same people would not oppose the private dams that would also dislocate many people and benefit but a few.

I would want to be assured that our Indian population, so badly treated for so many years, should receive just benefits from this project. It is ironical and not a little disturbing that the Flatheads align themselves with the very people who would disregard all Indian interests and impose termination on them at the earliest possible moment. The sacred Indian treaty can be safeguarded by proper negotiation, surely.

Even the Indians must surely realize that as the area prospers so they too will prosper. We must look for vision in Indian leadership so instead of fighting progress they will be reaching out to encourage it for the best interests of their people.

To those who came early to my beloved valley and can not bear to see it change and thus fight Paradise, my heart aches.

Can they not see our valley has ever been changing? Can they in truth say it has changed for the better? Can they deny the youth of today and tomorrow the chance to inhabit our valley—a chance that will never come in the declining economy of today?

When change, inexorable and foredoomed, removes the oldtimers from the valley, do they want to leave only the whispering pines and their silent gravestones?

I could not live in my valley because there was no way for us to support our family. My dad left the valley for the same reason. In his retirement he returned and now he also works for Paradise. His contribution to posterity and the possibility of more young people being able to stay in our beloved valley comes from a young heart—and remembering.

Paradise will bring great changes to our valley, but nothing is static. We are in a constant state of change. Democracy gives us the opportunity to have something to say about the form our change takes, and if as citizens of this wonderful country we are unable to be dynamic and visionary in the changes we make, we simply allow ourselves to become pawns of selfish, profit forces.

Neither can we be entirely selfish. Montana is nothing without the United States and our people have always worked unsparingly in behalf of the national interest. Why do we become suddenly provincial when the national interest is at stake now?

Not only is the national interest involved as a governmental unit but the national interest of all of the people in a personal way. As our population grows the search for recreation will become greater and greater. What finer contribution could Montana make to the general welfare than to provide a paradise of recreation and relaxation at Paradise?

As I drive, so often, down the valley these days, I think mostly of how wonderful it would be to share it. I look at the barren hills that could envelope a beautiful lake. I envision moonlight trips in recreation boats that would sail over the hills I tramped as a kid. I think of the beauty and the opportunity that would be there for the Nation's tired people.

I shall probably never be able to return to live in my beloved valley until, like my parents I return to retire, but perhaps in Paradise others could establish themselves. Just knowing a few more people might be able to live there would be a sharing that would make me glad.

We may never have any giant industries in our area. There are some who think we might and some who think we wouldn't. This is not of immediate importance to me. We could provide the power for industries nearby and if we cannot all live in the valley we could be close enough to come back often.

The great work Paradise would be doing for the State, region, and the Nation could make the hearts of every Montanan swell with pride—few States could make this contribution. Knowing the country needs what we can provide, we should be proud to be equal to the demands of our people and our country.

The giant pulsing turbines, generating tremendous units of power from Paradise can be added strength to the heartbeat of the Nation.

This is the heritage I would wish to leave in my beloved valley. When my bones rest among the whispering pines may there also be the swoosh of a great lake, the pulsating of giant turbines, the happy voices of people who seek whatever my valley has to offer.

Paradise in dam or any other form could offer no more.

Sincerely,

GRETCHEN G. BILLINGS.

HAMILTON, MONT., *February 24, 1960.*

HON. JAMES E. MURRAY,
U.S. Senate, Washington, D.C.

DEAR SENATOR MURRAY: In his letter to Congress accompanying the report of his Waterway Commission, President Theodore Roosevelt wrote:

"Every stream should be used to its utmost. No stream can be so used unless such use is planned far in advance. When such plans are met, we shall find that, instead of interfering, one use can often be made to assist another. Each river system, from its headwaters in the forest to its mouth on the coast, is a single unit and should be treated as such."

In adhering to this stated philosophy, President Roosevelt vetoed a number of bills which would have authorized private development of waterpower on some of our streams, and his successor in office, President Taft, did the same. After the second Roosevelt took office, multiple-purpose river development brought about the creation of TVA, and such dams as Grand Coulee and Bonneville on the Columbia. President Truman continued to adhere to this philosophy of maximum development of our river systems. One of the monuments of his administration is Hungry Horse Dam in northwest Montana, a Federal multiple-purpose impoundment on the Columbia River system.

The Eisenhower administration has had an entirely different philosophy. In advocating the "partnership" theory for the development of hydroelectric power, the present administration has brought about a serious problem in the Columbia Basin. The problem is how to provide the 27 million acre-feet of storage usable for power, flood control, irrigation, and navigation, which the Army Corps of Engineers has shown will be necessary by 1975. Because of the "partnership" theory, and the sacred cow of private enterprise, private power companies with limited means have been licensed to construct, not maximum, but minimum developments that are causing the Engineers to literally scrape the barrel for dam locations necessary to provide the 27 million acre-feet of storage.

Hells Canyon is an excellent example. This wild and rugged region of Idaho's Snake River country provides one of the best sites in America for the construction of a multi-purpose dam. The Army Engineers proposed such a dam, one that would cost \$373 million, which would be the highest in the country, which would provide 900,000 kilowatts of firm power, and which would provide 2,600,000 acre-feet of storage. Because of the nature of the country in which it would be built, recreation interests supported the Federal dam because it would do little damage to recreational resources, and because it would provide so much storage, which in turn would take the pressure off of other proposed damsites where construction would seriously impair recreational resources.

The Eisenhower administration, however, did not support the Federal multiple-purpose development of Hells Canyon. Instead, the Idaho Power Co. was given the green light to step in on the "partnership" basis. The result is that instead of one big dam in Hells Canyon, there will be three smaller dams, one in the canyon and two others farther upstream, privately owned by a private power company. And instead of providing maximum development, these three dams will furnish only 773,000 kilowatts of power and will store less than 2 million acre-feet of water. The American people will thus have lost approximately 127,000 kilowatts of needed power, plus over 600,000 acre-feet of needed storage for flood control, irrigation, and navigation. This loss will have to be made up elsewhere.

There are, fortunately, other good sites for major dams in the Columbia drainage which will go a long way toward providing that needed 27 million acre-feet of storage. The proposed Libby Dam on the Kootenay River in north-western Montana is another which the recreation enthusiasts do not oppose. Libby would be an even more important project than would have been the big Hells Canyon Dam. The Libby Dam would provide 3,900,000 acre-feet of storage, and 1 million kilowatts of power. It would also cost less, about \$275 million for the shorter 425-foot dam. It is understandable why the Engineers consider Libby such a good bargain, and so urge its construction. However, no private power company has yet expressed an interest in this site, and the Eisenhower administration has been dragging its feet on the project. The excuse offered is that because Libby would back water for 40 miles into Canada, it requires that country's approval. Canada, it should be noted, realizes the importance of maximum river development, and though it is a country with much less financial means than the United States, it has projected no less than nine dams for the Columbia River system in British Columbia. One of these is the giant Mica Creek project, 70 miles north of Revelstoke, which will cost \$400 million and which will have a reservoir capacity of no less than 15 million acre-feet. This 600-foot dam will be a real contribution to steady waterflow in the Columbia, and will, it is estimated, increase by more than 30 percent the industrial power output for the State of Washington.

Because of the flooding of Canadian lands, Libby will cost the United States about \$6 million in payments to Canada, mostly for the relocation of railroad line. This, of course, is peanuts. It would seem that the Eisenhower administration would be wise to extend the meaning of "partnership," by making Canada more of a partner in the development of such an important project, which, of course, affects both countries.

In 1957 the U.S. Army Corps of Engineers brought out its revised 308 report for the Columbia River. The main point of this review is that only through cooperation with Canada can this international river be controlled and developed to its utmost. Such cooperation could bring about, not a mere 27 million acre-feet of storage, but a maximum of 39.5 million acre-feet, giving us real security beyond 1975 in terms of flood control, hydroelectric power, irrigation, navigation, and so forth.

The real stumbling block for the Engineers has not been this needed cooperation from Canada, which has shown a willingness to cooperate, best evidenced by the St. Lawrence project, but rather, the Engineers must first sell the American people, and most especially their Government, on the necessity of us doing our share.

This brings us to another natural damsite on the Columbia system, that of Paradise, on the Clark's Fork River of Montana, near Missoula. Paradise would be second only to the proposed Nez Perce project on the Snake, in maximum water storage. Paradise would provide 4,080,000 acre-feet of usable storage, and, unlike Nez Perce, would not destroy any notable recreational resources. Nez Perce, though it would provide 800,000 acre-feet more storage than Paradise, would just about destroy the valuable Salmon River anadromous fish resource. Paradise Dam would provide 432,000 kilowatts of power, much of it to be made available for Montana, which badly needs the industry such power would attract.

Since 1948 we have been debating the pros and cons on the proposed Paradise Dam. You have seen the recreational interests come to the support of this vital project. You have seen the results of elections which have put local men into office who campaigned for Paradise Dam. You have seen the results of polls taken in the local areas to be affected, and which show a substantial majority in favor of this dam. You have seen who has been opposed: the vested interests who either want to maintain the status quo, or who stand to gain, so they think, by other, more limited developments. Now the bill which would authorize the construction of Paradise Dam is ready for Congress to act on. For the sake of our country and our country's future, I urge the passing of this bill. Then shall we return to that admirable philosophy first expounded by President Theodore Roosevelt so many years ago.

Sincerely yours,

MARK BOESCH.

THE COMMITTEE FOR PARADISE DAM,
Charlo, Mont., March 3, 1960.

Senator JAMES E. MURRAY,
Chairman, Senate Interior Committee,
Washington, D.C.

DEAR SENATOR MURRAY: Now that the report of the field hearing on S. 1226, held in Missoula on December 15 is available, may I make some further comments on it, on behalf of the Committee for Paradise Dam.

First, may I express our gratitude to Senators Gruening and Martin for the fair and efficient manner in which the hearing was conducted. This was recognized even by opponents of the bill. Their floor leader thanked both the Senators for their "consideration."

TESTIMONY INADVERTENTLY OMITTED

A section of the testimony submitted by the Committee for Paradise Dam, entitled "Limitation of River Development by Monopoly," was somehow omitted. May I furnish a copy with this letter and request that it be included in the record of the Washington, D.C., hearings on S. 1226 with this letter?

COMMENTS ON OPPOSITION TESTIMONY

On December 23 our committee filed supplementary testimony based on long-hand notes of the hearing. Now that the complete transcript is printed, may we make further comments, lest certain statements by one of the opposition's key witnesses, Mr. J. E. Corette, president of Montana Power Co., lacking refutation, be accepted as correct.

Mr. Corette's testimony purported to show that Paradise Dam would be an uneconomic project, representing, as he said, "a loss to the American taxpayer over the life of the project of almost \$1 billion." Although there is no need to discuss all of his testimony, we should like to point out that this part of it in fact constituted one of the strongest arguments for Paradise Dam which has yet been advanced. It also offers a complete rebuttal to those who have tried to stir up resentment against Paradise by appealing to State and local pride and provincialism with the slogan "Montana water for Montana people" and by making the claim that Paradise is a project designed to penalize Montana and provide great benefits to downstream States for which they will pay nothing. The Committee for Paradise Dam has, of course, always maintained that this project would make the best possible use of Montana's water for the benefit of Montana's citizens. Our position has now been emphasized by Mr. Corette's testimony, which shows that while the downstream States will receive benefits, they will pay very substantially for them, and that Montana will be a major beneficiary of these payments in lower electric bills. According to Mr. Corette's testimony, such benefits to Montana would amount to millions of dollars each year.

Mr. Corette, replacing Corps of Engineers statistics with figures which suited his purposes, testified that the annual costs of Paradise would be \$30,867,500, while the annual benefits, assuming the power were sold at present BPA rates, would be only \$11,516,000. Noting that these figures would involve an annual loss of \$19,351,000, Mr. Corette reached his conclusion of "almost \$1 billion loss" to the American taxpayer over the 50-year payout period of the project.

PARADISE DAM'S HIDDEN BONUS FOR MONTANA

It is obvious that Mr. Corette's conclusion is completely erroneous. The reason for this becomes apparent when we consider how incorrect are both his basic assumptions and his statistics. For instance, assuming for a moment that his statistics are acceptable, an analysis of his assumptions not only shows why his conclusion falls of its own weight, but also emphasizes the hidden bonus which Paradise can bring to Montana in the form of payments by the downstream States for the power they would receive.

You, as sponsor of S. 1226, are probably completely aware of this. Mr. Bessey mentioned it briefly, when he said " * * * the unit cost of power will be higher than it is in the system at large and you will get the benefits of the lower cost development on the system as a whole. * * *"¹ We apologize for not pointing this out more forcefully in our previous testimony.

¹ Knowles-Paradise hearing, Roy F. Bessey, p. 35.

Mr. Corette, using unsupported figures, argues that the annual power costs of Paradise would be over \$30 million. What he ignores is the basic requirement of the Bonneville Act that "Rate schedules shall be drawn having regard to the recovery of the cost of producing and transmitting such electric energy, including the amortization of the capital investment over a reasonable period of years."³ Thus, at the end of fiscal 1958 BPA was \$76,345,213 ahead of its repayment schedule, even though in 1958 it operated for the first time at a loss.⁴

In stating that the costs of Paradise would be borne by the taxpayers, Mr. Corette, like a very large number of opponents, who may have taken their cue from him, chose to ignore the fact that it is the ratepayers, not the taxpayers, who pay all power costs in the Bonneville system.

When we follow through with this analysis we discover the hidden bonus which Paradise Dam will bring to Montana. Mr. Corette's cost figure of some \$30 million, if it were correct, would require a price of about 6.7 mills per kilowatt-hour for Paradise Dam's 4½ billion kilowatt-hours annually—if this power were sold as a separate block of energy from Paradise as an isolated project. But of course this power will not be sold separately, because section 3(a) of S. 1226 requires that project power facilities shall be integrated into the Federal Columbia River power system, and as Mr. Corette testified: "The fact is that this power will be sold by Bonneville Power Administration at its regular rate which, according to its report, was 2.413 mills per kilowatt-hour in fiscal 1958."⁴

Actually, Mr. Corette's figure of 2.413 mills is probably too low. The cheap projects have already been built. With Paradise Dam and other higher cost projects being integrated into the Bonneville system along with the older, lower cost projects, the overall system rate will have to be raised to keep BPA's books in balance. For a few years it may operate at a deficit by living off its \$76 million surplus, but sooner or later its rates will have to be raised slightly, as is recognized by almost everyone in the Pacific Northwest.

What does this mean for Montana? First, it means that Paradise Dam constitutes a remarkable device to permit the electric consumers of Montana to participate in a substantial share of the benefits from the existing low-cost hydropower projects in the downstream States, such as Grand Coulee and Bonneville Dams. This is because the higher cost Paradise power will be diluted in the Federal system by this exceptionally low-cost power—and S. 1226 reserves to Montana the full amount of at-site power attributable to the project.

Another way of stating this is to say that a large proportion of the cost of Paradise Dam will be borne by the ratepayers in the downstream States. For instance, using for the moment the power rate of 6.7 mills required by Mr. Corette's annual power cost figure for Paradise of about \$30 million, let us assume that the BPA average rate has risen from 2.4 to 2.7 mills. According to House Document 531, in the phase C system Paradise would produce 312,000 kilowatts of prime power at site.⁵ Thus, under S. 1226, Montana would receive from the Bonneville system some 312,000 kilowatts of prime power at 2.7 mills, although according to Mr. Corette, Paradise power would cost 6.7 mills to produce. The difference of 4 mills would have to be met by the increase in rates throughout the Bonneville system.

Prime power is power available 8,760 hours of the year. Multiplying these figures we have: 312,000 times 8,760 times 4 mills equals \$10,932,480. What this means is that Bonneville's power consumers will be paying over \$10 million per year of the costs of producing power actually sold and used in Montana. Most of these customers live in the downstream States. This is Montana's "hidden bonus" in Paradise Dam.

Yet some of the opponents of Paradise have described this project as a giveaway of Montana's water resources to the downstream States. As Mr. Corette's figures demonstrate, it would actually mean a saving to Montana electric consumers of over \$10 million a year.

Whether we think of this as a contribution by the other States in the Northwest for the benefits they receive, or merely as a saving in power costs in Montana, the result is the same—the people of Montana would have \$10 million more to spend each year in building the State's economy or improving their standard of living.

³ Bonneville Project Act, 1937, sec. 7.

⁴ Bonneville Power Administration report, 1958, p. 1.

⁵ Knowles-Paradise hearing, J. E. Corette, p. 102.

⁶ H. Doc. 531, Mar. 20, 1950, Columbia River and Tributaries, p. 155.

While Mr. Corette's singular choice of figures brings out this difference in cost of power at Paradise in glaring contrast to that of the earlier low-cost projects, it is, of course, true that there will be a differential. Using the Corps' figures Mr. Bessey computes the cost of Paradise power at 4.5 mills based on relocation costs which he deems excessive. Reducing the costs, which he believes can probably be done, could reduce the unit cost of power by as much as 0.7 mill. The differential would then be 3.8 minus 2.7, or 1.1 mill per kilowatt-hour.* 312,000 times 8,760 times 1.1 equals \$3,006,432. This would still leave a "hidden bonus" of \$3,006,432.

We are grateful to Mr. Corette for emphasizing—no matter how unintentionally—this special benefit which S. 1226 and Paradise Dam will bring to Montana's people and to the State's economy.

LET'S USE A FAIR INTEREST RATE

We would also like to comment briefly on several other points covered by Mr. Corette's testimony. For instance to boost the annual cost of Paradise Dam and make it appear infeasible he used a rate of interest of 5 percent, which adds over \$9 million a year to the correct figure based on an interest rate of 2½ percent. This alone constitutes almost one third of Mr. Corette's \$30 million annual cost figure.

During only 4 years of Bonneville Power Administration's 21-year existence, has the average rate of interest on all marketable Federal securities exceeded 2.5 percent, and three of these years are 1957, 1958, and 1959, under the influence of the present administration's "tight money" policies. The actual figures are:

Average interest rate paid on all marketable securities

Fiscal year:	Percent	Fiscal year—Continued	Percent
1939-----	2.525	1951-----	1.981
1940-----	2.492	1952-----	2.051
1941-----	2.413	1953-----	2.207
1942-----	2.225	1954-----	2.043
1943-----	1.822	1955-----	2.079
1944-----	1.725	1956-----	2.427
1945-----	1.718	1957-----	2.707
1946-----	1.733	1958-----	2.546
1947-----	1.871	1959-----	2.891
1948-----	1.942		
1949-----	2.001	Average-----	2.161
1950-----	1.958		

Since the average rate of interest is well below 2.5 percent, it is apparent that BPA has been more than carrying its own weight as to its financing, and has actually been paying the Treasury a rate of interest higher than what the Treasury has had to pay to obtain the money it "loaned" to Bonneville. Under these circumstances it is difficult to understand why Mr. Corette thinks Paradise should be saddled with a 5 percent rate of interest, except that it seems to fit the purposes of his analysis—to make Paradise appear infeasible.

THE FLOOD CONTROL BENEFITS OF PARADISE

While thus increasing his cost estimates for Paradise Mr. Corette's testimony also cuts down its benefits by using only \$579,000 as its annual flood control contribution, although the Corps of Engineers' review report credits it with \$4,101,000 for flood control as part of the basic flood control plan. He does this by assuming the existence in the system, before Paradise, of projects in Canada which have been under discussion between the United States and Canada for years, and which have not even been planned in detail. He seems unaware that in doing this he is not only assuming we should ask Canada to provide benefits we are perfectly capable of supplying ourselves, but is also accepting an obligation by this country to pay Canada in perpetuity for flood control benefits which could be written off at U.S. projects like Paradise in 50 years. This may suit Mr. Corette's purposes, but it hardly seems to serve the economic interests of the United States.

* Knowles-Paradise hearings, Roy F. Bessey, p. 39.

† Rural Electric Minuteman, No. 24, Oct. 12, 1958, p. 2.

IS MONTANA A FOREIGN COUNTRY?

Mr. Corette further stated that the reservation to Montana of the full amount of the at-site prime power attributable to Paradise does not adequately protect the State's interests, arguing that the State should also receive not less than half the power generated downstream from releases from the project. His argument for this position is that this is what Canada is demanding as the price of agreement in the international negotiations on cooperative development of the Columbia River.

Apparently Mr. Corette believes that Montana's relationship to the United States is the same as Canada's, but there are some of us who just can't see Montana as a foreign country. We feel very much a part of the United States. The difference between Paradise and a project in Canada is almost too obvious to require comment. Canadian projects will be built by Canada in Canada to develop Canadian resources with Canadian money spent in Canada. Paradise will be built by the U.S. Government in Montana to develop a national resource with funds appropriated by Congress, spent largely in Montana—an additional benefit to the State. One might ask whether Mr. Corette would be willing to pay in perpetuity to the United States one-half the benefits of the third generator installed at his company's Kerr Dam as the result of storage at Hungry Horse, instead of the relatively small amount which Montana Power Co. will pay under section 10(f) of the Federal Power Act.

In trying to treat two such different cases as if they were identical, Mr. Corette is apparently trying to confuse both the issues and Montana's citizens.

LOW-COST POWER FOR INDUSTRIAL DEVELOPMENT

One more comment on Mr. Corrette's testimony should be included here because it demonstrates how far he is willing to go to paint Paradise with a black brush. He states: "Federal power alone will not attract industry." This, of course, misstates the issue, since proponents of Paradise do not claim that Federal power alone will assure the industrial development Montana so desperately needs. What we do claim is that low-cost power, plus water regulated for year-round supply, can be Montana's strongest argument to attract new industry, and can undoubtedly be a decisive factor in much of the State's future industrial growth.

In stating that Fort Peck and Canyon Ferry have not brought in new industry Mr. Corette proves nothing, since neither of these projects produces power at BPA's low price level, and neither of them provided a large block of uncommitted low-cost power for use within Montana, as Paradise will do. Fort Peck's full capacity of 85,000 kilowatts is required to serve the preference customers in Montana and other States in the Missouri Basin. Canyon Ferry's relatively small production of 50,000 kilowatts, as Mr. Corette well knows, is delivered to Montana Power Co., largely for its own system use and partly for wheeling to preference customers. Neither project made any substantial amount of power available to industry. Paradise Dam, on the other hand, would provide twice as much prime power for Montana as Fort Peck and Canyon Ferry combined.

The point is that neither Canyon Ferry nor Fort Peck ever provided a block of uncommitted low-cost power for Montana in any way comparable to that from Paradise Dam. On the other hand, the one project which did provide such power, Hungry Horse, has been one of the major factors in the industrial growth of the western part of the State during the past decade.

As if to give the coup de grace to his anti-industry argument, Mr. Corette quoted *Electrical World* magazine of October 5, 1959, as stating that new steam-electric generating stations in the Ohio Valley now have power costs as low as 2.26 mills per kilowatt-hour. What *Electrical World* does provide in the issue referred to is a tabulation of cost data on 55 modern steam stations. The article states:

"New steam powerplants produced energy in 1958 at an average cost of almost exactly 7 mills per net kilowatt-hour."³

"The average of all fixed charges was 3.32 mills and the average of all production charges 3.72 mills per net kilowatt-hour."⁴

³ *Electrical World*, Oct. 5, 1959, p. 72.

⁴ *Ibid.*, p. 73.

Included among the plants in the tabular listing is an unidentified plant No. 359. The power costs of this plant are summarized as follows in the tabulation:

<i>Cost of energy (mills per kilowatt-hour)</i>	
Fixed charges -----	None
Computed at (5) -----	None
Operating charges -----	2. 26
Total -----	¹⁰ 2. 26

"Annual costs after amortization in 50 years might be of the order of \$1½ million, with unit costs of only about one-third of a mill per kilowatt-hour at site" (Knowles-Paradise hearing, testimony of Roy F. Bessey, p. 140).

The one item selected and used by Mr. Corette gives a completely false picture of the situation as reported by the story he referred to. Of the 55 stations included in Electrical World's listing No. 359 is the only one which has its fixed charges listed as zero. As stated above, the average fixed cost is 3.32 mills.

"Investment charges and fuel cost, along with plant factor, exerted the greatest leverage on the cost of energy produced by reporting stations * * * 67 percent of stations reporting computed carrying charges of more than 13 percent;"¹¹

There is no explanation of why this particular plant selected by Mr. Corette requires no listing of the cost of depreciation and interest on investment and similar fixed costs, but it is obvious that no plant, whether publicly or privately owned, can actually operate without such costs; so it must be assumed that these costs are carried either in some other account or on some other organization's books. Mr. Corette's representation of such partial accounting as showing low "power costs" and his use of it as an argument against a great project like Paradise Dam constitutes either a shocking attempt to mislead the committee and the Congress or a misunderstanding of power economics which is almost unthinkable in a former president of Edison Electric Institute.

Respectfully,

FRANCES D. LOGAN, *Secretary.*

[From the Congressional Record, Mar. 21, 1960]

THE CONTRIBUTION OF HUNGRY HORSE DAM

Mr. MURRAY. Mr. President, I rise to make a progress report on the contribution of Hungry Horse Dam to the economy of Montana and the Nation, and the potential contribution of another even greater development in my State.

Hungry Horse Dam is the one former President Truman wisely told his Montana audience to take a good look at, because it would be a long time until they saw another one rise if the Republicans gained power.

Hungry Horse Dam was bitterly opposed by the private power companies and other shortsighted interests. But nowadays Hungry Horse Dam is quite respectable.

The Spokane Spokesman-Review which Harry Truman called the second-worst paper in the country—as to its editorials I would classify it as the worst—recently printed a fair news story detailing the tremendous progress of Columbia Falls since construction of Hungry Horse Dam nearby. The Great Northern Railway, in its recent brochure entitled "Great Resources," points out how this "single development"—Hungry Horse Dam—helped open new industrial horizons in the Flathead Valley. As one example, the brochure points out that the Anaconda Co. invested \$60 million for a new aluminum reduction plant at Columbia Falls.

I might mention that the positive attitude of the Great Northern Railway, whose management realizes the immense benefit to business created by Federal multipurpose dams along its line, is in marked contrast to the shortsighted, poor business attitude of the Northern Pacific Railroad, which is violent in its opposi-

¹⁰ Ibid., pp. 80-81. It may be remarked parenthetically that, if the fixed charges for Paradise are omitted, as will be possible after the dam has been paid for, power from Paradise would cost 0.33 mill.

¹¹ Electrical World, Oct. 5, 1959, p. 72.

tion to the proposed new dam in the Clark Fork-Flathead Basin of western Montana. Let me say for the record now, in case anyone chances to turn to it some 10 or 20 years from now, that I predict the Northern Pacific Railroad—if it is still running—will eventually brag about Paradise or Knowles Dam, whichever is built in the Clark Fork-Flathead Basin. For the dam which would be authorized by S. 1226 will bring even greater benefits to the people and businesses of Montana than the remarkably successful Hungry Horse Dam.

One of the baleful predictions made by opponents of Hungry Horse Dam—now being made by opponents of Paradise Dam—was that it would create a sea of mud. The Hungry Horse News, published at Columbia Falls by Mr. Mel Ruder, reports what happened to that prediction in a recent issue. Let me quote from the article entitled "Hungry Horse Dam Creates Flathead Jobs":

"Prediction that Hungry Horse Dam would create a 34-mile-long lake with mudflats fell flat. The lake filled to capacity June 9, 1954, and each summer since that time has been full.

The Hungry Horse News goes on to point out that "in 1954, Hungry Horse prevented a repetition of the damaging 1948 flood."

Further, the News reported that the dam "has returned \$16,730,000 in earnings from power sales, and it is expected that the entire cost of the project will be paid before the anticipated 50-year payoff period ends."

Mr. President, I ask unanimous consent to have printed in the Record, immediately following these remarks, the full text of the articles to which I have referred, which appeared in the January 31 issue of the Spokane Spokesman-Review, Great Resources Brochure No. 14, published by the Great Northern Railway, and the February 26 issue of the Hungry Horse News.

There being no objection, the articles were ordered to be printed in the Record, as follows:

"[From the Spokane Spokesman-Review, Jan. 31, 1960]

"TOWN LOOKS FOR MORE PROSPERITY

"COLUMBIA FALLS, MONT., January 30.—Columbia Falls, a Montana city that doubled its population in the past decade, expects continued growth in the 1960's.

"This is a town with industrial jobs, 5 minutes from trout streams and 17 miles west of Glacier National Park.

"The 1950 census showed Columbia Falls as having 1,232 residents. Postmaster Dudley W. Green estimates population now at 2,500, and the number of Pacific Power & Light residential customers has likewise doubled since 1950.

"NEW PLANT OPENED

"Important date for Columbia Falls was August 15, 1955, when the Anaconda Aluminum Co. plant was dedicated. The plant is the only aluminum producer in the Treasure State and employs 580 men. More than half the employees live in or near Columbia Falls with the balance in other Flathead area communities.

"Bringing the industrial job total in Columbia Falls to more than 1,000 are the 400 men who work at the four local lumber mills, Stoltze Land & Lumber Co., Superior Buildings Co., and Rocky Mountain Lumber Co. Plum Creek, employing 200 men, located here in 1945; Rocky Mountain in 1948.

"Columbia Falls, hub of the Flathead's lumber industry, shipped a record 3,946 carloads of lumber over the Great Northern Railway in 1959. This compares with 3,342 carloads in 1957 and a record for the time of 779 carloads in 1947.

"FOREST IS SOURCE

"Most of the timber milled here comes from Flathead National Forest which is cutting at the sustained-yield figure that can be maintained.

"Columbia Falls is proud of its school and church growth.

"There is a new 18-room school erected in 1953-54 through Federal grants totaling \$600,000 that came as a result of Hungry Horse Dam.

"Montana's largest concrete dam was started in 1948. The 564-foot-high structure was considered complete January 1, 1953.

"NEW HIGH SCHOOL

"Slated for dedication next March is the new 600-student, \$1,660,000 Columbia Falls district high school. The structure covers 113,000 square feet.

"Columbia Falls is a city that in 1946 had just one resident pastor. Now there are 10 churches. First mass was held in the new \$200,000 St. Richard's Catholic

Church Thanksgiving week. Local Methodists dedicated their new Sunday school and fellowship wing November 22. The Assembly of God dedicated its new Columbia Falls church January 1, and last spring local Baptists moved into their new church."

"[From the Great Northern Railway Co. Brochure No. 14]

"FLATHEAD VALLEY INDUSTRIAL AND AGRICULTURAL MIGHT AMID SCENIC GRANDEUR

"Nestled below the western slopes of the Rocky Mountains in northwestern Montana is the picturesque valley of the Flathead River. Farmers from Idaho and California, who recognized the richness of the 300,000 acres of soil on the valley floor, settled here and broke the first sod in the late 1880's. A lack of transportation restricted their markets until the Great Northern Railway crossed the valley with its mainline in 1891, opening the valley to national markets, and spurring logging operations which had developed soon after the settlers arrived.

"Industrial development is more recent. Just as the availability of transportation helped the valley blossom into a full-fledged economic community, so has a single development helped open new industrial horizons in the valley.

"The new project was harnessing the thundering Flathead River to produce power at reasonable rates. Hungry Horse Dam tames the mighty river's South Fork long enough to churn out 285,000 kilowatts of power. This factor, plus the abundance of water which flows from nearby mountains, is bringing new industry to the Flathead Valley. One example: Anaconda invested \$60 million for a new aluminum reduction plant at Columbia Falls, a few miles downstream from Hungry Horse Dam. The operation, Anaconda's first venture into the aluminum field, employs 600 persons and produces 60,000 tons of aluminum annually.

"The Pacific Power & Light Co., a private utility, and Flathead Electric Co-operative, Inc., a public utility, distribute abundant supplies of power through the valley for farm, home, and industry.

"But new industry is not diminishing the importance of agriculture to the valley. The rich soil and nurturing climate, typical of sheltered mountain valleys, combined with new farming and irrigation techniques contribute an important share of the valley's income through agriculture. The valley is known for its seed potatoes and seed peas; for its sweet cherries which are cultivated on the eastern shores of Flathead Lake. But it also produces a significant volume of field crops such as wheat, barley, hay, oats; and small fruits such as apples. Much of the grain and hay is consumed by dairy cattle, still another important agricultural factor in the valley.

"Great forests of the valley and nearby mountain slopes put logging and forest products high on the list of valley industry. Among the important activities: manufacture and treating of railroad ties; production of plywood; lumber milling; growing and marketing a substantial share of the Nation's Christmas trees. The Flathead National Forest, which nearly surrounds the valley and is managed on a sustained yield basis, provides much of the raw material for the lumber industry.

"Mountains, an abundance of waterways, winter snow, and mild climate make the Flathead Valley a natural recreational area. Within a few minutes drive is Glacier National Park, Flathead and Whitefish Lakes—two of the continent's most beautiful freshwater lakes. Boating, fishing, swimming, hunting both big game and waterfowl, golfing, skiing—the recreational opportunities are unlimited.

"The Great Northern transcontinental mainline opens the Flathead Valley to national markets by rail; Federal Highways 2 and 93 provide north-south and east-west access for residents and visitors.

"About one-third of the valley residents live in the county seat of Kalispell (population 11,000), which also serves as a distribution center for forest and farm products. Whitefish (population 5,000) provides important impetus for the valley's lumber industry, besides being a gateway to much of its vacation delights.

"Columbia Falls (population 2,000), home of Anaconda's aluminum reduction plant, also serve the North Fork River country where some of Montana's largest lumber mills and logging operations are located.

"Somers, one of the valley's smaller communities, boasts thriving plywood and tie-treating plants. The town is on the northern shore of Flathead Lake."

"[From the Hungry Horse News, Feb. 26, 1960]

"HUNGRY HORSE DAM CREATES FLATHEAD JOBS

"Fateful decade in the Flathead was the 1950's that saw first power produced at Hungry Horse Dam, October 1, 1952, and then August 15, 1955, dedication of the Anaconda Aluminum Co. plant 2 miles northeast of Columbia Falls.

"The Flathead was fortunate to have an aluminum plant under construction even as the big dam was being completed. Burning in the night as President's Truman's special train pulled into Columbia Falls were brush clearing piles at the future site of the Anaconda Aluminum Co. plant. Plant construction years were 1953, 1954, and 1955. Peak employment was 1,600.

"Plant construction eased the transition from dam building to these years. Anaconda Aluminum Co. employment averaged near 600 jobs. Many other jobs in the Flathead were created in professions, services, and trades as a result of the new plant with its 600 employees.

"Prime contract to build Hungry Horse Dam was awarded General-Shea-Morrison, combination of 12 firms, April 21, 1948. Total prime contract was given as \$48,061,070. After 1 million cubic yards of rock and surface material was excavated, first concrete placing took place September 7, 1949.

"The Hungry Horse News presented a week-to-week progress story of Hungry Horse Dam construction. First picture of the project appeared in our volume 1, No. 1, issue published October 8, 1946, and showed the drilling rig at the future site of Hungry Horse Dam.

"October 4, 1952, saw last concrete placed in mass of dam itself. November 2, 1952, was visitors' day with 814 cars carrying 3,500 persons driving across the massive dam.

"Top concrete placing month was July 1951, with the tally 235,649 cubic yards.

"Total cost of the project was \$101,500,000 compared to \$108,800,00 stated as anticipated cost when the project started in 1948.

"Building Hungry Horse resulted in more than 17 million man-hours being worked in Montana. Manufacture of cement, electrical equipment, reinforcement steel and other products for the dam was considered to have created equally as many man-hours of employment in a score of different States.

"Howard S. Latham, Bureau of Reclamation safety and labor relations officer, gave the man-hours worked per year as follows: 2,723,862 in 1949; 3,288,079 (not including 500,000 man-hours logging the reservoir area) in 1950; 4,991,305 in 1951, and 3,600,000 man-hours worked in 1952.

"The project was built without a single regular strike, and completed ahead of schedule.

"Peak employment building Hungry Horse Dam was 2,500 and the construction payrolls brought growth and prosperity to the Flathead. Annual construction payrolls were considered \$8,500,000.

"Wage pattern in the area in 1948 saw common laborers' pay at \$1.25 an hour. The first General-Shea-Morrison contract in 1948 established \$1.37½ an hour construction base for common labor. This was increased to \$1.50 in 1950; \$1.67½ in 1951 and \$1.79 in 1952. Many men worked 7 days a week as construction started in spring, continuing into the fall, and then winter layoff for many.

"The year 1953 saw construction windup. Clyde H. Spencer, project construction engineer for the Bureau of Reclamation, left July 19 to become Bureau chief for California. David Culver succeeded him. C. W. 'Smoky' Wood, project manager for General-Shea-Morrison; E. W. Simpson, General-Shea-Morrison general superintendent, and D. H. Henderson, General-Shea-Morrison office manager, left that year."

The CHAIRMAN. Senator Mansfield, we are glad to have you here, too. You may proceed with your statement.

**STATEMENT OF HON. MICHAEL J. MANSFIELD, A U.S. SENATOR
FROM THE STATE OF MONTANA**

Senator MANSFIELD. Mr. Chairman, it is a pleasure to appear before your committee this morning, together with my distinguished colleagues from Montana, our senior Senator, James E. Murray, and

Congressman Lee Metcalf, in support of S. 1226 which would authorize the construction of a hydroelectric power project in a stretch of the Flathead River in western Montana.

The key to the comprehensive development of the West and the less populated areas of this country, is the utilization of our vast storehouse of natural resources. Perhaps the greatest of these is the hydroelectric power potential which exists in such an abundance. It is in this area that the State of Montana has much to offer.

Montana has not had a major power project under construction for 10 years, and during this period Montana's economic condition has been at somewhat of a standstill. Conditions in many of the State's basic industries have been depressed from time to time and the improvements have been generally limited to defense facilities and tourism which is rapidly becoming a major source of income for the State.

The State of Montana is eager to be developed and the Treasure State has much to offer. I also recognize that we have limitations, the State's isolated position, the weather, unfavorable freight rates, taxes, and so on. But these factors are changing and can be changed.

Perhaps the largest attraction Montana can provide to industry is its great sources of hydroelectric power. Electric energy is basic to most industry today. Private utilities cooperating with the Federal projects provide the energy needs of the people of Montana, but this is not enough. We need large blocks of uncommitted power which will induce industrial development. Industry will not seek out a location and then proceed to look for power, but they will go where there are large blocks of low-cost power already available.

Hungry Horse met this need in northwestern Montana. This project provides the electric energy for the Anaconda Aluminum Co., the Victor Chemical Co., the Diamond Match Co., and a number of smaller lumber operations. I daresay that these people would not be there except for Hungry Horse.

What Montana needs is several more Hungry Horse projects throughout the State. The sites are available for development. It is my sincere hope that the Yellowtail Dam project will become a reality in a few years, as it is anticipated and hoped that actual construction will be started in the next fiscal year. Libby Dam is ready to go, but is being held up by international complications. The Clark Fork-Flathead area of western Montana provides another site for a multipurpose development. The provisions of the legislation being considered today will make this development possible.

I have always said that there is room for both private and public power development in the United States and in recent years I think a lot of unnecessary confusion has been cleared away and both parties see the necessity to cooperate. Private utilities take care of their private consumers and expand their facilities to meet the increased load, but their interests do not extend into the field of large multipurpose projects with their many benefits in addition to power generation.

A private utility's outlook is far more limited because of economic necessity and good business requirements. A project like the Knowles development will also provide flood control, irrigation, and recreational benefits. Each has a very important part to play in making Montana truly the Treasure State.

I am not an engineer and make no pretense about being able to judge the engineering feasibility of a project or deciding which is the best project. However, these Federal developments will receive my support if they meet the criteria I have set down for my own purposes.

Is there a need? The future economic development of Montana and existing difficulties support a project on the Flathead River.

Is the plan feasible? The Corps of Army Engineers and the Bureau of Reclamation have this responsibility. Existing reports and statistics indicate that a project in the Clark Fork-Flathead Basin is desirable.

Do a majority of the people directly affected in the area of the project favor it? That is what we hope to ascertain from the various field hearings and the testimony gathered here in Washington. I am interested in the feelings of those folks who live in the Flathead and the surrounding area, not the generated opinions from far and wide, beyond the area in question.

Finally, it is vital that there be an absolute guarantee to Montana of a maximum amount of power generated by this facility for use within the State of Montana.

The Paradise-Knowles project has an important role to play in the whole scheme of hydroelectric generation in the Columbia River Basin, but its primary benefit must be for Montana and its residents.

I wish to discuss briefly a matter which always develops when projects of this kind are considered. I wish to reiterate that these projects are repayable, with interest, to the Federal Government over a 50-year period, and they represent an investment in America's future. These projects create temporary dislocation, but to a minimum and the end result far exceeds the inconvenience.

These projects create employment, increase the valuation of the counties concerned, lower power rates, bring new industries, and broaden the local, State, and Federal tax base with expanded economic development.

The construction of these multipurpose hydroelectric power projects is an investment in the future. Since we say we are the most powerful Nation in the world, then I say the U.S. Government can well afford to invest in the future development of the natural resources of the Nation for the benefit of all our people. This can be a record to which we can point with pride. Before I conclude, I want to again emphasize the three points I have already alluded to:

1. The project must be feasible;
2. The project must be supported by the majority of the people concerned;
3. There must be power preference for Montana.

Mr. Chairman, I hope that your committee will be able to give early and favorable consideration to this legislation which will authorize a multipurpose development in the State of Montana.

The CHAIRMAN. Thank you very much.

Does any member of the committee have a question for either of the Senators from Montana?

Senator BIBLE. No, thank you, Mr. Chairman.

The CHAIRMAN. If not, we thank you, Senators.

We are very happy to have Congressman Metcalf with us this morning, for a statement.

**STATEMENT OF HON. LEE METCALF, A REPRESENTATIVE IN
CONGRESS FROM THE STATE OF MONTANA**

Mr. METCALF. For the record, I am Lee Metcalf, and I represent the First District of Montana.

Mr. Chairman, I appreciate this opportunity to join Senator Murray and Senator Mansfield in support of S. 1226, to authorize Knowles Dam, the largest multipurpose project that can be built in the United States without either international complications or wholesale destruction of fishery and wildlife resources.

I have with me today a brief statement for the hearing record, which I shall summarize and then leave with you, if I may.

As you know, I have cosponsored this measure in the House, as H.R. 5144.

Both Paradise and Knowles are feasible. Paradise has the support of the overwhelming number of local people according to the record of field hearings both by the Corps of Engineers and this subcommittee.

Senator Murray touched on that overwhelming support. The chairman mentioned our relations with Canada. Both Paradise and Knowles are endangered by negotiations now going on between the United States and Canada.

As you know, United States and Canadian officials are negotiating now on cooperative use of storage of water of the Columbia River system. On December 29, 1959, negotiators of the International Joint Commission recommended adoption of certain principles. One of them provides that the so-called storage credit positions of upstream storage will not adversely be affected by the addition of subsequent storage.

Adoption of this principle and of a base which includes upstream storage in Canada will "lock in" underdevelopment in the United States.

If downstream benefits are allotted first to Canadian storage, the great majority of such available benefits will be lost forever to such projects as Paradise or Knowles, seriously damaging, if not completely destroying their feasibility.

This makes imperative a prompt decision on such key developments as Paradise or Knowles.

We must use them or lose them.

Because the departmental report by the Department of Interior has just been submitted, I have only had time to glance at it. It is critical of certain sections of S. 1226.

I would appreciate it if the committee would allow me a few extra days to provide additional comments on that report.

The CHAIRMAN. Thank you, Congressman.

(The formal statement of Mr. Metcalf follows:)

STATEMENT OF REPRESENTATIVE METCALF

Mr. Chairman, I appreciate this opportunity to appear in support of S. 1226, to authorize Knowles Dam, the largest multipurpose project that can be built in the United States without either international complications or wholesale destruction of fishery resources.

As you know from your study of this bill, which I have cosponsored as H.R. 5144, it differs significantly in a number of ways from the usual project authorization.

One is that instead of fixing the site exactly, our bills give the Secretary of the Interior authority to locate the dam at that point in a 10-mile stretch of river at which it would best promote the irrigation and reclamation of arid lands, control floods, improve navigation, conserve and develop wildlife, provide recreation, generate electric energy, and encourage economic development.

The major question remaining after a review by the Corps of Engineers of its House Document 531, 81st Congress, the so-called master plan for development of the Columbia River and its tributaries, comes down to two alternative locations, each a part of a different control-development plan for the Clark Fork-Flathead Basin. Each plan has its advantages and disadvantages.

The corps recommended construction of Knowles on the Flathead River just above its confluence with the Clark Fork as part of its so-called plan 2, which also includes Ninemile Prairie Dam on the upper Clark Fork, and the Flathead Lake outlet channel improvement.

The latter, which consists of deepening the outlet channel between Flathead Lake and Kerr Dam to permit increased flows of water solely for flood control, also is a part of the corps plan 1, which consists of Paradise Dam on the Clark Fork, 6 miles downstream from the Knowles site and 4 miles below the confluence of the Flathead and Clark Fork Rivers.

A third alternative would substitute a commercial development, Buffalo Rapids No. 4, for either Knowles or Paradise. This substitution would require reaching out into the rest of the basin for lost storage. It would require the supplementary projects of plan 2 and, in addition, Spruce Park on the Flathead's middle fork, and Smoky Range, on the north fork 50 miles below the international boundary. The latter would flood more than 8,000 acres of Glacier National Park.

The major weakness of plan 3, not now under active consideration because the Montana Power Co. has withdrawn its application for Buffalo Rapids No. 4 pending a decision on the legislation before you, is that the major conservation organizations are strongly opposed to Smoky Range, a key storage feature.

Conservationists also oppose Spruce Park, a part of plan 3, and Ninemile Prairie, a part of plan 2 made necessary because of the failure of Knowles to provide any control of the upper Clark Fork.

Boiled down, the argument for Knowles is that it would cost less—approximately half that of Paradise. At half the price, it would provide three-fourths of the storage, half the power.

But Knowles does not fully develop the available resources. Paradise does. In the words of the recent Corps of Engineers review report on House Document 531, "Comparison of plans 1 and 2 reveals that plan 1 provides a larger resource development, but does so at a much higher cost."

Both Paradise and Knowles are feasible. Paradise has the support of an overwhelming number of local people, according to the record of field hearings both by the Corps of Engineers and this subcommittee. Both are endangered by negotiations now going on between the United States and Canada.

As you know, United States and Canadian officials are negotiating now on cooperative use of storage of waters of the Columbia River. On December 29, 1959, negotiators recommended adoption of certain principles. Among them is "Power Principle No. 3," which follows:

"The amount of power benefits considered to result in the downstream country from regulation of flow by storage in the upstream country should be determined in advance by computing the difference between the amount of power that would be produced at the downstream plants with the storage regulation and the amount that would be produced without such regulation. This determination would be made on the assumption that upstream storage is added at an agreed-upon level or condition of storage and power supply. The storage credit position of the upstream storage thus established should be preserved throughout the period of the agreement."

In the discussion of this principle which followed, negotiators include a "suggestion" that negotiations "utilize as a base system the developments existing and under construction on January 29, 1959." This base system consists of eight projects—Kootenay Lake, Hungry Horse, Flathead Lake, Albeni Falls, Coeur d'Alene Lake, Grand Coulee, Chelan and Brownlee. The International Joint Commission report continues:

"It is intended under this principle to provide that the credit positions of the storages thus established will not be adversely affected by the addition of subsequent storage," in the words of the report.

If downstream benefits are allotted first to Canadian storage, the great majority of such available benefits will be lost forever to projects proposed in the United States, seriously damaging, if not destroying, their feasibility.

This makes imperative a prompt decision on such key developments as Paradise or Knowles. We must use them, or lose them.

Because of the delay in preparation of the departmental report from the Department of the Interior, I have only had time to glance at it. I would appreciate it if the committee would allow me to provide additional comments for the hearing record on that departmental report within a few days.

Senator ALLOTT. May I ask you two or three questions, Congressman.

This is a new project to me. Will you locate this dam. This is on Clark River?

Mr. METCALF. Clark Fork River, a tributary of the Columbia River.

Senator ALLOTT. I just want to get this located in my mind. It flows to the northwest?

General ITSCHNER. This is the Flathead River, flowing in this direction where just below the Knowles damsite joins the Clark Fork River and together they form the Clark Fork and go northwest.

Senator ALLOTT. That is all I wanted to know.

Mr. METCALF. Knowles Dam is on the Flathead.

The CHAIRMAN. Thank you. General Itschner will give us information on it. You say the people who are in your district, and you represent the district where both of these locations are, are enthusiastically in favor of doing something up there?

Mr. METCALF. The overwhelming number of the people in my district are in favor of one or the other of these dams. Most of them are in favor of Paradise Dam.

I made this an issue in every one of the towns in the last campaign. For the first time in history, I carried every single one of the towns in Lake County.

The CHAIRMAN. Was your opponent opposed to it?

Mr. METCALF. My opponent was absolutely opposed to Paradise, Knowles, or any resource development.

Senator BIBLE. May I ask just one question, Mr. Chairman?

The CHAIRMAN. Certainly.

Senator BIBLE. What is the status of your companion bill on the House side?

Mr. METCALF. The departmental report has just been filed and no hearings have been held.

Senator BIBLE. Thank you.

Senator ALLOTT. How big a place is Knowles?

Mr. METCALF. Knowles is just the name of the site of the dam.

Senator ALLOTT. You spoke of some towns that would be inundated. Is it St. Regis; is St. Regis one of them?

Mr. METCALF. Yes.

Senator ALLOTT. How big is it?

Mr. METCALF. They are all small communities. St. Regis is about 500. Dixon is smaller, about 132. Perma is less than a hundred.

This is where the Indian agency is. In 1950 the population of Moiese was seven people.

The CHAIRMAN. Does this involve any question about Indian rights to water?

Mr. METCALF. Yes, sir. There is a serious question of Indian rights.

Senator ALLOTT. Has it been settled?

Mr. METCALF. No, that would have to be negotiated after the dam was authorized, along the lines of the negotiations we had on Yellowtail Dam with which this committee is familiar.

Senator ALLOTT. We had a lot of negotiations whether it was worth \$1 million, \$5 million, or \$50 million. Are we going to have the same argument?

Mr. METCALF. I can anticipate a very similar argument as to the rights of the Flathead Indian Tribe for the land that is inundated and for powersites that would be inundated upstream as a result of the construction of this dam.

Senator ALLOTT. There is no argument about the value of the land that would be involved in the Flathead Indian reservation? You ought to be able to appraise that pretty accurately.

Mr. METCALF. No. The principal argument is that the Indians have two powersites that are feasible for smaller development, run-of-the-river dams, and the Montana Power Co. has previously made a preliminary application to the Federal Power Commission to build dams at those sites.

The question is the same as the question we had on Yellowtail, whether or not the Indians should be compensated for the power value of those powersites.

That would have to be a subject of negotiation after authorization of this project.

Senator ALLOTT. Would it not be a lot simpler sometime if they were negotiated in advance?

Mr. METCALF. We have no authority to negotiate until there is some authorization.

Senator ALLOTT. It would certainly be simpler, would it not?

Mr. METCALF. Yes.

Senator ALLOTT. After you get the dam built then the price really goes up.

Mr. METCALF. We negotiated on Yellowtail between the time of the authorization which was in the Flood Control Act of 1944, and the time that the appropriation for the beginning of construction was made.

That was a part of the regular procedure of acquisition of land for the dam construction.

We acquired that from the Indians in the same way that we acquired land from the other individuals as a part of the starting of construction.

But, of course, we had different legal problems in acquisition of Indian land, such as treaty problems and Indian ownership, that we didn't have in acquisition and condemnation of private land.

Senator ALLOTT. Thank you very much, Mr. Metcalf.

Mr. METCALF. Thank you, Mr. Chairman.

The CHAIRMAN. General Itschner.

STATEMENT OF LT. GEN. E. C. ITSCHNER, CHIEF OF ENGINEERS, CORPS OF ENGINEERS; ACCOMPANIED BY LT. COL. JAMES A. VIVIAN, ASSISTANT CHIEF OF CIVIL WORKS FOR NORTH-WESTERN DIVISIONS; HENRY C. C. WEINKAUFF, CHIEF, PROJECT DEVELOPMENT BRANCH, CIVIL WORKS DIVISION, OFFICE, CHIEF OF ENGINEERS; MILTON A. PEARL, CHIEF, LEGISLATIVE SERVICES BRANCH, REAL ESTATE DIVISION, OFFICE, CHIEF OF ENGINEERS; AND BERNARD J. WITZIG, PROJECT DEVELOPMENT BRANCH, CIVIL WORKS DIVISION, OFFICE, CHIEF OF ENGINEERS

General ITSCHNER. Mr. Chairman, I am pleased to be here.

The CHAIRMAN. We are happy to have you here.

General ITSCHNER. I am pleased to be here today as you requested to make a statement on S. 1226, a bill which would authorize the Knowles Dam project and to answer any questions you may have on the matter.

S. 1226 would authorize the Secretary of the Interior to construct and operate the Knowles Dam project substantially in accordance with the physical plans set out in the Columbia River review report of the Corps of Engineers completed during the 86th Congress for the purpose of irrigation and reclamation, flood control, navigation, wild-life conservation, recreation, power, and encouraging economic development.

On the 9th of January 1960, I submitted my proposed review report on the Columbia River Basin authorized by several resolutions of the Senate and House Committees on Public Works to the Governors of the basin States and to other interested Federal agencies for comment as required by law or agreement.

After exhaustive study, including that by my division engineer, North Pacific division, and review by the Board of Engineers for Rivers and Harbors and by my staff, I have recommended authorization of certain additional projects, including the Knowles Dam project for the development of the water resources of the Columbia River Basin.

The Knowles project would be located on the Flathead River, Mont., about $2\frac{7}{10}$ miles above the junction with the Clark Fork River, and about 5 miles upstream from the town of Paradise.

The reservoir would control the drainage from an area of 9,000 square miles.

Records indicate an average annual discharge of 11,600 cubic feet per second, which is the equivalent of 8,282,000 acre-feet per annum.

The dam on the river section would be an earthfill embankment with a maximum height of 266 feet above the streambed. It would extend from the right abutment 2,050 feet to a concrete gravity spillway and intake structure, and a nonoverflow left abutment section totaling 1,680 feet long.

The powerhouse at the intake structure would house four units of 64,000 kilowatts each, or a total capacity of 256,000 kilowatts.

Space would be included for another future unit of 64,000 kilowatts also.

The reservoir would flood the Flathead Valley upstream to Kerr Dam. It would have a minimum pool elevation of 2,620 feet above mean sea level and a full pool elevation of 2,700 feet, thus providing an 80-foot drawdown for power.

However, except during low flow years the pool would be maintained as constant as possible during the summer months, facilitating its use for recreation.

The total gross storage capacity would be 5 million acre-feet of which 3,080,000 acre-feet would be usable for flood control and power.

The project is an extremely good one. It has a justification ratio if it is built in the near future—if it is built before some other projects which would dilute its benefits—of 2.31 to 1.

The CHAIRMAN. What interest rate is that?

General ITSCHNER. A $2\frac{1}{2}$ percent rate, Senator.

The CHAIRMAN. Are not some of the present projects carrying a provision that requires you to use yield on these bonds?

General ITSCHNER. No, sir.

The CHAIRMAN. What does the water facilities act provide?

General ITSCHNER. We are under instructions to use the interest rate provided to us by the Secretary of the Treasury through the Bureau of the Budget.

The CHAIRMAN. The interest rate provided by him as being what? Currently?

General ITSCHNER. Which is presumably the current long range interest rate. It is the long range interest rate as computed at that time.

The CHAIRMAN. You do not regard $2\frac{1}{2}$ percent as that, do you? You know it is $3\frac{5}{8}$ now.

What effect would $3\frac{5}{8}$ have on the feasibility of the project?

General ITSCHNER. It would still be feasible, but it would not have as good a benefit-cost ratio.

At the time we first began to use the Bureau of the Budget interest rates, the Corps of Engineers was using 3 percent.

Grand Coulee Dam of the Bureau of Reclamation was computed on the basis of 3 percent. About that time the interest rates decreased and we were given $2\frac{1}{2}$ percent interest rate and that is the rate that has been prescribed for our use by the Department of Treasury since.

The CHAIRMAN. Let me see if I get that now. When the interest rate dropped your use of the interest rate also dropped. You used the lower figure.

When it goes up, what happens? Do you still use the reduced figure?

General ITSCHNER. It was just an accident that the interest rate dropped at the time when the Bureau of the Budget or the Department of the Treasury through the Bureau of the Budget first began prescribing the interest rates we must use.

The CHAIRMAN. General, the reason I want to get into this a little bit, there is a project in Senator Allott's home State. The law under which it would be authorized would require presently about $3\frac{5}{8}$ to $3\frac{7}{8}$ interest be used.

Why would you use $2\frac{1}{2}$ on a Corps of Engineers project and nearly 4 percent on a Bureau of Reclamation project?

General ITSCHNER. We don't, sir. The Bureau of Reclamation and the Corps of Engineers, both, for justification purposes, use the interest rate that is furnished to us by the Bureau of the Budget which obtains it from the Secretary of the Treasury.

At the present time that interest rate for project justification purposes for both the Bureau of the Budget and for the corps is 2½ percent.

Senator ALLOTT. May I interrupt there, General?

We will have some people from the Bureau of Reclamation up here, I am sure, but this is not my understanding of the situation.

The CHAIRMAN. Nor is it mine.

Senator ALLOTT. I have been engaged in many, many conferences and talks with them. This is not my understanding of the way they are computing the feasibility of projects at the present time.

General ITSCHNER. Senator, I was not speaking of the interest rate used for payout purposes. That is higher. But it is something in the vicinity of 2.7 percent at this time.

The CHAIRMAN. General, do you mean to say to me you use one set of figures to figure feasibility, and another set of figures on which it pays out?

General ITSCHNER. That is correct.

The CHAIRMAN. That is a strange arrangement.

General ITSCHNER. We are acting under instructions, sir.

I am quite willing to agree that true interest rates at this time are much higher than 2½ percent. There is no question about that.

Senator BIBLE. How often do you get these instructions, General? Do these instructions come down periodically?

General ITSCHNER. No, sir; irregularly.

Senator BIBLE. When did you get the 2½ percent rate?

General ITSCHNER. It was a year and a half ago, sir.

Senator BIBLE. Is that not updated every 3 or every 6 months?

General ITSCHNER. No, sir; we get it irregularly from the Bureau of the Budget.

The CHAIRMAN. The Bureau of the Budget required that a provision be put into it to tie the project feasibility to the yield on long-term bonds for the upper Colorado River project.

Some of us objected and we were given the alternative of not having the bill signed or not putting it in. We put it in.

It is now up to a high level. It seems to me if you are going to have a project of this nature you ought to use some of the same yardsticks as though it were built by the Bureau of Reclamation. The money costs the Government the same.

General ITSCHNER. We use the same yardstick that the Bureau of Reclamation uses. I am not able to testify for them.

I am sure you can find out what theirs is. I feel quite certain for the same purpose we use the same yardstick.

Senator BIBLE. How is this evidenced by the Director of the Budget? Is this a formal communication, for purposes of reaching justification, that the interest rate shall be considered from here on out to be 2½ percent?

General ITSCHNER. Not from here on out, but until further notice.

Senator BIBLE. This is a year and a half back, you say?

General ITSCHNER. That is correct, sir. It is in the form of a written directive.

Senator ALLOTT. We last year, as I recall it, changed the interest rate formula on at least two bills that were before this committee to the yield on long-term bonds.

As a matter of fact, I, regardless of any other consideration, would not figure it on this basis, knowing what this committee is going to do.

As a matter of fact, I, regardless of any other consideration, would oppose any bill unless the interest matter is treated the same way. Somewhere along the line we have to get these on the same basis.

Undoubtedly with this high a feasibility, 2.57 or 7—

General ITSCHNER. It is a little less; 2.31, sir.

Senator ALLOTT. Undoubtedly this project would be feasible. It would be far over the 1-to-1 ratio. We ought to get these on the same basis somewhere.

The CHAIRMAN. That is all I was trying to get to. I think it is unfortunate that legislation was ever recommended that based the amount that the area would have to repay on the yield on bonds and not on what money was costing the U.S. Treasury.

The Treasury has no financial obligation to guarantee the yield of a bond, but it knows how much money it takes for it to meet the interest coupon that is attached to the bond.

We have been trying to get back to that. Two and a half percent is as unrealistic as it could be. I am surprised that the Bureau of the Budget has not found out what the Treasury is paying for money.

Senator ALLOTT. I know that they know from the way they have talked to me. What I am surprised about is that they have not changed it with the engineers.

The CHAIRMAN. Thank you. We wanted to get that in the record.

General ITSCHNER. My primary consideration in the review survey has been to insure proper development of the water resources of the basin and proper development of each site that warrants construction of a project.

The designation of a construction agency is secondary to this objective. However, my proposed recommendation would in effect assign construction of the Knowles project to the Corps of Engineers.

The Knowles project would serve primarily the needs of flood control, power production, and recreation, and was investigated in detail by the Corps of Engineers as an element of the major water plan for the Columbia River Basin.

I have included this project in the group intended for construction by the Corps of Engineers on the basis that the responsibility for the construction of future multipurpose projects in the Columbia River Basin, or elsewhere for that matter, should be accomplished by the agency which has predominant interest in the problems and individual projects designed to overcome.

By that I mean if a project would have amongst several purposes a greater amount of flood control and navigation benefits than it does irrigation, the project should logically be authorized for construction by the Corps of Engineers.

On the other hand, if irrigation benefits would exceed flood control and navigation benefits, the project should be authorized for construction by the Bureau of Reclamation.

The Knowles project would produce appreciable flood control benefits in addition to power. The irrigation potential by gravity or pumping has not been evaluated, but is considered sufficient to offset the loss of irrigated lands to be flooded by the reservoir and possibly permanent development of some new irrigated lands.

It would not approach the flood control potential in value. There are, of course, other important benefits from multipurpose projects besides flood control, navigation, and irrigation.

Power production is one of the most important in the Columbia Basin and far outweighs all others in value.

However, it is in the solution of the three basic problems of flood control, navigation, and irrigation that the Federal Government has entered into the water resources field.

This field now, with the approbation of Congress, embraces the corollary benefits of power production, fish and wildlife enhancement and recreation, which are considered on their merits and on an equal basis with the other functions of multiple-purpose water resource development.

Now, I hope the remainder of my testimony is not misconstrued because I firmly believe construction of the Knowles project should be started soon.

As you know, we are negotiating at this time for the cooperative development of the Columbia Basin with the Canadians, so that Canadian storage and U.S. head at downstream plants will combine to produce benefits that can be shared by the two nations.

In this effort it is important we assure Canada by authorization of our projects that we intend to provide storage of our own. This will provide a strong justification for our insisting upon consideration of the availability of this storage on a realistic schedule integrated with the schedule of proposed Canadian storage.

Such consideration automatically reduces the relative worth of Canadian storage and, therefore, the amount the United States should pay Canada in terms of power as its share of the benefits from the cooperative development.

S. 1226 would permit the moving of the site of the dam downstream. That is, to the Paradise site. It is 2.7 miles from the Knowles site to the confluence of the Flathead and Clark Fork Rivers and it is an additional 4 miles downstream to the Paradise site.

Studies by Corps of Engineers show that the Paradise project on the Clark Fork River would be practicable from an engineering standpoint. However, the cost of developing the Paradise site over the cost of developing the Knowles site, would be far greater than the additional benefits derived from a dam at the Paradise site.

The CHAIRMAN. I conclude from that that you favor the Knowles location?

General ITSCHNER. We do favor the Knowles site over the Paradise site, recognizing that the Knowles site provides less benefits.

The CHAIRMAN. But it is a better project from your standpoint?

General ITSCHNER. It is a much better project because the Paradise project costs so much more relatively.

The CHAIRMAN. And does not return correspondingly larger benefits?

General ITSCHNER. That is right, sir.

The additional dollars required to construct the Paradise project would be about 1.28 times the amount of benefits obtained from those dollars.

The CHAIRMAN. Put them back into dollars. What does the Knowles dam cost? This is very important information, General, and we want to have that directly from you.

General ITSCHNER. I have it all in terms of annual cost, but I will give you the total costs. Let me say the Paradise project would cost \$492,262,000 and the Knowles project would cost \$235,021,000, not including interest during construction.

The CHAIRMAN. Then we are debating whether we are going to spend \$235 million or \$492 million.

General ITSCHNER. I must admit that there is some discussion as to whether the estimate on the Paradise project might be a little too great.

The CHAIRMAN. Could you give us some explanation of the vast difference in cost? It is a different type dam, or just a much larger dam, or is the construction job much more difficult?

General ITSCHNER. The principal difference, sir, is in the much greater cost of relocating railroads for the Paradise project as compared to the Knowles project.

The CHAIRMAN. What about the question of Indians? Is there more of a problem if the Paradise is used instead of the Knowles Dam as far as the Flathead Indians are concerned?

General ITSCHNER. There is a problem in connection with each of the dams with respect to Indians.

The CHAIRMAN. Is it greater at one site than the other, or would you rather send us a report on that?

General ITSCHNER. I would rather analyze that and insert it in the record, sir.

The CHAIRMAN. As you know, General, we are very proud of the work the Corps of Engineers has done. We are very, very anxious to have your view on some of these matters because we have to have your engineering judgment.

If you can give us some figures on that at a later date, we would rather have them the way you want them in the record than to ask you for a horseback opinion now.

General ITSCHNER. Yes, sir.

The CHAIRMAN. The Indian problem is a difficult problem. In the Yellowtail Dam, as you know, after it was on its way, there was a request for \$5 million. That bill was passed and vetoed by the President.

We do not want to go through that same procedure again.

I think finally there was an agreement to give them perhaps \$2½ million with the right to sue.

I do not believe they have attempted to sue as yet.

On this one if we could find out what you think the situation is with reference to the Indians, we would appreciate the information for the record.

General ITSCHNER. Yes, sir.

(The information referred to follows:)

The effect on Indian lands will be the same regardless of whether the Knowles project or the Paradise project is constructed. The reservoir for either dam would involve the same lands within the Flathead Indian Reserva-

tion, affect approximately 300 Indians, and require the acquisition of approximately 19,905 acres of tribal and allotted lands with improvements, the aggregate value of which is currently estimated at approximately \$608,000. In addition it will be necessary to relocate 58 Indian graves at an estimated cost of \$17,000 and to relocate the U.S. Indian Agency headquarters at an estimated cost of \$1,123,000. Should Congress determine that special allowances should be made to the Indians who are displaced by the project, it would be necessary to enact separate legislation therefor and the Secretary of the Interior is in a better position to advise the committee concerning the need for such legislation.

Senator BIBLE. Mr. Chairman, may I ask just one question?

The CHAIRMAN. Senator Bible.

Senator BIBLE. Did I understand you to say how far the Paradise site was from the Knowles site; 6 or 7 miles?

General ITSCHNER. It is 6.7 miles downstream from the Knowles Dam site, or 4 miles downstream from the confluence.

Senator GRUENING. What would be the difference in kilowatt costs between Knowles and Paradise?

General ITSCHNER. The Knowles project would produce energy at a lesser cost per kilowatt-hour than the Paradise, Senator.

Senator GRUENING. Yes, I assume that, because the original investment is less and the total production is proportionately higher.

What would the approximate difference in the cost of kilowatt-hours? Do you have that information?

General ITSCHNER. May I insert that in the record, sir?

Senator GRUENING. Yes.

(The information referred to follows:)

COST OF POWER FROM KNOWLES AND PARADISE PROJECTS

The estimated average annual costs of power per installed kilowatt of capacity attributable to the Knowles and Paradise projects are \$20.66 and \$28.96, respectively. The average costs per kilowatt-hour of energy are 3.50 and 4.91 mills, respectively.

These estimates include preliminary project costs allocated to power, transmission costs for both at-site and downstream generation, and also the additional costs required for the capacity required downstream to obtain the benefits of project regulation.

Senator ALLOTT. While we are on that, what is the difference in capacity? You stated that Knowles was 256,000 kilowatts with space for another 64,000 kilowatts. What would be the capacity of the other dam, General?

General ITSCHNER. The Paradise project, sir, would have an installed capacity initially of 432,000 kilowatts and ultimate capacity of 864,000 kilowatts, as compared to ultimate capacity in the Knowles project of 512,000 kilowatts.

Senator ALLOTT. There must be some mistake in that; 256 plus 64,000 does not make 512,000.

General ITSCHNER. We would construct the project, as I indicated, with provision for four units and the foundations for the fifth. But there would be a capability of adding ultimately an additional three units which would produce 512,000.

But the last three units would not be part of the initial construction nor are they included in the initial construction cost.

The CHAIRMAN. You are going to put four in with the possibility of adding the fifth and you might bring it up to eight in the ultimate development?

General ITSCHNER. Not only the possibility of the fifth, but we would build the foundation and make real provision for the future installation of the fifth. We would not make any provision for the additional three.

The CHAIRMAN. But you subsequently might build six, seven, and eight, if the demand was there for it?

General ITSCHNER. That is correct, sir.

Senator BIBLE. Do you have any power cost estimates as to the two dams, or is this a reclamation item? What would you sell power for at Knowles and at Paradise?

General ITSCHNER. We will have to supply that for the record, sir.

Senator BIBLE. Thank you.

(The information referred to follows:)

SALE OF POWER

Estimated costs of power from the Knowles and Paradise projects are given in the previous statement.

The sales rates for power from the Knowles or Paradise projects would be determined by the Bonneville Power Administration, the marketing agency, with the approval of the Federal Power Commission, in accordance with law. Sales rates schedules reflect the average overall costs of the existing interdependent system of operating and transmission facilities in a market area. Established rate schedules now in effect are subject to review every 5 years.

General ITSCHNER. All the power in the Pacific Northwest is sold at the postage stamp rate which at the present time averages out to be about 2.34 mills per kilowatt-hour.

Senator BIBLE. Is that the average pool rate in the Columbia River power system?

General ITSCHNER. Yes, sir; 2.34.

The CHAIRMAN. General, with respect to this relocation, do you have any figures how much of that is due to the fact that the railroads wanted this long twin tunnel built?

General ITSCHNER. Yes, sir; the railroad is very insistent in respect to the Paradise project that we build them a twin bore tunnel.

The CHAIRMAN. Plush lined or anything? A twin bore tunnel is very expensive, is it not?

General ITSCHNER. Very expensive. Each bore would cost \$55 million.

The CHAIRMAN. So that \$110 million of this extra cost is trying to take care of the railroad?

General ITSCHNER. It is trying to take care of the railroad tunnel which is 8 miles long.

The reason why they say they need that twin bore tunnel is because they now have two different alternative routes. On one of them they route their passenger traffic, and the emergency freight traffic, and on the other route they route just the regular freight traffic.

So they do have two routes now. Paradise Dam would eliminate one of those routes.

The CHAIRMAN. But not the other?

General ITSCHNER. The other would have to be relocated. They say that they now have two routes, or what amounts to double tracking through there, and they, therefore, would like to settle with us for two tunnels.

The rest would be single-track railroad. They are afraid if we constructed an 8-mile-long tunnel they might have that tunnel blocked for some reason or other because of slides and what not and, therefore, they are very insistent upon the additional bore.

However, I would like to point out that even if that \$55 million were subtracted from the total cost of the Paradise project, it still would not be justified to build the Paradise project as compared to the Knowles project.

The difference in cost between the two projects is something of the order of \$112 million.

Senator ALLOTT. You gave 492 and 235. It would be \$260 million difference, roughly?

The CHAIRMAN. Roughly \$250 million.

General ITSCHNER. What I should have said is that the cost of the Paradise project could be reduced up to \$112 million and it still would not be as economically desirable as the Knowles project.

At that point it becomes as desirable as the Knowles project.

The CHAIRMAN. There was a statement by the Senators that they thought most of the people out there preferred the Paradise project. Naturally if it gives an awful lot more cheap power that might be easy to understand.

From an engineering standpoint, and from the ultimate welfare of the Treasury, there is no comparison between the two, is there?

General ITSCHNER. I don't think there is any comparison between the two from that standpoint.

As I very frankly admitted, our estimate may be too high for the Paradise project because of that requirement for a twin bore tunnel. It possibly could be that our estimates for the relocation of the railroad outside that tunnel may be slightly too high, but neither of those differences could possibly amount to the \$112 million that would be required to bring the two projects to an equal benefit-cost ratio.

Therefore, I feel quite strongly that while the Paradise project is more desirable from the standpoint of benefits derived from it, that it cannot be justified economically as compared to the Knowles project.

It does not have as favorable a benefit-cost ratio.

Senator GRUENING. Is there not some alternative tunnel that is less costly?

General ITSCHNER. We have not been able to find an alternative route that provides the railroad their current grades and alinement and so on that would be less costly and acceptable to the railroad. If there were one we would be very happy to know about it and to make our estimate accordingly.

Our estimates are based upon actual and recent experience in railroad relocation. We built the Eagle Gorge now called the Hanson Dam on the same railroad close to Seattle. The costs have been very, very great on that relocation.

Frankly, we quite underestimated them. We are basing these estimates upon our actual contract experience at Eagle Gorge.

Senator GRUENING. General, these projects would both be self-liquidating. If the cost of power from Paradise is not substantially higher than the cost from Knowles, and you get a lot more of it, what is the objection to it from an economic standpoint?

Granted that the cost of Paradise is almost twice as high, if the ultimate cost of power is not very much greater and the whole project is retired from the revenues from power, what is the objection to Paradise.

General ITSCHNER. The cost of power from Paradise would be substantially higher, sir.

Senator GRUENING. It would?

General ITSCHNER. Yes, sir, substantially higher.

Because there is flood control also to be considered, I would have to furnish that information. We have always evaluated projects, and I think it is economically sound, on the basis of justifying each increment as the project gets larger.

In this case we have in effect a single project that we are comparing and we are, therefore, evaluating the worth of the increment as compared to its cost.

We find it does not measure up and cannot be justified.

Senator BIBLE. What is the comparative installed capacity of Paradise versus Knowles? It was on this other chart that was down a few moments ago, but the other chart has gone up.

General ITSCHNER. The installed capacity at Knowles, sir, is 256,000 kilowatts and at Paradise 432,000 kilowatts. Those are the initial installations.

The CHAIRMAN. Will you proceed?

General ITSCHNER. I invite the attention of the subcommittee to the Secretary of the Army in letter dated January 26, 1960, commenting on S.1226, that consideration of specific legislation such as S.1226 authorized Knowles Dam might be deferred pending submission of my review report to Congress.

My report will be transmitted to Congress as soon as I have received the comments of the States and other agencies which are allowed by law 90 days for review.

Therefore, I should have these comments in April of this year.

S.1226 also contains provisions designed to afford relief to those affected by the project. Such special legislation on a problem that affects all Federal construction activities in varying degrees may create a precedent that may mitigate against equitable and sound solutions to be resolved by general legislation.

General legislation for this purpose would be provided by H.R. 1066, 86th Congress, now under consideration by the House Committee on Public Works.

H.R. 1066 is a bill to establish a Commission To Study the Adequacies of Compensation for Real Property Acquired by the United States.

Section 1 of the bill declares it—

To be the policy of Congress that owners and tenants who are displaced because of public works projects of the United States of America should be paid a fair and equitable amount for the property acquired and reimbursed for their actual losses.

Section 2 states that the purpose of the bill is—

To study the present methods of determining compensation, the adequacies thereof, and whether or not the procedures with respect thereto should be defined by statute to assure a clearer definition of the rights of all concerned.

Senator ALLOTT. What this does, then, General, is to upset the whole law of eminent domain in these matters.

General ITSCHNER. The purpose of H.R. 1066, sir, is to appoint a Commission to study the matter which would presumably make recommendations for legislation which would pertain to the law of eminent domain.

Senator ALLOTT. Yes, but you read into the record some criteria as to the actual cost sustained, or something like that. What you are doing here, or what this bill would do, as I understand it, would be to change the complete method of compensation by eminent domain—that is, set up a Commission to study—for the purpose of changing the method of compensation of land acquired under eminent domain for these purposes.

You get directly into the question here, which we were concerned with with the Flathead Indians on the Yellowtail. It does not matter, it was one of the tribes of Indians. We got not only into the proposition of compensating them for the land taken, which in that case was worth nothing—it was barren land—and we found ourselves literally paying through the nose for the right to erect a dam.

Would such a study and reevaluation get us into the position here that we would have to, for example, set up criteria for the repayment of the Flatheads in this instance perhaps on a capitalization of the ultimate value of the site as a powersite and compensate them upon that basis rather than upon the basis of the land taken?

This is a very serious question.

General ITSCHNER. This is a very serious question, sir, but we have always felt, and I think all government agencies feel, that the present laws do not permit us in all cases to pay a fair and equitable amount for our takings.

The purpose of this Commission would be to study measures for making fair and equitable payments for the property of people that we take by the right of eminent domain for reservoir or any other Federal projects.

Senator ALLOTT. When you say they are not allowed to pay a fair and equitable amount, what you are doing is saying that the whole mode of law for 400 years has been inequitable.

General ITSCHNER. In some respects we feel that it would be very desirable for a commission to study the matter and see if they think there have been incidents of inequitable solution to the real estate acquisition problem.

If that is the case, they can make their recommendations and Congress can or cannot enact it into law.

Senator ALLOTT. Let us be specific. In a given instance you go in and have your appraisers appraise, do you not?

General ITSCHNER. Yes, sir.

Senator ALLOTT. Then I think your practice generally is to make an offer not higher than the appraisal?

General ITSCHNER. That is right. We make an offer of the amount of the appraisal.

Senator ALLOTT. In some instances you will go slightly above that if you feel that the circumstances justify it? If that person is dissatisfied with your offer, he can then go to the courts and he has a determination of his value and his damage under the law of the State.

What is fairer than having a man's damage determined by courts? What are we going to substitute for this? What principles are we going to substitute for this?

This is something I am very concerned about.

General ITSCHNER. As to one remark you made, sir, we do not make an offer in excess of the amount of the appraisal except with the specific approval of the Secretary of the Army. Consequently, we make our offer based upon the appraised amount and use that as the highest firm offer that we can make.

It is true and rightly so, that people who are dissatisfied with the amount of that offer can go to court. I think it would be very much to the Government's advantage from a monetary standpoint, based upon our experience, and I think it would be to the advantage of the people, too, if they did not have to go to court except as a last resort.

I think we find that the court awards in such cases are higher than we would probably have to pay on an average if we had some means of going slightly higher than the appraisal and recognizing factors other than those that we can recognize in a strict appraisal.

Senator ALLOTT. General, this is true. I have known of specific instances where this is true, where perhaps you should have more flexibility, but this is not the basic question that is raised by this bill in which it is proposed to study methods beyond the present laws of compensation for people.

In other words, what this bill proposes, as you read the language and I cannot quote that back to you exactly, in effect is to upset, as I interpret it, the ordinary laws of compensation for these matters and to consider other items other than those set down in the body of law for 400 years.

General ITSCHNER. That is the purpose of the Commission, to study the present methods of determining compensation and to determine whether they should recommend that the statutes be enacted which would change those procedures.

Senator ALLOTT. Thank you. I think we have the point in the record.

The CHAIRMAN. Yes.

General ITSCHNER. The Secretary of the Army in letter dated August 21, 1959, to the chairman of the House Committee on Public Works, stated that the Department of the Army on behalf of the Department of Defense supports the objectives of the bill and recommends that the committee give favorable consideration to H.R. 1066.

I have with me today, sir, the following members of my staff.

Lt. Col. James A. Vivian; Mr. Henry C. C. Weinkauff, Chief, Project Development Branch; Mr. Milton A. Pearl, who is Chief of the Legislative Service Branch of the Real Estate Division of our Office; and Mr. Witzig, of the Projects Branch.

We should be pleased to answer any questions that the committee desires to ask.

The CHAIRMAN. General, I do not know to whom this inquiry should be directed. But Mr. Albright, former head of the Park Service, and long known as a conservationist, has written a letter as chairman of the Boone and Crockett Club, which is very much interested in hunting, wanting to know about the buffalo range in this

area and whether it is being adequately protected. If you do not have the information on that, would you supply something to us?

General ITSCHNER. Yes, sir; I do have the information, Mr. Chairman.

We planned, and included in the cost estimate provisions for, the relocation of the headwaters of the National Bison Range and acquisition of 10,000 acres of land to replace the loss of buffalo and big game range.

The CHAIRMAN. Thank you.

Mr. Albright, who is highly regarded as a conservationist thinks this is the best bison range in the country, and if it is to be disturbed he wanted to be really sure that no precipitate action be taken until the individuals and organizations interested in the welfare of the American bison have a chance to make oral or written presentations.

We will be very happy to supply them with a statement on it.

General, will you address a letter to the committee some time setting forth what the act plans are so that a reply can be made to these conservation organizations.

Do members of the committee have questions to direct to the general or members of his staff?

Senator ALLOTT. I would like to ask one question, Mr. Chairman.

As I understand your statement, you have recommended the enactment of 1066?

General ITSCHNER. That is correct.

Senator ALLOTT. I would like to ask the man in your Real Estate Division to comment upon the questions and answers which occurred here a few moments ago about the ultimate effect that the enactment of such a bill apparently contemplates.

Do I interpret the title to that bill correctly?

Mr. PEARL. Yes, sir. As was indicated, the purpose of the Commission would be to study the adequacy of present compensation.

As I am sure you and the other members of the committee know, there is a constitutional guarantee in the fifth amendment of the Constitution that the United States shall pay just compensation for private property taken for public use. However, there has never been any general legislation enacted implementing that constitutional guarantee.

So, therefore, we have a situation where there are many losses that are real, damages that are suffered by people, that are not compensable under the court interpretations of just compensation.

The CHAIRMAN. Can you give us an example?

Mr. PEARL. Loss of good will, for example, in a business. Moving costs except where special enactments have been made.

We have legislative authority for moving costs. The Department of the Interior has. But except for those two no other Federal agencies in Federal acquisitions can pay for moving costs, although there is another bill pending at this time that would broaden the applicability of moving costs.

The CHAIRMAN. Are you and the Bureau of Reclamation the main groups that do have responsibility for moving people? Are there other organizations that have anything near the same responsibility for moving people that the Army Corps of Engineers and the Bureau of Reclamation has?

Mr. PEARL. Other agencies are acquiring property. General Services Administration, the Department of Agriculture, and other Federal agencies are acquiring property under separate rules.

Senator JACKSON. Mr. Chairman, right at that point, Senator Bible has a bill before our committee dealing with an element of damage.

Senator BIBLE. On moving costs.

Senator JACKSON. Yes. The Department of Defense under existing law is able to cover such moving costs. The bill, I think, was passed.

Senator BIBLE. The bill was passed and became law.

Senator JACKSON. That happened last year. There are a lot of factors that I can see that enter in that a court under the definition given by the court in various decisions would not allow certain items of damage as being part of just compensation. Is that the point?

Mr. PEARL. Yes, sir.

Senator JACKSON. In the absence of statutory implementation by the Congress.

Mr. PEARL. Yes, sir. The courts call these, such as loss of business, loss of professional practice, and so on, consequential damages.

We have situations of utilities being hurt. We have situations of what is known as the noncompensable interest in land where someone has an improvement, but no compensable interest in the land. Therefore, the Comptroller General and the courts say we cannot pay them for their improvements.

We have one situation which is before the Congress now in a relief bill where a town claims to have been injured by reason of the fact that we acquired private property in the town and, therefore, hurt their bonded indebtedness and their ability to pay off their bonds. This is noncompensable under present law. The courts hold this is a consequential damage.

It may be that many of these damages, loss of good will and loss of business and other things, are speculative. It may be that some of them are too difficult administratively to evaluate. It may be that no standard of measure could be found by which to say how much people should be compensated for these losses and damages which they are suffering.

All we have said is that we support the idea that they should at least be examined to find out whether there is a way to pay these people and companies and municipalities for damages that are incurred.

We have for that reason opposed many a bill that has come along offering spot relief, such as in this particular instance in this bill. There are provisions made in S. 1226 to vary the standards of just compensation and to set up new standards for this project alone.

Another bill is pending to set up separate standards for another of our new projects.

We have taken the position, and the Department of the Army supports it, that no further spot relief should be given based on a particular situation that happens to come to the attention of Congress, but, rather, to review the entire problem and try to establish uniformity.

Senator ALLOTT. May I inject this: You ignored the fact that each State has a right to adjust its own laws with respect to this taking of land and as to the substantive law as to damages and what is compensable damage, you would be bound in the Federal court by the laws of that individual State.

Mr. PEARL. As I understand the decisions, Senator, the Federal law governs on the determination of just compensation.

Senator ALLOTT. If there is Federal law.

Mr. PEARL. The courts have held that the Federal courts will determine because of the constitutional guarantee of just compensation.

Under the rules the trial in the district court is in accordance with Federal rules, and we do not follow either the procedure or the substance of the State courts or State law on questions of compensation or determination of just compensation.

Senator ALLOTT. I am sure you do not follow the procedure in State courts. I am aware that the Federal has invaded the State's laws in many respects.

The body of the Federal law has grown to the extent that they do now ignore the State law entirely with respect to compensatory payments for land takings; is that right?

Mr. PEARL. Yes, sir.

The CHAIRMAN. General, on the Canadian negotiations, which are going to continue in Ottawa, the Canadians proposed a joint package of three projects in Canada. If these projects were brought in ahead of the U.S. project, or if they are accredited by the negotiators with such priority, they would absorb almost all the downstream benefits available in the Canadian River power system and thus render infeasible many of the storage projects planned by the U.S. portion of the basin which depend considerably on the downstream benefits allocable to them under existing U.S. projects.

Under these circumstances, would the authorization of the Knowles project strengthen the position of the U.S. negotiators and possibly save some of the downstream benefits for credit to the United States later on?

General ITSCHNER. Yes, sir. The authorization of the Knowles project and the authorization of any other projects that provide storage in the United States in the near future would strengthen the justification for the inclusion of these projects in a schedule of construction times.

Therefore, in negotiating with Canada, if we could show them that we plan to construct projects on a schedule which is earlier than the time the Canadian project could possibly be effected, that would mean that the U.S. projects would be considered to be the next added to the system.

That is important because the first project added to the existing system is the one which takes the cream of the benefits. The next one down takes less, and so on.

So it would greatly strengthen our hand in negotiating with the Canadians to determine how much power they should have returned to them for the storage which they are providing for benefit.

The CHAIRMAN. The members of this committee that are good lawyers would qualify you as an expert witness. I do not intend to do that. Are you not one of the three negotiators?

General ITSCHNER. Yes, sir.

The CHAIRMAN. You are not speaking from lack of acquaintance with the subject?

General ITSCHNER. Nor am I speaking as one of the negotiators, but just speaking in generalities which I am sure that anybody would recognize and accept. The negotiations must be kept confidential until we reach agreement.

The CHAIRMAN. Yes. I merely was saying that you are in a position to advise us because you do know what is going on.

General ITSCHNER. I am one of the three negotiators on each side.

The CHAIRMAN. Thank you. I have a statement here submitted for the record by Devereux Butcher, editor, National Wildlands News, which will be inserted in the record at this point.

(The statement referred to follows:)

STATEMENT OF DEVEREUX BUTCHER, EDITOR, NATIONAL WILDLANDS NEWS

The proposed Knowles Dam, suggested to be built by the Bureau of Reclamation of the Department of the Interior, on the Clarks Fork of the Flathead River, in western Montana, is of concern to the editors of National Wildlands News because it would reduce the National Bison Range by 2,500 acres, through inundation, with the possibility of another 3,000-acre reduction for relocation, on the refuge, of 4 or 5 miles of Northern Pacific Railway track.

The loss of these 5,500 acres in the lower elevations would mean a substantial reduction of vital winter range of the bison and other mammals, thus reducing the year-round value of the refuge.

If the dam is authorized and funds are appropriated, these funds should be sufficient to replace in whole or in part those lands which are flooded or otherwise are no longer usable by the 300 to 400 head of bison inhabiting the present area; and sufficient for construction of a new headquarters, fencing and other facilities. The land and facilities together may require as much as \$2,500,000. These funds should be made available when the first appropriations for the dam project are approved, so that necessary land acquisition can be completed as quickly as possible.

The late Dr. William T. Hornaday, president of the American Bison Society, purchased the present area through popular subscription, and in a report to the society, dated March 1910, he described it in these words: "The American people have thus become owners in perpetuity of what we believe to be the richest and the most beautiful grazing grounds ever trodden by bison hoofs. We have seen the best portions of the American great buffalo plains all the way from the Texas Panhandle to the sweet grass hills of northern Montana, and for abundance of rich grass, pure water, winter shelter, picturesque interior and picturesque surroundings, the Montana National Bison Range is absolutely beyond compare."

The loss of the National Bison Range is a matter not to be taken lightly. Even if the Fish and Wildlife Service should locate another equally suitable area, it should be realized that the removal of a large herd of bison is not accomplished without extreme effort. Bison cannot be driven like cattle. It might be possible to ease a herd through a strip of land a quarter mile wide by enticing it with feed. To ship more than one animal at a time by truck probably would be impossible without damage to the animals.

There is, it seems, reason to believe that not all of the big dams built or proposed to be built can be fully justified as necessary to human welfare, or that they are financially feasible, either with regard to construction cost or operation. To keep Government engineers solvent; to create a business boom for a local community; or to provide individual gain of any kind—such reasons cannot justify big dam building.

The editors of National Wildlands News hope Congress will give the most careful consideration to all advantages, if any, as well as to the disadvantages that would result, particularly with regard to the Nation as a whole, both from the point of view of economics and the loss or impairment of our outdoor heritage.

No sooner have we shown the once vigorously promoted Glacier View Dam, proposed to be built on the North Fork of the Flathead River, Mont., to be ill-advised because it would inundate a national park, than we are faced with another proposal that would cause similar impairment of a priceless national asset. It is on this basis that we now must oppose the Knowles Dam. Let us weigh well the permanent existing values—recognize their significance to ours and future generations—before giving way to the claims of those who see in the proposal a personal or community “bonanza.”

The CHAIRMAN. Mr. Nelson.

**STATEMENT OF H. T. NELSON, REGIONAL DIRECTOR, BOISE, IDAHO;
ACCOMPANIED BY DON BURNETT, CHIEF, DIVISION OF PROJECT
DEVELOPMENT, BUREAU OF RECLAMATION**

Mr. BURNETT. I am D. R. Burnett, Chief of the Division of Project Development, Bureau of Reclamation.

This is Mr. Harold Nelson, regional director, Boise, Idaho.

The CHAIRMAN. Will you proceed, please.

Mr. BURNETT. The Department of the Interior and several of its agencies have been working in the Clark Fork Basin since the early 1900's. In that time there have been several reclamation projects constructed, the latest of which is our multiple-purpose Hungry Horse Reservoir which was completed in 1954.

Last year we completed a reconnaissance report which inventoried the additional irrigation and water development projects in the area. We have not, however, studied in detail the Knowles or Paradise projects.

On March 23, 1960, the Department reported on S. 1226; but, because the Bureau of Reclamation had not made any detailed studies of the Knowles Dam, nor had it yet completed its review of the corps' report, the Department does not, at this time, make any recommendations as to the enactment of S. 1226.

Mr. Nelson, who is thoroughly familiar with the area, has a statement that he would like to present to this committee.

The CHAIRMAN. The Department has no recommendation with reference to S. 1226?

Mr. BURNETT. It has no recommendation as to the enactment at this time of 1226.

The CHAIRMAN. It has no recommendation as to the enactment. What is the difference between a recommendation on a bill and a recommendation on the enactment of a bill?

Mr. BURNETT. May I quote from the Department's letter?

The CHAIRMAN. Yes, if it helps me understand it.

Mr. BURNETT (reading):

We are unable to make any recommendations at this time with regard to the enactment of legislation which would authorize construction of the project.

Senator JACKSON. Are you able to make any recommendations for the consideration of the project?

Mr. BURNETT. Since we have not made any studies of this particular project and we have not as yet completed our review of the corps' report, we are not in any position to make any recommendations at this time.

Senator BIBLE. Is this a proper question: When would you be able to make the recommendation?

Mr. BURNETT. We would presume that after the Congress and this committee have been provided a feasibility report containing detailed studies, and we have had an opportunity to review it, we would then be in a position to make specific recommendations to this committee.

Senator JACKSON. How long would that take?

Senator BIBLE. When would this be? When could you say that Reclamation's position is this or that?

Mr. BURNETT. At the time the Corps' current report is completely processed and in the hands of this committee we would be in that position.

Senator BIBLE. Are you talking about 3 months, 6 months, 9 months or a year?

Mr. BURNETT. As General Itschner indicated, that report is now in the process of interagency review.

Senator BIBLE. They have 90 days to make their comments.

Mr. BURNETT. He said the review should be completed this April.

Mr. NELSON. Mr. Chairman, members of the committee, my name is Harold Nelson. I am Reclamation Director of the Bureau of Reclamation for this area and my office is located in Boise, Idaho. I have a statement that predominantly summarizes some basic data and also some investigations that have been conducted by the Department and some of the existing developments in the basin.

Perhaps, in the interest of brevity, I could insert this in the record.

The CHAIRMAN. I think we had better have your statement. We would like to know what you think about the project.

Mr. NELSON. I will certainly brief the statement.

I would like to call attention to a basin map which may be of interest to you as I go along. It is attached to the end of the statement, and is also represented on the large map before you.

Briefly, the areas in green are the existing irrigation developments in the basin. The areas in yellow are considered to be arable lands susceptible of future irrigation development. And, as a matter of convenience, we have also added the blue lines for both Paradise and Knowles, and have also indicated another project on which a project planning report is in the process of preparation, namely, the Ninemile Prairie Dam site which is located on the Blackfoot River upstream from the confluence of the Clark Fork and the Flathead and which may have some significance insofar as consideration of the Knowles project is concerned.

Senator ALLOTT. Could we have these various things pointed out as you go along so we are sure to understand it?

Mr. NELSON. Yes, sir.

As a starter, I think that the basin from the Idaho line up to where it enters Canada—that is Clark Fork Basin in Montana—is about 22,000 square miles, and has an annual runoff of about 15 million acre-feet, of which about 600,000 acre-feet enter from the relatively small part of the basin in Canada.

The Clark Fork Basin is predominantly made up, as I think General Itschner mentioned, of the Flathead River and the Clark Fork River which join to form the Clark Fork and flow into Pend Oreille Lake and the lower part of the basin in Idaho and northern Washington is commonly referred to as the Pend Oreille. In Mon-

tana it is referred to as the Clark Fork from the Idaho line east and north.

The CHAIRMAN. Would you point out the land that is going to be irrigated?

Mr. NELSON. The land that will be susceptible of irrigation are the areas in yellow. I think almost immediately you will observe that they are scattered all over the basin because of the nature of the basin. It is rather mountainous. It is heavily forested. What developments there are are concentrated pretty generally along the existing river valleys. So there are no large bodies of land.

The CHAIRMAN. What sort of per-acre cost are you going to have then?

Mr. NELSON. The costs are going to be high because it will be necessary to pretty largely pump the water. There will be long discharge lines. There will be requirements for large supplies of pumping energy.

Undoubtedly, financial assistance will be required to irrigators insofar as repayment of capital costs are concerned.

The CHAIRMAN. How much per acre, for example? If you have pumping and long lines in small tracts, this is generally pretty expensive, is it not?

Mr. NELSON. Yes, sir, it is.

The CHAIRMAN. \$1,000 or \$2,000 an acre?

Mr. NELSON. The areas that we have looked at up to now run on the order of \$500 to \$600 an acre, including \$200 to prepare the land, although there are about 120,000 acres developed now in Federal projects in the basin, the construction cost of which was relatively low, on the order of \$100 to \$200 an acre.

This question of irrigation is primarily going to be significant insofar as replacements are concerned due to some of these large impoundments. They are not projects that the Bureau is recommending at the present time for development as additional irrigated areas.

Senator ALLOTT. I do not understand that statement, Mr. Nelson. What do you mean?

The CHAIRMAN. Move somebody out and put them on a new piece of ground.

Senator ALLOTT. This is what you mean by replacement?

Mr. NELSON. Yes, sir.

Senator BIBLE. Would you point out whom you would dislocate if you built Knowles?

Mr. NELSON. There would be about 16,000 acres of arable land in the flow line area of Paradise which is probably more easily pictured on the small map.

The CHAIRMAN. Are these people now irrigating?

Mr. NELSON. A large percentage are irrigating by natural flow; a lot by gravity diversion.

There will be some dislocations in the Flathead Indian Reservation which is a combination of pumping and gravity flow now.

The CHAIRMAN. Have you made any study of what their per-acre return is at the present time?

Mr. NELSON. Yes.

The CHAIRMAN. What do they get generally off an acre in crops?

Mr. NELSON. The general returns from that area run about \$60 to \$80 per acre.

The CHAIRMAN. That is gross return?

Mr. NELSON. Yes.

The CHAIRMAN. And you would move them to land that would cost \$500 an acre?

Mr. NELSON. It is largely in support of the cattle industry, forage crops and so on.

The CHAIRMAN. You cannot afford to put cattle grazing on \$500 land.

Mr. NELSON. Not as a pure irrigation venture, no, sir.

Senator BIBLE. What do they raise on these 16,000 acres? Is it largely alfalfa?

Mr. NELSON. Yes, and pasture. There are some areas of sugar beets, particularly the Bitter Root Valley. Those projects have been developed for many years and the crops are higher.

The CHAIRMAN. Bitter Root is not involved in this.

Mr. NELSON. It is located in the basin, but they would not be affected.

The CHAIRMAN. We are talking about people who will be moved to this high-priced land. What are they producing now?

Mr. NELSON. We are not going to move anybody.

The CHAIRMAN. You are going to relocate them.

Mr. NELSON. But those are the problems if the project is enacted.

The CHAIRMAN. If all things work out, what are the people now growing, who will be moving to another location?

Mr. NELSON. Forage crops.

The CHAIRMAN. Not sugar beets?

Mr. NELSON. No, sir. That is one of the problems that would be confronted in this area.

Senator ALLOTT. Forage crops would be limited to hay and things of that type?

Mr. NELSON. Yes.

Senator ALLOTT. You do not include small grains in that?

Mr. NELSON. Yes, there are small grains.

Senator ALLOTT. Such as sorghum; that type of thing?

Mr. NELSON. No, sir. Generally, they are areas of forest lands that have Taylor grazing rights and bring the stock down for winter pasture. Usually they have alfalfa, too.

Senator BIBLE. How many crops would they cut in this area? What is the altitude?

Mr. NELSON. Generally about two to three crops.

The CHAIRMAN. How high is it?

Senator BIBLE. What is your altitude here? Is 2,700 correct?

Mr. NELSON. Somewhere around that. There are some dairy operations also.

I will get back to how the irrigation potential fits into other development plans. I want to mention something about the control of the basin flow now, the 15 million acre-feet.

It is largely uncontrolled. There is only one multipurpose major reservoir in the entire basin, Hungry Horse Dam on the south fork of the Flathead River. It has a storage capacity of 2,982,000 acre-feet, an installed capacity of 285,000 kilowatts.

I believe in the entire basin there is about 4½ million acre-feet of developed storage at the present time. There are about 360,000 acres presently irrigated in the entire basin. The Bureau of Reclamation is estimating that there is about 270,000 acres that could conceivably be developed in the future, providing, of course, the economics so justify.

I think we have touched upon the fact that future irrigation development will be confronted with two problems: one, the necessity for low-cost pumping power; and, secondly, undoubtedly a requirement for financial assistance by use of surplus power revenues such as would be provided by a basin account. There will be no question of water supply. In other words, the potential irrigable acreage has been a little over half developed. And as far as percentage of irrigation development is concerned, it far exceeds the development insofar as the control of the riverflow is concerned. There are about 835,000 kilowatts of developed hydro in the basin now. They include four plants of the Montana Power Co., about 210,000 kilowatts; one small plant of the Pacific Power & Light Co., 4,000 kilowatts; one of the Washington Waterpower, 336,000 kilowatts; and the one Federal plant of 285,000 kilowatts.

The Department of Interior, in combination with the Geological Survey, the Indian Service, the Bureau of Sports Fisheries and Wildlife, has had interest in the basin dating from the early 1900's. I mentioned earlier that there are four development projects totaling 120,000 acres. The principal one is the Flathead Indian Reservation, which accounts for something like 90,000 acres of that total. The others are the Bitter Root, Frenchtown, and Missoula Valley. There is a National Bison Range, and there are also a number of wildlife refuges that could be affected by the multipurpose river developments that have been discussed such as the Knowles-Paradise projects.

Insofar as basinwide investigations go, in order to avoid unnecessary duplication of work and costs in studies of this kind, the Bureau of Reclamation and the Corps of Engineers signed an agreement April 11, 1949, which delineated areas in which each agency was deemed to have a primary interest, and from that point forward the agreement specified that subject to any directives that Congress might issue, responsibility for conducting new investigations on a multipurpose basis would rest with the Department of the Interior in the Clark Fork.

The first step that the Bureau and the Department felt necessary of consideration in some of these multipurpose developments would be an evaluation of what were the other resources that remained to be developed. As a result of that, the Bureau issued a rather large reconnaissance report in June 1959, which has examined all 11 sub-basins from the standpoint of various potentials.

This is not a feasibility report. The report does not make any recommendations. However, the Bureau did not, in recognition of conflicts and unresolved local problems surrounding Knowles or Paradise, perform any work on those two projects. The engineering and economic studies have all been performed by the Corps as outlined to you by General Itschener. However, pending resolution of those matters, the Bureau did complete a reconnaissance classification of all

the lands in the basin. In addition to that, it conducted some feasibility grade studies on projects that would be complementary to the Knowles or Paradise projects and probably would not become adversely affected by but would be coordinated with any development plan that might be selected.

One of these is the Ninemile Prairie Dam, which I called particular attention to because it is on the Blackfoot River.

It will be observed that the Knowles project would more or less completely develop the flow of the Flathead River, but would be above the confluence of the Clark Fork, which would leave the Clark Fork uncontrolled.

So the Ninemile Prairie Reservoir upstream would add about 1 million acre-feet of storage. It would also provide about 60,000 kilowatts of installed capacity, and, in combination with Knowles or in combination with Paradise, could provide some further upstream development.

The estimated cost of that project would run about \$55 million.

The other project now under study is a run-of-the-river project below Ninemile Prairie, called McNamara, which would have an installed capacity of something like 40,000 kilowatts.

Finally, there is another project, Spruce Park Dam and Reservoir, under study that would provide storage on the middle fork of the Flathead River. That would be near Glacier National Park. The storage would amount to about 400,000 acre-feet. Through a pressure tunnel it would develop about 800 feet of head and bring the water out on the backwater of the existing Hungry Horse Reservoir. That would add about 78,000 kilowatts of installed capacity and is estimated to cost something like \$82 million. It is a high-cost project. The feasibility of that has not yet been determined.

I believe, Mr. Chairman, that I have given you a brief rundown of the potentials of the basin and some of the projects that are currently under reservation.

(Mr. Nelson's statement follows:)

STATEMENT BY BUREAU OF RECLAMATION, HAROLD NELSON, REGIONAL DIRECTOR,
BOISE, IDAHO

DESCRIPTION OF THE BASIN

The Clark Fork River Basin is a major component of the Columbia River system and contains the largest remaining water resource development potential within the State of Montana. The basin, as illustrated on the attached basin map, extends some 250 miles northward from the border of the Snake River Basin to and including a small area in Canada. From a line formed by the Continental Divide, on the east, the basin extends westward about 250 miles and covers western Montana (except for a small part of the Kootenai River in the extreme northeast corner), the northern panhandle of Idaho, and northeastern Washington. The latter portion from Pend Oreille Lake to the Columbia River is also known as the Pend Oreille River Basin.

BASIN RUNOFF

The Clark Fork Basin lying wholly within Montana west of the Continental Divide comprises an area of about 22,000 square miles. This part of the basin has had an annual runoff of 15,750,000 acre-feet (including 600,000 acre-feet of Canadian inflow) during the 1911-56 period, which is about 10 percent of the runoff of the Columbia River at The Dalles.

Most of the basin's runoff water is uncontrolled and contributes to downstream floods. There is one major headwater reservoir, Hungry Horse, com-

pleted by the Bureau of Reclamation in 1954 on the South Fork of the Flathead River, with an active capacity of 2,982,000 acre-feet which is operated in the interest of downstream river regulation. There are a number of possible reservoir sites in the basin that could provide additional storage for river regulation and also develop hydroelectric power for both local and regional use.

IRRIGATION IN THE BASIN

About 359,000 acres are presently irrigated in the basin and the Bureau of Reclamation has estimated that there is a potential of about 270,000 acres of nonirrigated but arable lands that could possibly be developed at sometime in the future. Thus, it can be seen that while the Clark Fork Basin is an area of abundant water resources, irrigable lands are relatively limited in relation to this water supply with over one-half developed now. Most of the basin is mountainous and forested. There are large tracts of natural grasslands used for livestock grazing. The agricultural lands are used primarily in support of the livestock industry and the principal areas are concentrated in a few larger valleys. There are numerous small tributary valleys containing farmed areas. About 84 percent of the irrigated land in the basin is used for forage production.

IRRIGATION DEVELOPMENT PROBLEMS

Future expansion of irrigation in the Clark Fork Basin will be limited by economic considerations and by the land resource rather than the water supply. Most of the suitable and easily irrigated lands are privately developed and are served by simple low-cost diversions. Most of the nonirrigated arable lands occur on isolated remnants or terraces lying at considerable elevations above adequate sources of irrigation water.

Typically the arable land bodies are too scattered to be served by single project canal systems. High pumping heads, lengthy discharge lines, and relatively small bodies of land result in high per unit costs on all but a few lower-lying compact areas. Although the cost of supplying water to each arable tract has not been determined and much of the available data is of reconnaissance grade, it has been concluded that a source of low-cost pumping power and financial assistance will be required in the future irrigation development of the Clark Fork River Basin.

POWER DEVELOPMENT

There are 835,150 kilowatts of installed hydroelectric capacity in seven plants located in the Montana portion of Clark Fork Basin. These include four plants of the Montana Power Co. totaling 210,000 kilowatts, one owned by Pacific Power & Light Co. of 4,150 kilowatt, one built by the Washington Water Power Co. of 336,000 kilowatts, and the one Federal plant of 285,000 kilowatts.

EXISTING FEDERAL PROJECTS

The Department of the Interior has had important responsibilities in the development of the water and land resources of this basin since the turn of the century. The Bureau of Reclamation, Bureau of Indian Affairs, and the Geological Survey have participated in the collection of basic data and construction of water development projects. Presently constructed projects include the Flathead, Bitter Root, Frenchtown, and Missoula Valley irrigation projects serving some 120,000 acres of irrigated lands and the multiple-purpose Hungry Horse project containing 2,982,000 acre-feet of usable storage and an installed hydroelectric capacity of 285,000 kilowatts. Hungry Horse powerplant is interconnected with the other plants of the Federal Columbia River power system through transmission lines and other facilities built and operated by the Bonneville Power Administration.

BASINWIDE INVESTIGATIONS

Under the authority of Federal reclamation law (act of June 17, 1902, 32 Stat. 388, and acts amendatory thereof or supplementary thereto) the Bureau has been engaged in investigations of potential irrigation and resource development projects throughout the Clark Fork Basin since the early 1900's. Basinwide investigations in the Clark Fork by the Bureau of Reclamation were begun following World War II. An interim report was prepared in March 1948. Following this, a number of specific irrigation project investigations were started including

studies of the Bitterroot and Kalispell Valleys. These studies have been completed and reports prepared. During this period the Bureau constructed the Hungry Horse project, located on the South Fork of the Flathead River, under authority of the act of June 5, 1944 (58 Stat. 270). Construction of this project was initiated in 1948 and was completed in fiscal year 1954.

In order to avoid unnecessary duplication of works and costs in the studies of potential projects in the Columbia River Basin, the Bureau of Reclamation and the Corps of Engineers, U.S. Army, on April 11, 1949, signed an "Agreement on Principles and Responsibilities in the Columbia River Basin," which delineated the areas in which each agency was deemed to have the primary and predominate interest. Exhibit G of the agreement specifies that the responsibility, subject to any directives Congress might issue, for conducting new investigations and of continuing investigations already launched of potential multipurpose storage and power projects in the Clark Fork Basin should rest with the Bureau of Reclamation.

In June 1959, the Bureau completed a reconnaissance report, "Clark Fork Basin, Montana," inventorying the irrigation and water development potentials of the area drained by the Clark Fork River and its tributaries.

This inventory indicates that of the 359,000 acres of presently irrigated land about 95,000 acres are in need of supplemental water. Assuming that the 270,000 acres of nonirrigated arable lands and the portion of presently irrigated lands needing supplemental water are furnished an adequate irrigation supply, it is estimated that the additional irrigation depletion would amount to about 450,000 acre-feet annually. The presently irrigated area depletes streamflow an estimated 500,000 acre-feet annually. Thus, the total irrigation depletions could approach 1 million acre-feet annually, or about 6 percent of the basin streamflow.

CURRENT INVESTIGATIONS

The Bureau of Reclamation has not made engineering or economic studies or plans of the Knowles project on the Flathead River or the larger potential Paradise project on the Clark Fork River. Both of these projects were studied by the Corps of Engineers prior to 1948 and its findings were published in House Document No. 531, 81st Congress, 2d session. Because of the many conflicting views and lack of unified support by a majority of the interests which would be affected by construction of either of the projects, the Bureau of Reclamation has during the intervening years believed that inclusion of these projects in its investigation program was unwarranted.

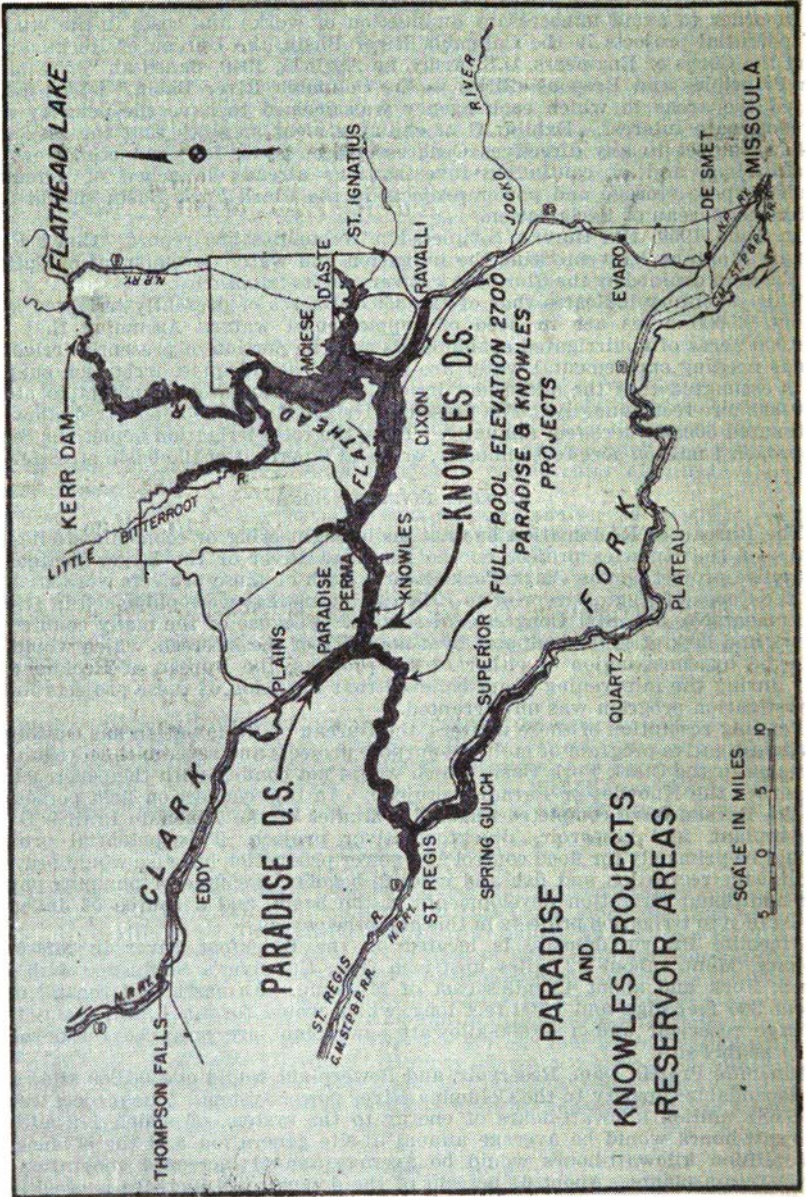
Pending resolution of these matters, the Bureau of Reclamation has continued its investigative program of multiple-purpose projects and reservoirs on tributary streams in the Clark Fork Basin which would not conflict with the construction of either the Knowles or Paradise projects. In this connection field personnel of the Bureau have completed feasibility studies of the Ninemile Prairie Dam, powerplant, and reservoir, Blackfoot River project. This potential project would be primarily for flood control and power production but also would provide significant recreation and fish and wildlife benefits, a source of pumping power for additional irrigation developments in the basin, and a source of financial assistance to irrigation projects in this and other areas.

Ninemile Prairie damsite is located on the Blackfoot River in Missoula County, Mont., about 22 miles upstream from the river's confluence with the Clark Fork and about 42 miles east of Missoula. An earth and rockfill dam about 300 feet high and 1,100 feet long, which would form a 1-million-acre-foot storage reservoir and a 60,000-kilowatt powerplant are proposed for development at this site.

Ninemile Prairie Dam, Reservoir, and Powerplant would add 60,000 kilowatts of dependable capacity to the Columbia River power system. The project would add 581 million kilowatt-hours of energy to the system, of which 172 million kilowatt-hours would be average annual at-site generation and the balance of 409 million kilowatt-hours would be average annual increased generation in downstream plants. About 61 percent of the downstream increase is creditable to downstream Federal installations.

The Ninemile Prairie development has been an integral part of nearly all development plans because it would control the Blackfoot River, which is a major stream in the Clark Fork system.

There is no presently recommended or authorized alternate to the Ninemile Prairie development. Ninemile Prairie Dam, Reservoir, and Powerplant on the Blackfoot River, and Knowles project on the Flathead River, are recommended



elements of the major water plan for the future in the report, "Water Resource Development, Columbia River Basin—June 1958," Corps of Engineers, U.S. Army.

Paradise damsite, on the Clark Fork below the mouth of the Flathead River, was selected in the 1948 studies in connection with preparation of House Document 531 and was an important element in the coordinated system for control of Columbia River flows, particularly in the lower Columbia River area. The Knowles site was also considered at that time and was reviewed in the more recent studies as a separate and alternative project to Paradise. Construction of Knowles would preclude development at the Paradise site and vice versa because Knowles is located within the Paradise Reservoir area. There is no physical incompatibility between Ninemile Prairie and the two sites. In fact, Ninemile Prairie Dam would not physically conflict with any development in any comprehensive plan proposed to date.

Construction of either the Knowles or Paradise projects for control and regulation of the Clark Fork River waters would reduce to some extent the downstream benefits allocable to the proposed Ninemile Prairie project. Due to the fact that Paradise Reservoir would provide control at a point downstream from Ninemile Prairie the reduction would be greater on the allocable downstream flood control and power benefits than if Knowles were constructed. However, in either case, benefits from Ninemile Prairie would still be sufficient to justify that project as part of the basin's regulatory storage. Several potential run-of-the-river power projects, such as McNamara, Plateau, Quartz Creek, Superior, and Quinn Springs, located between Ninemile Prairie and Paradise sites, would entirely depend upon upstream storage such as Ninemile Prairie would provide.

The CHAIRMAN. The Corps of Engineers report states that Knowles would inundate 9,000 acres of land and about 1,600 acres of cultivated land.

Mr. NELSON. The 16,000 I was giving you was Paradise. It would be both forks.

I think the two statements are compatible. I agree that the 9,000 would roughly approximate the Flathead project. The rest would be on Clark Fork if Paradise were built.

I might add in that connection, Senator Anderson, that some preliminary studies were made of the replacement areas that might be available close to the pool area. We find something like 47,000 acres. However, the quality of those lands is considerably lower.

We recognize the construction and operating problems that have been mentioned. No detailed studies have been made. They are not considered to be warranted until there are some fundamental decisions on the development plan. It will take quite a lot of general investigation funds to run those things out.

The CHAIRMAN. What sort of land does the bison range occupy?

Mr. NELSON. I think Mr. McBroom would be qualified to answer that.

The CHAIRMAN. Is it good land or rough land?

Mr. MCBROOM. I believe I am the next witness. Shall we wait until then?

(Mr. McBroom subsequently provided the following description of the area:)

The National Bison Range is an area of steep hills and wide valleys, in the great basin between the Continental Divide and the Bitterroot Mountains, above Missoula in western Montana. The famed buffalo grass that fed the extensive herds on the prairies does not grow here, but there is sufficient nourishment for the stock in the wheatgrass and fescue that blanket the area. Though snow piles into huge drifts in nearby hills, the bison range is so located that it is scantily covered in winter. Even in the worst weather, bison are ruggedly self-sufficient, and can find forage by rooting through the snow.

The upper hills are covered with Douglas-fir and yellow pine, and along the creek bottoms are junipers, aspens, and cottonwoods. These creek bottoms are favored by the white-tailed deer, while the mule deer frequent the higher slopes and ridges. Plants at this altitude are the bitterroot, which is Montana's State flower, paintbrush, and penstemon. Patches of balsamroot and lupine brighten the hills in season, and lower down the larkspur, yellow bells, and asters bloom on nature's schedule. Clematis and wild cucumber cover some of the 23 miles of big-game fence that surrounds the area.

Shrubs of the refuge include the currant, Juneberry, or serviceberry, choke-cherry, mockorange, and wild rose, whose seed pods, or hips, are relished by birds.

Mr. NELSON. In addition to the irrigated areas, there is quite a considerable area of natural grassland now used for agricultural purposes. I believe something like 1½ million acres was studied, to come up with this total I gave you, that might be susceptible to a higher type of development.

The CHAIRMAN. You recognize, with the present agricultural surpluses, the Congress may not be enthusiastic about bringing a couple of hundred thousand acres of irrigated land?

Mr. NELSON. Yes, sir. That is a long-range estimate.

Senator ALLOTT. On your map you have a yellow area here—Kalispell, which is a potentially irrigable area, and it is the only large unit in all of your yellow-designated development zone.

Mr. NELSON. Yes, sir.

Senator ALLOTT. Where does that fit into your map?

Mr. NELSON. That is completely above the area that would be affected by the development of the Knowles-Paradise projects, which are below Flathead Lake.

The blue area is the Flathead Lake. The Flathead River flows out of Flathead Lake to the south and to the west.

Senator ALLOTT. That is in the Kerr Dam area?

Mr. NELSON. Yes; below Kerr Dam.

Senator ALLOTT. How would this Kalispell area, if we can refer to it that way, then be susceptible of irrigation?

Mr. NELSON. The Kalispell area would be susceptible to irrigation if and when conditions warrant, by pumping from the Flathead River in that area. It would not be connected with the Knowles-Paradise project in any way. This is just a basin representation of the whole basin.

Senator ALLOTT. So it would be a pumping project completely from the Flathead River?

Mr. NELSON. Yes, sir.

Senator ALLOTT. I would like to ask this other question.

Your yellow spots, which designate your possible or susceptible irrigable lands, seem to be extremely scattered and extremely small, as you have stated.

We face this problem: you can grow sugar beets up there. At the present time there are no quotas available for sugar beets. So I presume, as a crop, it is fairly well eliminated.

I see Senator Jackson sitting on my left, and he has tried to get additional quotas for his State, too. So I presume this is a thing that we could only consider as a very possible thing in the future.

Mr. NELSON. That is correct.

Senator ALLOTT. Can you justify a \$500 or \$600 an acre cost for the production of forage corps? I personally cannot see how you can do it.

Mr. NELSON. I am saying you cannot, sir.

Senator ALLOTT. The only thing that might be grown in this area, if you eliminate the forage crops, is the small grains.

Mr. NELSON. And row crops in the lower regions of the basin.

Senator ALLOTT. To identify that with the map, that would be in the area which goes toward the northwest corner of the map?

Mr. NELSON. That is correct, sir.

Senator ALLOTT. How many acres would actually be there in that area?

Mr. NELSON. The lower Clark Fork would have about 25,000 acres susceptible of development. It would probably be developed by rather small pumping lifts from the river.

In that particular area I am sure that the construction cost would be much lower than the average I gave you, which would be for high-cost replacement. But the operation and maintenance cost would be high because of the necessity for pumping, possibly as much as 200 feet.

I would say that all of the areas delineated on this map are 200 feet or less from the river. So individual areas where only a small pumping plant is involved would probably not carry the high per acre cost, but would carry a high annual operation and maintenance cost which, in turn, would make the availability of pumping power very important.

Senator GRUENING. What would be a minimum cost for the irrigation of 10,000 or 20,000 acres? What would be the approximate overall cost?

Mr. NELSON. Are you asking me that on a per-acre-per-year basis or a total cost?

Senator GRUENING. On the total cost.

Mr. NELSON. We have estimated that the water users here could afford to pay something on the order of about \$6 per acre per year. That includes operation and maintenance and return on capital investment. So, if you are referring to a 10,000-acre project, and \$2-per-acre-per-year repayment, in 50 years the water users would pay about a million dollars.

My estimate is that the cost of the project of that kind would probably run three times that. It would pay about one-third of the proper cost.

Senator GRUENING. Would you consider that an economically sound undertaking?

Mr. NELSON. That would depend upon the benefit cost determination and an analysis of the productivity capacity of the land. I would say that the areas we have delineated in yellow, we feel over the long pull, probably can develop a favorable benefit-cost ratio.

Senator GRUENING. You mean over 50 years. Is that what you mean by the long pull?

Mr. NELSON. I was referring to the pressures to develop land in the future years. I would say as of this time the Department and the Bureau of Reclamation are not proposing a new irrigation development in that area.

Senator GRUENING. Then your answer is that it is not economically feasible?

Mr. NELSON. It is not economically feasible at the present time.

Senator GRUENING. Although you say in the long pull it would be.

Mr. NELSON. Feasibility probably could be developed depending on the availability of pumping power and surplus power revenues to aid repayment of irrigation costs.

Senator GRUENING. Aren't your two statements somewhat in conflict?

On the one hand, you say you don't recommend, and, on the other, you say it will work out in the long pull. Which is it?

Mr. NELSON. We do not recommend it now because we do not have the availability of pumping power. We have not conducted detailed economic analyses of any of these areas.

Senator GRUENING. You really do not have information at the present time?

Mr. NELSON. We do not. We have the background of 120,000 acres of, I would say, completely successful irrigation development up to this time in the general range I have given you, of repayment of about \$6 an acre per year.

Senator BIBLE. In line with that question of Senator Gruening, you are going to displace about 9,000 acres if Knowles Dam were to be constructed. Is this correct?

Mr. NELSON. I would say that is correct, sir.

Senator BIBLE. Have you developed any figures, or do you have any idea of what the cost of replacing the 9,000 acres would be per acre?

Mr. NELSON. No, sir; we have not.

Senator BIBLE. You have no idea of that at all?

Mr. NELSON. No, sir.

Senator BIBLE. Is it \$100 an acre, or \$200?

Did I not understand General Itschner to say it could be \$500 an acre?

Mr. NELSON. No. I used the figure that it would be several hundred dollars an acre. It could conceivably cost \$500 or \$600 an acre, which includes \$200 for preparing the land for irrigation.

Senator BIBLE. If you take farmers away and place them in some other general area, your statement is that it would cost about \$500 an acre?

Mr. NELSON. It could, conceivably.

Senator BIBLE. But you say you have not made a study of it.

Mr. NELSON. That is right.

Senator BIBLE. I do not want to be unfair on the question because you have not made a study.

Mr. NELSON. We have not felt at this stage of the game that expenditures of that kind were warranted.

Senator ALLOTT. Now, if I may comment, we were getting at the type of crops that could be expected from this area. As you explained, it would all result in either forage crops or the small grains.

Mr. NELSON. Yes.

Senator ALLOTT. As I look at this map, what this means is that, compared with the total cost, you have little justification for this project from the standpoint of irrigation?

Mr. NELSON. That is correct.

Senator ALLOTT. You mentioned a 200-foot head. Just to put this in the realm of practicality, it is a very expensive process to pump water against a 200-foot head, is it not?

Mr. NELSON. Yes.

Senator ALLOTT. I think that is all.

The CHAIRMAN. Are there additional questions?

If not, Mr. McBroom, do you have a statement on this?

STATEMENT OF JAMES T. McBROOM, CHIEF, BRANCH OF RIVER BASIN STUDIES, BUREAU OF SPORT FISHERIES AND WILDLIFE, FISH AND WILDLIFE SERVICE; AND W. E. ACKERKNECHT, ASSISTANT CHIEF, BRANCH OF WILDLIFE REFUGES

Mr. McBROOM. Mr. Chairman, we appreciate the opportunity of appearing before the committee this morning. We do have a statement of four or five pages, and I will attempt to boil it down as much as possible.

First, the Fish and Wildlife Service has investigated this project in accordance with the Fish and Wildlife Coordination Act to determine its effects on fish and wildlife resources. This has been in the nature of a preliminary and reconnaissance report that has been prepared so far.

On the fishery side we find that there is good fishing in the river that will be flooded out. The reservoir that will be built will result in a good-size rough fish population, and this will present a problem. Our major concern, however, Mr. Chairman, is the effect that this project will have on the National Bison Range.

Senator ALLOTT. Are you going to come back to fish at any time?

Mr. McBROOM. That is all I am planning to say on the subject of fish.

Senator ALLOTT. I would like to ask one question.

Is this involved in the salmon run at all?

Mr. McBROOM. No, sir.

The National Bison Range was established by act of Congress in 1908. It consists of about 18,500 acres. This range was constructed by public subscription as well as by appropriation of Congress. It is one of the finest if not the finest area for bison that we have left in the country.

If the Knowles project is to be constructed, some 2,200 acres of range, including both open land and wintering areas, would be lost by inundation. An additional 3,000 acres and the principal water supplies would be isolated by the necessary relocation of the railroad right-of-way. This would mean that something over 5,000 acres of the total would be rendered unusable as part of the range. This would take the very heart out of it.

We have a great number of problems with the management of this species. It is doubtful in our mind whether an additional area located at some distance from what would be left of the bison range could be utilized. Buffalo are not species that can be driven or herded. There are a lot of problems, one of which is that the cows are likely to throw their calves and a large proportion of miscarriages.

We have estimated a number of measures that need to be undertaken as part of the project if it is carried out. These measures are spelled out fully in the statement which I have presented to this committee.

Senator BIBLE. Before you develop that, may I ask one question.

How many bison do you estimate there are on the range at the present time?

Mr. ACKERKNECHT. About 350 head. We can carry about 500 or 600 head, but about 6 or 7 years ago we had a sentimental refuge manager and he let the range deteriorate because he wanted the animals to build up. In the last 6 or 7 years we have gone into a revegetation program, and, as a result, we have had the heard down to 300 head. We are gradually building up now, so that there are about 350 head.

Senator BIBLE. What other type of animals do you have on the range?

Mr. ACKERKNECHT. Antelope, big horn sheep elk, mule and white-tail deer.

Senator BIBLE. In roughly what numbers?

Mr. ACKERKNECHT. There are approximately 65 elk in the area, 400 deer, about 75 big horns, and about 60 antelope.

Senator BIBLE. This is the total animal population within this bison range that has just been described?

Mr. ACKERKNECHT. That is right. It will be built up higher after our revegetation program is completed.

Senator BIBLE. Do you have an open season on bison?

Mr. ACKERKNECHT. No, sir. They are all disposed of under a control system. We don't allow any hunting on the refuge.

Senator BIBLE. What is the control system? Do you give them 50 permits?

Mr. ACKERKNECHT. We bring them into corrals and sort them out like you would a normal cattle herd. It is a rather tricky operation and we handle it exclusively with our own personnel. The animals are too dangerous to allow hunting as far as we are concerned.

The CHAIRMAN. What is the total population of bison in the country?

Mr. ACKERKNECHT. Between 8,000 and 9,000 head. This is the only project ever established specifically for buffalo.

The CHAIRMAN. Under the Federal Government?

Mr. MCBROOM. Yes. This is the only one established specifically for buffalo.

The cost of carrying out the measures that we have estimated in our preliminary report is estimated at \$2,096,600. Included in this figure was a tentative estimate of \$350,000 for acquisition of land to replace the habitat lost on the bison range, \$250,000 for the relocation of refuge headquarters and administration facilities, and \$250,000 for replacement of big-game fencing. The refuge headquarters would be inundated completely.

The CHAIRMAN. How much property cost do you have in the headquarters? You only have 300 buffalo. You don't have too much headquarters.

Mr. ACKERKNECHT. No, sir.

We estimate that the existing facilities that would be inundated would cost about a quarter of a million dollars to replace. Some of those have been in existence for quite a number of years. In fact, the project has been in operation for over 50 years.

The CHAIRMAN. Would you send us a little sketch of what you have to run 350 buffalo? You certainly have no problem in connection

with 70 or 80 head of elk. We have many, many ranches that have those in the back yard.

Mr. McBROOM. You want a description of the headquarters facility?

The CHAIRMAN. Yes. I would like to know what is going to cost a quarter million dollars, to look after that many head.

(The following information was later supplied for the record:)

NATIONAL BISON RANGE, ADMINISTRATIVE FACILITIES, MARCH 31, 1960

The administrative facilities for the National Bison Range, Montana, consist of the following:

- 1 office building.
- 1 service building.
- 1 shop and warehouse combination building.
- 2 equipment buildings.
- 1 warehouse.
- 4 garages.
- 1 oil house
- 2 pump houses.
- 1 horse barn.
- 2 utility buildings.
- 1 coal storage house.
- 5 residences.

If it is necessary to replace the administrative facilities, some reduction in the number of buildings doubtless can be made through consolidation.

Mr. ACKERKNECHT. We have a sizable herd of horses. We have 10 or 12 riding animals we have to maintain. We have facilities for our staff.

Senator BIBLE. If I might interpolate, how much does it cost per bison? How much does Uncle Sam pay per bison? What is the operation and maintenance cost of a bison per year?

Mr. ACKERKNECHT. I don't have the figure.

The annual operating costs run between \$30,000 and \$40,000.

Senator GRUENING. Has the Department given any consideration to a replacement range somewhere for the land that would be taken out by the project? I know that was suggested by Senator Murray.

Mr. ACKERKNECHT. Yes; we have given some consideration. We have been unable so far to find any suitable range.

Senator GRUENING. We have lots of replacement areas in Alaska.

Mr. ACKERKNECHT. The buffalo that are in Alaska are animals that came from the National Bison Range.

Senator GRUENING. Yes, sir. We are glad to have them. They have propagated quite rapidly.

Mr. McBROOM. It may cost \$2,250,000 for land and water as replacement. The amount equal to the 1958 estimate of \$2,096,600, which I referred to earlier, is included in the construction cost estimate contained in the report of the division engineer of the Corps of Engineers on water resource development, Columbia River Basin, dated June 1958. It is also contained in a report of the Board of Engineers for Rivers and Harbors, dated June 5, 1959.

If a new estimate were to be made today, it would have to be increased by \$2,150,000 at least to provide adequately for the total replacement of the bison range, if that is required.

The CHAIRMAN. Does that that mean a total of \$4 million?

Mr. McBROOM. Yes, sir.

The CHAIRMAN. Is that \$10,000 a bison?

Mr. McBROOM. No, sir. A substantial part of the total cost would be for fish and wildlife measures other than those related to the National Bison Range.

The Fish and Wildlife Service is now preparing a detailed report scheduled for completion in April 1961, which will further analyze the effect of the project on fish and wildlife, and approach specific measures for mitigation and enhancement of these resources in connection with the project construction and operation. The cost estimate for carrying out the needed measures will be brought up to date at that time.

Close cooperation with the Corps of Engineers or any other construction agency will be continued so that the measures needed for fish and wildlife can be integrated with other project plans.

That completes the statement, Mr. Chairman.

We have some leaflets on the National Bison Range. I don't offer them for the record, but the committee might like to look them over.

May I ask that our whole statement be incorporated in the record? The CHAIRMAN. Yes.

(The statement referred to follows:)

STATEMENT OF THE BUREAU OF SPORT FISHERIES AND WILDLIFE

In accordance with the Fish and Wildlife Coordination Act the Bureau of Sport Fisheries and Wildlife, in cooperation with the Montana Department of Fish and Game, prepared a report, dated October 31, 1959, on fish and wildlife resources of the Clark Fork River Basin, including the Knowles Reservoir project. The Knowles project was also discussed in a report, dated February 1958, prepared by the Fish and Wildlife Service in cooperation with the Montana Department of Fish and Game and other State conservation agencies.

In these reports it was pointed out that the project would inundate stream habitat, including spawning areas, of resident-game fish. The reservoir would cause undesirable rough fish species to increase unless they were controlled, would probably cause increases in populations of warm-water species, and would affect game-fish populations adversely through water-level fluctuation and loss of spawning areas. The game-fish populations might furnish good fishing, however, if a stocking program, control of rough fishes, and water-level stabilization—particularly during the summer months—could be accomplished. The downstream fishery might be benefited substantially by control of river flows and provision of a cool temperature regimen. The National Bison Range, administered by the Bureau of Sport Fisheries and Wildlife, would be severely damaged by the project. The refuge comprises a most important bison habitat and is the only Federal area in the country established specifically to preserve this species. Had it not been for this refuge, the bison might well have vanished from the United States. The refuge of 18,540 acres was established by Act of Congress in 1908. Funds for purchase of the original bison stock were obtained by national public subscription conducted by the American Bison Society. School children contributed their pennies so that this great American animal could be preserved for posterity.

Some 2,192 acres of range, including essential bottomland and wintering areas, would be lost by inundation to bison and other big-game using the range. An additional 3,000 acres and the principal water supplies would be isolated through railroad relocation. Relocation of headquarters buildings and other facilities would be necessary. If the Knowles project is constructed, and if suitable replacement for winter range adjoining the existing refuge is not found, it may be necessary to replace the refuge in total at some other location. Annual transfer of bison between winter range and summer range by driving methods, if needed because of separation of the two, is infeasible because of the damage the animals do to one another and the associated high rate of abortion during spring movement. The effect of the project on the Canada goose population of western Montana would be serious because of flooding of nesting habitat. The project would also cause a significant decline in the largest and most heavily utilized pheasant population in northwestern Montana.

In our report entitled, "Comments on Fish and Wildlife Resources in the Columbia River Basin" in relation to review of House Document 531, 81st Congress, by the Corps of Engineers, dated February 1958, it was pointed out that the following measures should be undertaken if the Knowles project were constructed:

(1) Detailed studies of fishery resources; (2) chemical treatment of the impoundment area and tributary streams to remove undesirable rough fish species; (3) stocking of treated water with resident game fish; (4) construction of hatchery facilities to provide fish to maintain resident game-fish populations and development of remaining spawning areas by stream improvement in the reservoir and tributary streams; (5) stabilization of reservoir levels, especially in the summer months, to aid in fish production and harvest; (6) provision for flow releases from a low level in the reservoir at a minimum of 2,000 cubic feet per second and free from sudden and severe fluctuations in volume; (7) detailed studies of wildlife; (8) development of nesting habitat for Canada geese; (9) provision of management areas for brooding and feeding by Canada geese; (10) construction of controlled-level impoundments for waterfowl, development areas; (11) acquisition of lands for development of pheasant habitat; (12) acquisition of lands if available adjacent to the National Bison Range suitable for range development, and relocation of headquarters and other facilities, or relocation of the entire bison range and appurtenant facilities to another area if range replacement on adjacent land proves neither feasible nor satisfactory; and (13) fencing of game-management areas to exclude livestock and permit controlled access.

The cost of carrying out the above measures was estimated at \$2,096,600 in 1958. Included in this figure was a tentative estimate of \$350,000 for acquisition of land to replace the habitat lost on the Bison Range and relocation of refuge headquarters and other facilities. Today, it is estimated that replacement of headquarters facilities alone would cost about \$250,000; and if total replacement of the refuge should prove necessary, it may cost as much as \$2,250,000 for land and water for the refuge.

An amount equal to the 1958 estimate of \$2,096,600 is included in the construction cost estimate contained in the report of the Division Engineer, Corps of Engineers, on "Water Resource Development, Columbia River Basin" dated June 1958, and the report of the Board of Engineers for Rivers and Harbors dated June 5, 1959. If a new estimate were to be made today, it would have to be increased by at least \$2,150,000 to provide adequately for total replacement of the Bison Range if such is required.

The Fish and Wildlife Service is now preparing a detailed report, scheduled for completion in April 1961, which will further analyze the effects of the project on fish and wildlife and propose specific measures for mitigation and enhancement of these resources in connection with project construction and operation. Cost estimates for carrying out the needed measures will be brought up to date at that time. Close cooperation with the Corps of Engineers will be continued so that measures needed for fish and wildlife can be integrated with other project plans.

The CHAIRMAN. Are there any other questions?

We have made arrangements to go into another session, but Mr. Florance is still to testify. Do you have a statement on this?

STATEMENT OF REYNOLDS FLORANCE, DEPARTMENT OF AGRICULTURE

Mr. FLORANCE. Yes, sir, I have a prepared statement.

The CHAIRMAN. Could you put it in the record?

Mr. FLORANCE. Yes, sir.

The CHAIRMAN. If we need you, we will call you back.

Mr. FLORANCE. Yes, sir.

The CHAIRMAN. I think you better do it because we have some other projects coming.

(The statement referred to follows:)

STATEMENT OF REYNOLDS G. FLORENCE, DIRECTOR, DIVISION OF LEGISLATIVE REPORTING AND LIAISON, FOREST SERVICE, DEPARTMENT OF AGRICULTURE

Mr. Chairman and members of the committee, I appreciate the opportunity to appear before you and make this statement as to the effects that the project which S. 1226 would authorize would have on the national forests.

S. 1226 would authorize the Secretary of the Interior to construct the Knowles Dam project in the Clark Fork-Flathead River Basin, substantially in accordance with the physical plans set out in the Columbia River Review Report of the Corps of Engineers. The bill would also provide that the Secretary of the Interior could approve an alternate site within certain limits. The Paradise Dam project which is also described in the aforementioned report is within these limits and could be the alternate site.

The Forest Service made a survey of the impacts of both of these proposed projects upon the national forests, as it does in the case of other proposed reservoir projects. The Forest Service reports of these impacts are included in the Corps of Engineers report.

There is a general procedure for Forest Service participation in the survey and planning of reservoir projects which I might briefly describe.

Reservoirs and related developments can have both adverse and favorable effects upon the surrounding lands and resources. When such projects are within or adjacent to the national forests, it is necessary for the Forest Service to make a survey as to the projects' impact upon the management, development, and utilization of the national forests.

Because of its responsibility for overall Department of Agriculture leadership in forestry matters, the Forest Service is also concerned with the relationship of reservoir development to forest resources on non-Federal lands. Forest Service responsibility with respect to non-Federal lands has been discharged through informing the State foresters of proposed projects, providing assistance as needed in field investigations, and correlating impact studies for Federal and non-Federal lands.

For a number of years there has been, through the Interagency Committee on Water Resources, a close working relationship with other agencies in connection with proposed reservoir projects. There is direct and constant liaison at both the Washington and field levels.

Principal objectives and responsibilities of the Forest Service in considering the impacts of proposed reservoir construction on the lands, resources, improvements, uses, and activities under its administration are: (1) Participation from the inception in investigations, surveys, and the preparation of reports analyzing the impacts, both favorable and adverse, of proposed reservoir projects; (2) specifying needs and planning for relocation or replacement of services and facilities inundated or impaired; (3) advance planning and revision of management plans for other resources to minimize adverse effects and take advantage of favorable aspects of water resource development; and (4) arranging to furnish extra administrative and protective services during the construction period as needed and requested by the construction agency.

The key to the success of this survey and advance planning activity is the participation in the project studies and proposals from their inception.

The impacts of the proposed Knowles and Paradise Dam projects upon affected national forest lands, resources, and uses are summarized as follows:

KNOWLES DAM PROJECT

The Knowles project damsite is located on the Flathead River in Montana about 2.7 miles upstream from the confluence of the Clark Fork and Flathead Rivers approximately 40 miles southeast of Thompson Falls. The dam would be located near the exterior boundary of the Lolo National Forest. It would directly affect not over 300 acres of national-forest land, with perhaps less than 40 acres being inundated.

Within or adjacent to the flowage area and outside the national forest boundary the Forest Service leases three tracts of winter horse pasture. The project would inundate approximately 100 acres of one of these tracts and our Perma winter range headquarters. It would separate the remaining grazing areas. In addition to the relocation or replacement of the Perma winter range headquarters, approximately 17.5 miles of fence constructed by the Forest Service

would need relocation and reconstruction. If, as indicated in the report of the corps, Highway 10A between Ravalli and the confluence of the Clark Fork and Flathead Rivers were reconstructed above the flowage line and a short section of road were constructed along the north side of the flowage area there would be little or no impact from this project on the use and administration of national forest lands.

PARADISE DAM PROJECT

The site of the proposed Paradise Dam is on the Clark Fork River approximately 4 miles downstream from the confluence of the Clark Fork and Flathead Rivers. It is approximately 33 miles southeast of Thompson Falls. This dam would form a reservoir extending up the Clark Fork River for a distance of 39 miles and up the Flathead River for a distance of 66 miles embracing all of Knowles Dam area. The reservoir would extend into the major tributaries of these rivers for distances of from 1 to 16 miles. The total inundated area would be 66,132 acres, of which 1,845 acres would be national forest lands in the Lolo National Forest.

Although only a small percentage of the total flooded area would be national forest land, the reservoir would have important impacts upon the administration, management, and uses of a much larger area of national forest. This is due mainly to the elongated impoundment area adjoining national forest lands.

Within that portion of the proposed reservoir area located inside the exterior boundaries of the Lolo National Forest, there are 18 miles of forest highway, 4 miles of forest development road, 18 miles of county road, and 1 mile of forest trail.

A public camp and picnic area near the mouth of Sloway Gulch and a public picnic area at the mouth of Cascade Creek are both within the proposed flowage area. The St. Regis ranger station is also located within the proposed reservoir site. The ranger station has all the needed facilities and improvements to accommodate an office force of 5 and a work crew of 20 men.

All of these facilities and services would need to be relocated or replaced if the Paradise Dam were built, in addition to those that would need to be replaced if either the Knowles Dam or Paradise Dam were to be constructed.

The Corps of Engineers' report recognizes the need for these relocations and replacements in connection with both projects. These would be done as a part of the project costs.

As is the case when any reservoir project is constructed within or adjacent to national forest lands, certain adjustments would necessarily need to be made in our resource management plans and in our plans for additional facilities and services to meet increased public demands on the resources of the area.

Because of high risk and high hazard fire conditions, the fire protection provided for this area is more intensive than average. This is a continuing job. Increased fire protection services would be necessary following construction, due to reservoir-attracted public uses.

The replacement road system would provide improved accessibility in some areas but it would not be as satisfactory as the system which is and could be installed without the reservoir. The relocated system would be in rockier terrain, resulting in some increase in road maintenance costs. It would be at a higher elevation from the valley bottom, resulting in reduction in alinement qualities.

After completion of the project, the reservoir would enhance recreation if the drawdown in water were during the winter months. Based on population trends, improved accessibility, and the greater attraction of the project area, recreation visits would undoubtedly increase appreciably. Preliminary study indicates that desirable sites for recreational developments are limited. A minimum of 13 recreation sites, with a capacity of at least 190 family units and including sanitary facilities, water systems, boat docks, loading ramps, and access roads, would be required.

The needed additional facilities and services would be undertaken by the Forest Service as a part of its regular program activities.

In reporting on other bills which would authorize reservoir construction within the national forests, the Department of Agriculture has explained that it already has authority to develop and manage the recreation resources of the national forests. We do not believe that S. 1226 would give authority to the Secretary of the Interior to develop and maintain recreation facilities on national forest lands nor to transfer national forest lands to local governments

for recreation purposes. If there is any question on this, we recommend that it be made clear. The Department has also recommended in reporting on other reservoir project bills that any lands acquired within national forest boundaries for project or recreational purposes that are not needed for actual use for project works be added to and administered with the national forests.

Mr. O'HARA. M. L. Countryman, the general counsel of the Northern Pacific, expected to be here, and would have been here for the original hearing which was set, but which was postponed until today. Since that time it has been impossible for him to be back and he has asked me to appear here.

The only question which I have: Is the record on S. 1226 still open so I may advise Mr. Countryman whether or not he may want to file a statement?

The CHAIRMAN. Without objection, it will be regarded that the record on S. 1226 is still open.

We have very definitely the question of the matter of this dual tunnel. We would appreciate any statement with reference to the project in general.

Mr. O'HARA. I think they have testified previously, Mr. Chairman.

The CHAIRMAN. But this dual tunnel involves some \$110 million.

Mr. O'HARA. I was a little disturbed about what General Itschner said. Unfortunately, Mr. Countryman will not be back in his office until next Monday.

The CHAIRMAN. Without objection, he has time to file a statement with the committee, and the record will remain open.

Mr. O'HARA. That is the only request I have.

The CHAIRMAN. Angus McDonald, of the National Farmers Union is our next witness.

STATEMENT OF ANGUS McDONALD, COORDINATOR OF LEGISLATIVE SERVICES, NATIONAL FARMERS UNION

Mr. McDONALD. Mr. Chairman and members of the committee, I am appearing here in support of S. 1226 which provides for construction of a project either at a site on the confluence of the Clark Fork-Flathead River (the Paradise site) or on the Flathead above the confluence (the Knowles site). As we interpret this legislation, the determination of the site of this development depends on future study. Before discussing the factual situation in regard to the Paradise and Knowles sites, I will state the fundamental position of the National Farmers Union in regard to resource development.

Our organization over a period of more than 50 years has repeatedly endorsed the principle of comprehensive development. We understand this to mean the development of all the resources in a river valley, including flood control, navigation, electric power, fish and wildlife, recreation, irrigation, and utilization of all the soil and water resources in a way that would be beneficial to the greatest possible number of citizens. A corollary of this great principle, which our organization has worked for, is the preference principle which simply means that the benefits of resource development, particularly

water for the purpose of irrigation and electric power and residential and business uses should be distributed at the lowest possible cost and to the maximum number of families.

Specifically this principle is spelled out in the preference clause which has appeared repeatedly in resource legislation since Theodore Roosevelt first caused it to be inserted in the Reclamation Act of 1906. The application of this principle does not mean that any business or industrial group seeking to make a profit on its operation should be denied power or water made available by the building of a Federal project. It simply means that in regard to electric power nonprofit groups such as cooperatives and municipalities shall have the opportunity to fulfill their needs and that what is left over may be distributed to private utilities.

The preference principle as applied to water is usually referred to as the 160-acre limitation. This simply means that a man and wife owning land in a project area are entitled to purchase from the Federal project sufficient water to irrigate 320 acres of land. Farmers Union reemphasizes our endorsement of this antimonopoly family-farm law and asserts that exhaustive investigation by the Department of Agriculture has failed to prove that 320 acres of irrigated land is insufficient for the support of a farm family. We, therefore, urge that application of this principle be made a condition of the enactment of this legislation.

In regard to our specific views on the project proposed here, we believe that the evidence is overwhelming in favor of the selection of the Paradise site. According to a report of the Army Engineers, "Water Resource Development—Columbia River Basin," volume 1, June 1958, page 188, the Paradise project would provide 4,080,000 acre-feet of storage for flood control and power. The project would generate an average of about 2,024 million kilowatts annually at the site and 2,497 million kilowatts annually at downstream plants. In the system, 1,009,000 kilowatts of prime power would be available.

The Corps of Army Engineers in their report suggests three alternate plans: The first is the Paradise development which is objected to because of the costs of relocation. The engineers admit that Paradise is by far the more feasible site but dismissed it because of relocation costs.

The second plan relates to the Knowles project on the Flathead River and avoids a good deal of the relocation costs. This project would, however, result in considerably less water storage installed electric power capacity. The third plan consists of a group of smaller projects, including Buffalo Rapids and several others. Paradise project would inundate, according to the Army Engineers report (p. 184, *ibid.*), 69 miles of the main lines of the Northern Pacific Railway, 13 miles of Chicago, Milwaukee, St. Paul & Pacific Railroads, and 7 miles of the Polson branch line of the Northern Pacific Railway. It is estimated that relocation of these and other related facilities would

cost \$291,170,000. Here is an itemized list of the construction cost (ibid., p. 189) :

<i>Feature</i>	<i>Construction cost</i>	<i>Estimated cost</i>
Lands and damages-----		¹ \$9, 034, 000
Relocations-----		291, 170, 000
Reservoir-----		2, 595, 000
Dams-----		94, 285, 000
Fish and wildlife-----		¹ 2, 584, 000
Powerplant-----		40, 802, 000
Roads and bridges-----		92, 000
Recreation-----		¹ 208, 000
Buildings, grounds, and utilities-----		1, 696, 000
Permanent operating equipment-----		201, 000
Preauthorization studies-----		209, 000
Engineering and design-----		12, 894, 000
Supervision and administration-----		30, 573, 000
Construction facilities-----		2, 249, 000
Operation and maintenance expense during construction-----		3, 670, 000
		<hr/>
Construction cost-----		492, 262, 000
Interest during construction-----		61, 533, 000
		<hr/>
Investment cost-----		553, 795, 000

<i>Annual costs</i>		
Interest and amortization-----		\$19, 527, 000
Operation and maintenance, except recreation-----		802, 000
Replacements, except recreation-----		242, 000
Recreation:		
Operation and maintenance-----		8, 000
Replacements-----		6, 000
		<hr/>
Subtotal-----		20, 585, 000
		<hr/>
Additional economic costs on national forest lands: ²		
Loss of timber-----		3, 800
Increase in harvesting costs-----		16, 000
		<hr/>
Subtotal-----		19, 800
		<hr/>
Total annual costs-----		20, 604, 800

¹ Includes cost of engineering, design, supervision, and administration.

² As estimated by U.S. Forest Service.

Annual costs, excluding taxes, with project accomplishments summarized

<i>Purpose</i>	<i>Basic flood control plan</i>
Local flood control-----	\$160, 000
System flood control-----	3, 941, 000
Power-----	27, 000, 000
Recreation-----	28, 000
	<hr/>
Total-----	31, 129, 000
Annual costs-----	20, 604, 800
	<hr/>
Justification ratio-----	1.51

Attention is called to an article in Fortune magazine, August 1958, "A Plan To Save the Railroads," by Gilbert Burck, in which it is suggested that at least two of the major railroads' trunklines crossing the State of Montana are unnecessary. I request that this article from Fortune magazine be inserted in the record. It appears that there is a possibility the railroads might abandon some of the unnecessary lines traversing the State of Montana. I suggest that this matter be

given study by the committee and that possible investigation be initiated by other appropriate committees looking toward the possibility of railroad consolidation. It would seem on the face of it uneconomical and even ridiculous to pay the railroads \$290 million for lines which they should abandon. Pending answers to some of the questions raised by the Fortune article, we suggest that selection of the site be postponed until the relationship of the Paradise site to the railroads is thoroughly investigated.

The CHAIRMAN. Thank you, Mr. McDonald. The article you refer to will be printed at this point in the record.

(The article is as follows:)

[From Fortune, August 1958]

A PLAN TO SAVE THE RAILROADS

(By Gilbert Burck)

It is still not too late for U.S. railroads to do what they should have done years ago: consolidate into three or four noncompetitive, integrated, regional systems that would absorb every one of the 634 existing companies. The railroad industry's performance in 1958 is dismal. Even with a general economic upturn in the second half of the year, the roads will be lucky to earn a niggardly \$400 million net profit on gross revenues of more than \$9 billion. This is evidence not merely of the recession but of the chronic inability of the industry's overbuilt plant to earn an adequate return. The remedy is consolidation on a grand scale. It would eliminate thousands of miles of duplicate track, close down hundreds of redundant yards and terminals, let the roads move traffic much more expeditiously and cheaply, and save hundreds of millions of dollars a year. In fact, large-scale consolidation is probably the only measure that will enable the railroad industry to make enough money to survive as private enterprise.

It is true that the Smathers Act, passed by Congress in June, gave the railroads some relief from their burdens, including more freedom in ratemaking. This may mean that the Interstate Commerce Commission will gradually allow the railroads to make rates that reflect their costs, and so allow them to try to recapture some of the traffic they have lost to highway and waterway competitors. But even this concession will not deliver the kind of prosperity that railroads need. Much of the freight they do not handle is beyond their grasp: either it goes places where no railroad service exists, or another service is cheaper, speedier, or more flexible. In any event, winning back some of the traffic now going to competitors is no substitute for the huge economies of consolidation.

Nor will the railroads profit as they should from a new surge of national prosperity. Even in booming 1953-56, their best peacetime years in recent history, they earned each year an average of only \$847 million net profit on average revenues of \$10.2 billion. Their operating income before fixed charges came to less than 4 percent of their depreciated property investment. And they paid an average of only \$411 million in cash dividends. Without adequate profits, industries with heavy capital investment cannot progress, and few industries need more capital investment per dollar of revenue than the railroads. To save or raise the capital they need for continuous modernization, the railroads should earn a net profit of at least \$1.8 billion on gross revenues of \$10.2 billion, and should be able to pay at least \$900 million in dividends. The fact that a few special carriers like the coal-carrying Pocahontas roads normally earn a handsome net should deceive no one. So long as the earnings of most, or even half, of the rail mileage of the country are miserable, the Nation is denied the cheap and rapid transportation that railroads can supply; and the railroad industry, as it has in so many other countries, inevitably moves closer to the day when it must be taken over by the Government—an eventuality that would serve the country even worse than it would the railroads.

To be sure, there are a few hopeful signs. The Great Northern and Northern Pacific want to combine with the Burlington to form an 18,000-mile system. The Erie, Lackawanna, and Delaware & Hudson are exploring the idea of forming a great new system in the East. A recent plan to merge the Chicago & North

Western and the Milwaukee is dormant, but not dead. The New York Central and the Pennsylvania, which together do nearly a fifth of the country's railroad business, are studying a consolidation that could shake the transportation world. While these proposed consolidations may not yet be too late, they are too few.

However, they have one good thing in common: for the first time in more than 50 years, they aim to unite so-called competing roads. The existence of hundreds of separate railroad companies is usually justified by the assumption, long outdated, that most of them compete with one another. Compete in price they certainly do not: exempt from the antitrust laws, they get together and set prices under supervision of the ICC. Although they talk of "service competition," the service they render suffers as much as it gains from this kind of competition. Just as the high-cost railroads in effect set the price levels, so the lame and the halt lines tend to set the service standards. Railroad rivalry is actually the rivalry of cartel members who go through the motions of competition, with the result that costs are much greater than they would be if the railroads did not pretend to compete at all.

A sound economic reason no longer exists, in any case, to compel U.S. railroads to compete with one another. Their multiplicity is technologically and functionally obsolete, a relic of a past when the rails served local needs and had no rivals. Traffic today flows in regional and national rather than in the old parochial patterns. Most loaded freight cars move over two or more railroads between their origin and their destination; whether railroads wanted to or not, they have had to function more and more as parts of a national system, but without obtaining the advantages of being units in a single system. Moreover, they face real competition from the enterprising highway, waterway, and air carriers. They will not be able to meet this competition without cutting out the wastes of interrailroad rivalry.

Massive consolidation, as this article will demonstrate, would let the railroads scale down their excessively large plants and save perhaps as much as \$1 billion a year at today's volume. Equally important, it would enable railroads to concentrate long, heavy hauls on low-cost lines, and so realize their great potential as mass producers of transportation. It would also make it relatively easy for them to revamp their obsolete rate structure, which bears little relation to their costs.

The management of huge consolidated systems would naturally present immense problems, but they should not be insoluble. And although the way to large-scale consolidation is tortuous and strewn with a wide variety of booby-traps—financial, legal, and political—Congress could shorten it and make it safer.

TOO MUCH PLANT

Now let us see how consolidation might save the railroads as much as \$1 billion a year. To begin with, so long as the industry is set up as 634 separate companies, it is forced to maintain far too much plant—tracks, terminals, shops, buildings, and freight cars—for the work it does. Any railroad, of course, must maintain sufficient excess capacity to accommodate traffic peaks, some expansion, and national emergencies. But "competition" among the roads has always forced them to maintain vastly more capacity than they needed; and technological advances now enable them to handle so much more traffic with so much less trackage and other facilities that they can accommodate any immediately foreseeable increase in traffic with considerably less plant than they now maintain.

Like U.S. farmers, U.S. railroads are a problem partly because they can produce more and more with less and less. Twenty-five years ago, for instance, freight trains of some large eastern roads moved as many as 150,000 tons of freight a day over four-track main lines. Today, with electronic signal controls and other improvements as well as more powerful locomotives, heavier and faster trains can roll twice as much tonnage over the same track (or, in depressed 1958, about the same tonnage over about half as much track). Ten years from now, even heavier and faster trains will be able to move half again as much tonnage over the same track.

Thus the railroads can effect enormous savings—and improve service, too—by eliminating duplicate lines. A good example of how this can be done is the Erie-Lackawanna coordination now underway in New York State. For 77 miles, in the valleys of the Susquehanna and Chemung Rivers, the Erie and Lackawanna main lines parallel each other closely. Together they have been handling an average of a few more than 60 trains every 24 hours—not enough, these days, to begin to tax the capacity of either line.

Three years ago the two companies worked out a coordination scheme still waiting for ICC approval. Trains will be run over what was the Erie main line; yards and stations will be maintained jointly. Fifty-four miles of double and eighteen miles of single track will be abandoned. A yard will also be eliminated at Elmira, leaving 40 acres available for industrial development. Yet freight schedules will be accelerated, and industries along the line will be served better than before. The improvement will require \$1,600,000 worth of new signaling, interlocking, and track connections. But the roads estimate that the change will save no less than \$1,090,000 annually—\$800,000 in maintenance, \$160,000 net in switching and locomotive expenses, and \$130,000 in station expenses—a 68-percent annual return on the new investment.

Throughout the country there may be more than 30,000 miles of line that could be coordinated in this way. But so long as all railroads are separate companies, each with its own strategy, and reluctant to share some hard-won or inherited advantage with a rival, deals like the Erie-Lackawanna are hard to make. Let the roads be consolidated, however, and a large strategy automatically dominates policy. The consolidation of duplicate trackage then presents few more difficulties than combining two adjacent grocery stores.

THE DIFFERENCE A HILL MAKES

Consolidation, furthermore, would allow the railroads to concentrate traffic on their most economic routes—that is, routes demanding the least in energy and repairs. The inherent economy of a route is determined by curves and grades, chiefly the latter. It takes twice as much energy to roll a train slowly up a grade rising only 3 feet in a thousand (0.3 percent) as it does to run the same train at high speed on level track; and it takes six times as much energy to move a train slowly up a 1-percent grade as to move it fast over level track. Thus, the out-of-pocket costs (wages, fuel, locomotive maintenance, maintenance-of-way expenses affected by use) of hauling a thousand gross tons a mile come to between \$1.25 and \$1.30 over a fairly level and straight division, but to more than \$1.50 over a division with frequent grades of over 0.5 percent.

Unfortunately, few railroads have really analyzed their line costs in detail. But the measurements that do exist suggest that much freight is being hauled over routes whose out-of-pocket costs may be 15 percent higher than on an alternate route or combination of routes. In almost any business but the railroad industry, with its cartelized rate structure, this could be a ruinous difference for the company with the higher costs.

The most economic route between New York City and Los Angeles is not, as one might suppose from looking at the map, a combination of the Pennsylvania or New York Central and the Santa Fe or Union Pacific. It is probably the New York Central to Chicago, the Santa Fe to Vaughn, N. Mex., and the S.P. to Los Angeles. Or it may even be the New York Central to Buffalo, the Wabash to Kansas City via Canada and Detroit, the Rock Island to Tucumcari, N. Mex., and the S.P. to Los Angeles. But few cars are sent over either route. The New York Central, or the Erie, or the Pennsylvania, when soliciting or originating westbound freight, routes the freight as far as it can over its own rails in order to get the largest possible share of the total charges, and then over the connection designated by the shipper. The S.P., Santa Fe, or U.P. does the same at the other end.

A thorough analysis of inherent line costs would disclose some astonishing differences in routes regarded as acceptable alternates. A consolidated system would make such an analysis, and, like any ordinary business confronted with the choice between a more and a less expensive process, route its through traffic over its best line. And because it could concentrate tonnage on that line, it would have both the incentive and the money to improve the line by straightening curves, reducing grades, installing and perfecting automatic controls, and otherwise striving to attain the ideal of straight, level track capable of carrying heavy freight trains at a sustained speed of more than seventy miles an hour.

THE \$100-MILLION ROUNDABOUT

Consolidation would not only mean using the most economic track: it would also eliminate or greatly reduce the practice of dispatching loaded freight cars over roundabout routes. According to ICC studies, the average loaded car rolls some 13 percent farther than the shortest route between its origin and desti-

nation. Students of transportation conservatively estimate that this "circuitry" now costs the railroads more than \$100 million a year.

Some of the circuitry, of course, is a byproduct of the railroads' service to shippers who want to unload or load part of their cargo at points en route; but most of it occurs because the company that solicits the traffic rolls that traffic as far as it can over its own rails. Examples:

There are more than a thousand permissible "competitive" routes between Portland, Maine, and St. Louis, and most of them are much longer and less economic than the principal ones between the same points.

Southern Pacific moves freight from Southern California to the Middle West over its line through San Antonio and Corsicana, Tex., and thence up to St. Louis over its subsidiary, the Cotton Belt—a journey more than 400 miles longer than the shortest route between Southern California and St. Louis or Chicago.

A vast amount of time and legal talent is devoted to computing, checking, and litigating the division of freight revenues. The road originating a cargo usually gets a premium, and the road hauling it, say, 250 miles, usually gets more than the road hauling it 150 miles. But the precise division of the total charge is full of complexities. Fantastically, a company that can prove its costs are higher than the costs of connecting roads can usually wrangle a larger share of the total, if a disputed revenue-division case goes to the ICC, than it otherwise could. Consolidation would all but end this vexatious problem.

SENDING "FOREIGNERS" HOME

U.S. railroads operate nearly 2 million freight cars. Under consolidation, fewer than 1,500,000 cars would suffice for all needs, including national emergencies. The main reason railroads need so many cars now is that they haul too many of them around empty at a waste of some \$200 million a year.

Each company buys and retains title to its own cars: each pays \$2.75 a day rental for every foreign car in use on its line. This per diem is cheap enough; indeed, it does not bring the owner a fair return. But when business is slack and cars are plentiful, no railroad likes to keep foreign cars on its line at \$2.75 a day per car. Instead of keeping them until they can be loaded nearby, it promptly shoots them homeward. (Or, if it needs some foreign cars but has a surplus of them, it returns the old, beat-up ones and keeps the new.) And so empty cars are hauled back and forth at just the time railroads can least afford the unnecessary expense.

On the other hand, when business is brisk and cars are scarce, a company naturally hangs on to all the cars it can get, even if the owners need the cars worse. Consequently, railroads originating a lot of traffic have to maintain an inordinately large supply of cars, keeping many in reserve.

Whether business is brisk or bad, railroads understandably bother to repair foreign cars only if absolutely necessary even though they are compensated by the owners. And since the average freight car spends most of its time on foreign lines, car owners neither build nor maintain their cars as well as they should; nor do they retire them promptly when their economic life has ended. Why build and maintain your rolling stock to high standards when, the other guy gets the most use out of it?

Here again regional consolidation would almost automatically introduce higher standards in car design, construction, and maintenance, and would also end today's senseless system of oversupply and maldistribution.

PUT THE TERMINALS TOGETHER

Terminal costs, the scourge of all modern transportation, are especially burdensome for railroads. No less than a third of their money and two-thirds of their operating time are spent on terminals—freight and passenger stations, "classification" yards, and other facilities devoted to combining cars into trains or breaking up trains into cars.

Although the carriers have recently managed to reduce terminal costs, here again they are restrained from achieving genuine economy by the individual road's reluctance to share an advantageous facility with a competitor. Except for the yards of jointly owned switching and terminal companies, the railroads operate few yards together. Consequently, a freight car moving from road A to road B usually must first be "classified" or switched in A's yard, wait to be moved to B's yard by a transfer engine, and then be switched in B's yard. This triple play may take several days, and it adds more than \$30 to the cost of each interline car movement.

Simply by making it possible for heavier trains to be run farther without being broken up, consolidation would reduce the proportion of cars requiring yard handling. More important, consolidation would generate huge direct savings in terminal costs. In one merger now under discussion, for example, the largest time and moneysaver would be a joint yard that none of the participating railroads could justify alone. The proposed yard would cut terminal costs nearly 50 percent by eliminating three old yards and intermediate transfer movements. It would also save up to 12 hours on through car movements.

Other economies of consolidation are fairly obvious. Last year railroads spent some \$1.8 billion on fuel, materials, and supplies. Much of their purchasing is based on reciprocity: you ship on my road and I'll buy your product. When there are no competing roads to ship on, reciprocity should be heavily reduced. Together with mass buying, this could make for sizable savings. Some optimists have estimated the savings at 10 percent of present purchases, but even 5 percent of \$1.8 billion works out to \$90 million, or close to a quarter of the carriers' dividend payments in 1957.¹

THE \$700-MILLION PROBLEM

Consolidation should end the carriers' shiftless attitude toward their passenger business, which is losing them \$700 million a year, a sum nearly equal to the average net income of the whole industry in the best postwar years. For consolidation would enable the roads, without any loss of prestige, to eliminate duplicate runs and unprofitable trains, and concentrate on the most expeditious and remunerative routes. If, as some students of transportation believe, the carriers can still make money on passenger traffic by developing a true mass transportation service, a consolidated system can do it efficiently.

Finally, there is money to be saved in reorganizing less-than-carload freight service and establishing centralized equipment-repair shops. Analyses made in 1934-35 by the Federal Coordinator of Transportation indicated that these two areas, at that time, could yield economies totaling more than \$500 million a year. Railroads have since improved their performance in both departments, but not nearly enough.

BILLION SAVED, BILLION EARNED

All the economies described above add up to at least \$1 billion a year: \$400 million in terminal costs, about \$100 million now spent on maintenance and operation of unnecessary line, at least \$300 million through improved car routing and utilization, \$75 million or more in purchasing, and perhaps several hundred millions by centralizing equipment-repair shops and reorganizing less-than-carload service.

Several consolidation plans were advanced during the 1930's and the estimates of potential savings then ranged from 15 to 30 percent of operating expenses. Most students of consolidation today agree that regional mergers could save at least 12 percent of current operating costs, or around \$1 billion a year.

But there is much more to consolidation than saving money—for the country as well as the roads. Only consolidation can enable the carriers to achieve their great efficiency potential. With the present number of competing lines, even the largest railroads usually don't have enough traffic to operate heavy, long-distance trains between their terminals at sufficiently frequent intervals to maintain good service. A 4,800-horsepower diesel can easily roll a train of 5,000 gross tons over the New York Central from New York to Chicago in 24 hours, and for less than \$2,500 in direct costs (wages, fuel, lubricants, and locomotive terminal expenses), or for about \$12,500 if overhead and other costs are counted in. But every time the train has to be broken up and classified, even in the most modern yard, transit time is lengthened by 5 to 10 hours, and the cost of moving the 5,000 tons is increased by as much as \$1,000.

"Competition" forces five systems and dozens of combinations of routes to share in the New York-Chicago traffic. Not only does the most expensive and slowest route set the standards of all; few cars make the trip without being classified in one or more yards. Even the great Pennsylvania Railroad operates

¹One sardonic railroadman complains that centralized buying would strike a blow at underpaid railroad officers, who depend on the expense accounts of equipment and supply salesmen for a good deal of their social life. But there is little cause for concern. Equipment and supply salesmen will still be seeking the favor of junior officials who influence the central bureau. Even on a consolidated system, the expense account is too durable (and useful) to die.

no freight trains straight through between the two cities. The management of a consolidated eastern system would change all this: it could concentrate traffic and move it between principal terminals in heavy, through trains of as much as 10,000 tons, and achieve new high standards of economy and service.

Consolidation would also enable railroads to revise their rate structure, which is even more obsolete than their pretensions to competition. Unlike ordinary industries, railroads cannot or do not make rates that reflect costs, and their charges therefore have little to do with the weight of the freight, the space it occupies, or the distance it is carried. Because unit rail costs decline steeply as traffic increases, the early railroads created a rate structure based on the "value of service" or "what the traffic will bear" principle. That is, they levied high ton-mile rates on valuable light merchandise in the final price of which rail charges figured little, and very low ton-mile rates on heavy raw materials in whose final price rail charges bulked relatively large. This rate structure worked fine until highway competitors came along and ran off with much of the high-rated freight.

Furthermore, the rate structure is a handicap because, as John W. Barriger, president of the Pittsburgh & Lake Erie, puts it, rates must be made to cover the needs of the weak roads rather than the capabilities of the strong ones. Under consolidation, of course, weak roads would be absorbed into a large system, whose average costs should approach or even fall below the costs of the strongest road before consolidation. The new system then could reduce rates on valuable freight without raising them on low-value goods—or reduce them more on valuable freight than on low-value goods. Gradually it would erect a rate structure bearing a rational and consistent relationship to the cost of providing the service and thus immeasurably strengthen the railroads' competitive position vis-a-vis the truckers.

THE GREAT CONSOLIDATORS

There is nothing new or untried about consolidation. The early railroads, which produced mostly "retail" or local carload transportation, had to consolidate as the need arose for trainload or mass transportation over longer distances. Later, the great railroad monopolists like Vanderbilt, Huntington, Hill, Morgan, and Harriman initiated a nationwide wave of consolidation that reached its peak between 1890 and 1900. Whatever their motives, the monopolists had economics on their side.

But then the movement began to slow down. One reason for the slowdown was the depression of 1907, which threw several great roads into bankruptcy. Another reason was the Sherman Antitrust Act, which the Department of Justice employed to dissolve the Hill system (in 1904) and the Harriman system (in 1913). Another reason was the Government's own "consolidation program," as written into the Transportation Act of 1920, which did anything but promote consolidation.

CHANGE WITHOUT CHANGE

Rarely if ever has any Congress enacted legislation so self-contradictory as the act of 1920. The ICC was directed to prepare a consolidation plan. Congress recognized that price competition between the roads was impractical if not impossible; yet it specified that after consolidation, competition must be maintained wherever possible. It also specified that existing routes and trade channels must be maintained wherever practicable, and that the consolidated systems must earn substantially the same rate of return under uniform rates. Things must change, in other words, but nothing must change. The carriers must compete, yet they must not compete.

The ICC struggled with this fantastic mandate for the best part of a decade. It prepared a preliminary plan in 1921, and for years listened to the protests of railroads, shippers, municipalities, and labor. A final plan, delivered to the world shortly after the Wall Street crash in 1929, proposed to consolidate the Nation's railroads into 21 competing systems. But the ICC had no power to enforce the plan, and railroads simply let the matter drop. Meantime, except for a few scattered attempts at mergers, notably those of the Van Sweringen brothers of Cleveland, who tried to consolidate the Erie, C. & O., Nickel Plate, and Missouri Pacific, consolidation languished.

Of the several new consolidation plans advanced during the depressed 1930's, the most seriously regarded was the Prince plan, drawn up in 1933 by John W. Barriger and named for its sponsor, the effervescent industrialist-financier,

Frederick Prince. Necessarily hewing to the terms of the 1920 law, the Prince plan preserved existing trade routes and competition at main points. But it cut out much wasteful competition by dividing the carriers into seven regional systems. On the sound premise that the Nation was supporting too many high-cost, light-traffic lines, the plan suggested radical line mergers and a scaling down of railroad properties as a prelude to intensive development of the main routes.

Barriger estimated the plan's eventual savings at 25 percent of operating expenses, or \$743 million (equivalent to \$2.3 billion today)—though a deliberately critical study estimated the plan's savings at considerably less. In retrospect, two things can be said of the Prince plan: (1) it did not go far enough, and (2) if the Nation had adopted it, a modern, prosperous railroad system would today be providing better rail transportation at lower prices.

In the Transportation Act of 1940, Congress ignored the ICC plan of 1929 without providing for another plan. The 1940 act says only that consolidation is lawful if consistent with the public interest, and that the ICC, in judging consolidation, shall give weight to such considerations as adequate service to the public, compensation to labor, etc. Nothing is said about preserving competition and existing trade routes.

Why didn't the railroads rush in to take advantage of the change? During the war, of course, they were too busy moving a colossal volume of freight and passengers. And their burst of postwar prosperity, brief and meager though it was, presumably lulled them into inactivity. Only belatedly have a few competing lines begun to work on regional consolidation projects.

THE MANAGEMENT PROBLEM

Theoretically, there should be as few systems as possible, and one big system for the whole country would be best of all. Only a single system could wholly eliminate duplicate track and terminals, end circuitous routing, and rationally concentrate traffic. But a single national system probably would be regarded by most railroaders as too radical and also too hard to manage, and might arouse insurmountable political opposition. And a single system might also seem too easy for the Government to take over—though it is not the size of a railroad system but its liability to make money under private operation that will force it into Government ownership. In any event, a single system would have to be split into regional operating units.

A truly national rail network could logically be divided into four large systems. Of the four, the Northeastern would be the largest, with more than 400,000 employees, 59,000 miles of line, and gross revenues of \$5 billion.

But how, the practical railroadman will ask, do you proposed to manage a system encompassing as much as 59,000 miles of line and employing several hundred thousand people? The large railroad is a transportation factory located everywhere and yet in no one place.

Existing railroads as large and complex as the Pennsylvania and New York Central have not yet solved the rather elementary problem of how to decentralize and yet enable top management to keep in touch with daily operations without devoting most of its time to them. By their very nature, railroads are run like armies at war: operations come first. Officials with the important and satisfying jobs are primarily line officers; a purely staff officer, even at the highest level, is like a general cooling his heels in the Pentagon while the battle is raging 2,000 miles away. Every good railroad president spends a large part of his time in his business car, getting the feel of what is happening on the road.

Management of a large consolidated system might well be set up like this: (1) line responsibilities would be decentralized under district vice presidents possessing large autonomy (they could be called presidents if that would help); (2) central staff officers without line responsibilities would have authority over system functions like ratemaking, personnel policies, purchasing, big engineering jobs, and locomotive and car distribution; (3) a large, high-caliber engineering staff under a vice president would be assigned the critical job of analyzing the system and constantly looking for ways of making it more efficient; and (4) a system of communications would enable top officials to keep in constant touch with the front line without spending most of their time on it.

This is not impossible. The probability, indeed, is that a drastic consolidation, because it would break sharply with the past, would help solve the management problems that plague the railroads today, rather than create insoluble new ones.

THE ROADBLOCKS

How could regional consolidation be taken out of the realm of theory and made a reality under today's conditions? Looking for the answer, one speculates on what a man like Edward Harriman, who 60 years ago aimed to control nearly all U.S. railroads worth owning, might do if he were alive today.

At market prices—\$12 a share for Pennsylvania stock and \$16 for New York Central stock as this goes to press—a latter-day Harriman could acquire a 38 percent control of these lines, which only a few years ago managed to earn more than \$100 million between them, for as little as \$100 million. Consolidating and improving these great properties as the original Harriman did with the Union Pacific and Central Pacific 60 years ago, he could in a few years convert them into a huge moneymaker, earning upwards of \$200 million and paying dividends of \$100 million or more. Stock that is worth \$14 a share today might then be worth more than \$100 a share.

Indeed, a man as audacious and resourceful as Harriman, given great financial backing, could conceivably get control of most of the important railroads and thus force the rest to join him. Employing imaginative, farsighted managers, he could convert the railroads into everything they should be: efficient, progressive, national in scope, profitable—and indispensable.

He could—if there weren't so many obstacles in the way of consolidation today that even a super-Harriman would be put off by them. As the Van Sweringen brothers discovered 25 years ago, the merging process is complex, time consuming, frustrating, and mankilling. And although the Interstate Commerce Commission is no longer dedicated to preserving existing channels of trade or interrailroad competition, there are still plenty of other obstacles to consolidation. Unless a consolidator could get firm control over the prosperous carriers, they would naturally be unenthusiastic about merging with any other road, strong or weak. Many rail executives, of course, would fear loss of prestige and security under consolidation, and they would have to be won over. And the owners of the roads' securities would have to be persuaded to agree on the terms. The bondholders would presumably make no trouble; but the minority common stockholders, even after a merger had been approved by the majority, could bring suit against the deal. The wrangling could take years.

Consolidation proposals must be argued before the ICC, which has been catering to special interests so long it has almost forgotten there is such a thing as the national interest. The ICC must give ear to communities that hate to lose railroad property taxes when a line is scaled down, to shippers who fear that service may be impaired, to trucklines that fear railroad competition—and particularly to labor, which could be counted on to wage effective war against consolidation because most of its economies would be realized as reduced labor costs. As long ago as 1936, railroad labor forced Congress to write into the law the so-called Washington agreement, which provides that workers displaced by consolidation must be compensated for as long as 5 years.

And there is also Congress itself. Although few, if any, professional railroad-baiters are left in Congress, it is hard to imagine any Congressman figuring there were many votes in a crusade for consolidation.

Unless all railroads were engaged in consolidation at the same time, moreover, some of the most persuasive and serious objections to it would come from lines whose managers and stockholders could reasonably complain that other mergers were putting them at a disadvantage. If strong railroads, for example, were to merge with other strong railroads and leave the weaker lines scattered around to fend for themselves, the ICC could interpret the law to give sympathetic (and plausible) heed to the weaklings' cries for succor.

THE GOVERNMENT MUST HELP

To overcome these numerous obstacles, inside and outside Washington, the Government must take some initiative. The truth is that any industry as far gone in Government regulation as the railroad industry can be manumitted only through the good offices of Government. One suggestion, made by a rail official who favors consolidation but argues that it would take the ICC 25 years to prepare a plan, is that Congress simply adopt a resolution to the effect (1) that large-scale consolidation is consistent with the public interest, (2) that the railroads be urged to undertake consolidations, and (3) that the ICC both render staff assistance to railroads studying consolidation and give applications for consolidation a high priority.

Some merger advocates, however, do not believe this would be enough. Professor William N. Leonard, author of "Railroad Consolidation Under the Transportation Act of 1920," and chairman of the department of economics at Hofstra College, Hempstead, N.Y., believes the Government must compel the roads to consolidate. Because the ICC is burdened with too many routine duties, Leonard argues, Congress should appoint a special authority to prepare a regional consolidation plan and to enforce it.

William Wyer, the consulting engineer working on three proposed consolidation schemes, also argues that some Federal agency must be charged with both responsibility for a plan and authority to enforce it. Ernest Williams, professor of transportation at Columbia University, says that Congress will probably have to subordinate the States' jurisdiction over minority stockholders' suits to the Federal Government.

NEEDED : A PUSH

The consolidation projects now underway, assuming they are given sympathetic attention by the ICC, might in time be successfully consummated. Suppose, however, that Congress were to expedite them. Suppose it were to declare large-scale consolidation in the public interest, and instruct the ICC to give aid and priority to consolidation projects. And suppose Congress were also to give the carriers 2 years or so to develop their own plans, postponing meantime the establishment of a Government consolidation authority.

Thus stimulated, the roads' current consolidation projects could start a wave of mergers that might take in most of the lines in the country. The G.N.-N.P.-Burlington combination would probably force the Chicago & North Western and Milwaukee roads to revive their merger scheme and combine in self-defense, or even to join the Hill roads—which in turn could force most if not all other big western lines into the group. Similarly, a merger of the Pennsylvania and New York Central could force other eastern roads into their combine.

The consolidation plans of the big roads, however, cannot be selective. To keep smaller and weaker roads from importuning the ICC and so delaying the consolidation process indefinitely, the big companies would have to enlarge their aims to include all the lines in their region. In other words, the railroads themselves, given both encouragement and prodding by Washington, could push consolidation to its logical conclusion.

The CHAIRMAN. Our next witness is Alex Radin, general manager of the American Public Power Association. Proceed, Mr. Radin.

**STATEMENT BY ALEX RADIN, GENERAL MANAGER, AMERICAN
PUBLIC POWER ASSOCIATION**

Mr. RADIN. My name is Alex Radin. I am general manager of the American Public Power Association, a national trade organization representing more than 1,000 local publicly owned electric utilities in 43 States and Puerto Rico.

Our association is committed by action of the membership to support the fullest possible development of our water resources. This principle has been endorsed in many policy resolutions adopted at our annual meetings and is the keystone of our statement of Federal power policy, also approved by the membership of the association.

It is against the background of this principle that I express the association's support for S. 1226, which would authorize a storage project in the Paradise reach of the Flathead and Clark Fork Rivers.

Two significant advantages will accrue from proper development of these key tributaries of the Columbia.

First, a multiple-purpose project so located will make a substantial contribution to the regionwide goal of water control to prevent disastrous floods downstream and to increase the efficiency of the region's hydroelectric powerplants.

Second, the impact of a large supply of low-cost power in western Montana, if properly developed and marketed, can bring substantial economic benefits to an area which at present is lacking in industrial development.

It could be said, in general, that either the Knowles or Paradise alternative would provide these two advantages in some degree. It seems clear, however, that in controlling the flow of both rivers the Paradise project would produce vastly greater benefits.

It has been suggested by the Northwest Public Power Association, an organization affiliated with APPA, that S. 1226 be amended at page 2, line 13, to add a provision clearly authorizing and directing the Secretary of the Interior to investigate alternate sites on this reach of the Flathead and Clark Fork to determine upon the storage reservoir of the maximum usable and feasible capacity.

Our association strongly supports this amendment and believes that only by such a determination can the criterion of fullest possible development be met.

It is important to keep in mind that either of the projects now under consideration would be economically feasible, despite the extremely high cost of relocating railway lines and highways at both projects. As you know, the most recent review report of the Corps of Engineers gives Knowles Dam a justification ratio of 2.31 and Paradise Dam a ratio of 1.51. The review report recommended Knowles as the more economical of the two.

Serious questions have been raised with respect to cost estimates of the corps for these relocations, particularly the railway relocations. Any restudy should consider new approaches to this problem, such as consolidation of lines and other facilities.

It has been suggested by Roy Bessey, appearing in behalf of the committee for Paradise Dam, that as much as \$100 million could be pared from relocation costs at Paradise by building one railway tunnel instead of two, cutting down the present \$55 million contingency allowance, and other economies. These possibilities deserve full investigation.

Given the estimates of the corps of benefits from the two projects, it is immediately apparent that Paradise represents maximum use of the resources.

To summarize these benefits briefly, Paradise would provide 4,080,000 acre-feet of usable storage for flood control and power; Knowles would provide 3,080,000 acre-feet, representing a loss of a million acre-feet of storage.

Paradise would add 1,009,000 kilowatts of prime power to the Columbia River system, at site and downstream, while Knowles would add 697,000 kilowatts. Average generation at site is estimated by the corps at 2,024 million kilowatt-hours annually for Paradise and 1,323 million kilowatt-hours annually for Knowles, while Paradise would add about 2,497 million kilowatt-hours annually at downstream plants and Knowles would add only about 1,200 million kilowatt-hours.

Thus, in prime power added to the system, Knowles would provide only 69.1 percent as much as Paradise; in water storage, Knowles represents only about 75 percent of the benefit which would be obtained at Paradise.

J. E. Corette, president of Montana Power Co., the utility which serves about 70 percent of the consumers in Montana, testified at Missoula that Paradise Dam is not needed, that his company stands ready to provide for future power needs of the State, and that Paradise would represent a large loss to the taxpayers.

Power company presidents have been putting forth these arguments every time a Federal hydroelectric development has been proposed—whether it was in the Tennessee Valley, at Grand Coulee, or at Hungry Horse.

In every case, time has proven these arguments to be in error.

In the Tennessee Valley, the marginal farmers who, according to the power companies, did not need an additional power supply have found that electricity was more than simply a means of lighting the farmhouse. For many, it became the means for raising their economic level well above the margin.

The Grand Coulee jackrabbits did not buy the so-called surplus power, it is true. But new electroprocess industries did. Already the effect of Hungry Horse power has been felt in that area by the Anaconda Aluminum plant in Flathead County, providing hundreds of year-round jobs. I am told that this company alone paid over \$700,000 in county taxes last year.

Another new industry attracted by Hungry Horse power is the Victor Chemical Co., whose operation in Silver Bow County provides many jobs and an expanded tax base.

You have heard testimony from the people of the Northwest on the vast benefits which storage at Hungry Horse has brought to the downstream areas. With its 3 million acre-feet of storage, Hungry Horse is able to catch floodwater in spring and summer and release it during the winter, at a time when downstream plants need to operate at full capacity to take care of power loads. Of the 840,000 kilowatts of prime power which Hungry Horse contributes to the Columbia system, only 212,000 kilowatts is at site and 628,000 kilowatts is created at downstream plants. As more dams are built downstream, these benefits will increase, while the area around the dam enjoys the new prosperity which comes from a growing industrial base.

Prior to large-scale Federal hydroelectric development in the Tennessee Valley and on the Columbia, the Nation's private power companies were wedded to a high-cost, low-use philosophy, satisfied with what amounted to a guaranteed return on investment.

TVA showed that low-cost power attracted ever-increasing use of power and that, by selling larger quantities at lower cost the utilities could make a better return than ever before. In the areas surrounding TVA, the private utilities have learned this lesson.

In Washington and Oregon, the existence of Federal powerplants and local publicly owned distribution systems likewise has established a pattern of low cost and high use, which is followed by both the public and private distributors of electricity.

Paradise Dam, which would make a large block of power available at Bonneville Power Administration rates, can spread this low-cost, high-use philosophy into Montana, where the principal power supplier has shown no apparent interest in this concept.

One need only look at a map which appears in the Federal Power Commission publication "Typical Electric Bills" to see that the low-cost powerline cuts off at Montana's western border.

The map appearing on page v. of the "Typical Bills" report for January 1, 1959, shows that at that time the average residential consumer in Montana paid \$7.43 for 250 kilowatt hours of electricity.

In nearby Washington, the average rate for the same amount of electricity was only \$4.52; in Oregon the residential consumers paid \$5.39 for 250 kilowatt-hours.

It is not surprising to find, in a table appearing on pages 100-102 of the same document, that consumers used much more electricity in States where rates were low than they did in States having high rates.

In 1957, the last year covered in the table, the average residential consumer in Billings, Mont., used 2,923 kilowatt-hours during the year; his counterpart in Butte used 2,321 kilowatt-hours, and a similar consumer in Great Falls used 3,125 kilowatt-hours.

As might be expected, the Washington consumer did not fail to take advantage of his low electric rates. In Seattle, the average annual use per residential consumer was 7,961 kilowatt-hours; in Spokane, 7,398 kilowatt-hours; and in Tacoma, 9,040 kilowatt-hours.

Montana, with its hydroelectric resources, had higher residential rates on January 1, 1959, than New Jersey, on the fringe of the highest New England region, where all fuel-to-fire thermal-generating stations has to be brought into the State from distant points. In fact, there were 28 States in the continental United States at that time which had a lower average rate to consumers than Montana.

The pattern established in the years since establishment of the TVA and Bonneville systems shows clearly that, where rates are low enough to attract new residential users and new industries, new sources of low-cost power are put to use as soon as they are available.

I am confident that the same pattern will apply to western Montana when the stimulus of low Bonneville rates is applied.

In conclusion, I want to reaffirm our association's support for Paradise Dam and to urge that the pending bill be amended to assure a complete study of the perplexing economic problems which stand in the way of this key development.

The CHAIRMAN. Thank you, Mr. Radin.

The next witnesses represent the Confederated Salish and Kootenai Tribes of the Flathead Reservation of Montana.

STATEMENTS OF WALTER W. McDONALD AND WALTER H. MORIGEAU, MEMBERS OF THE TRIBAL COUNCIL; AND JOHN W. CRAGUN, LAWYER, ALL REPRESENTING THE CONFEDERATED SALISH AND KOOTENAI TRIBES OF THE FLATHEAD RESERVATION, MONT.

Mr. CRAGUN. We represent the Confederated Salish and Kootenai Tribes of the Flathead Reservation, Mont. Walter W. McDonald, a member of the tribal council and a former chairman of the Tribal Council of the Confederated Salish and Kootenai Tribes of the Flathead Reservation, Mont., is a rancher at St. Ignatius, Mont. Walter H. Morigeau, a member of the tribal council and former chairman of the Tribal Council of the Confederated Tribes, is a rancher residing

near Arlee, Mont. I am a member of the firm of Wilkinson, Cragun & Barker, of Washington, D.C., who are the tribal attorneys for the Confederated Tribes.

The Committee on Interior and Insular Affairs has heretofore heard the opposition of the Confederated Tribes to the building of the Knowles or the Paradise projects at all. Knowles Dam would be situated a few hundred feet beyond the reservation boundary, but would have substantially its entire reservoir within the reservation. Paradise Dam, downstream from Knowles, would flood precisely the same amount of reservation land, and, in addition, certain additional lands on the Clark Fork River. While the tribes have heretofore been heard on its opposition to the development of either of these projects at all because of the gross and serious economic and human consequences to the Indian people of the Flathead Reservation, we understand that there are compelling reasons in the view of the United States why one or the other of these developments must be authorized immediately. Accordingly, we urgently wish to be heard and to be heard as to extent of the title to be taken, the method of determining values, and the manner and time of making payment.

1. EXTENT OF TITLE

The proposal, Committee Print No. 3, on S. 1226, pending before the Senate Committee on Interior and Insular Affairs, is that the tribes shall convey—

all right, title, and interest of the tribes and their members in and to any tribal or individually owned land required for carrying out the purposes of this act—with a provision for making just compensation—a matter which would follow as a matter of law anyway from the proposed taking.

This is far more of the tribal property than the United States needs to take to build and operate a dam. That can be done with an easement, without the need for taking other interests in the tribal lands, such as hunting and fishing rights, timber, minerals, grazing, and the like. Undoubtedly some greater amount of tribal lands will be needed for the initial construction than will be needed afterward; and under a mere easement these would revert in the tribes and the United States would need to pay only for the temporary use. The bill envisions—revised section 9—acquisition of lands outside the reservoir area necessary for ownership of sufficient lakeshore frontage and adequate adjacent areas for recreation and related matters. This foresees transforming what at present is subsistence fishing by tribal members into mere sport for the white man. It is unnecessary to the fundamental project and is not germane to the great need felt for authorizing it now. No more should be taken than is necessary to the building of the dam and related works themselves and the required reservoir area. The provision should be merely for an easement.

2. METHOD OF DETERMINING COMPENSATION

While the Confederated Tribes on the whole have excellent relationships with their neighbors, determining the value of tribal assets which will be lost if the project is built raises problems which the tribes should not be compelled to endure. No Indian could sit, for instance, on a condemnation jury if the land is obtained "in accord-

ance with the rules applicable under eminent domain proceedings." For such Indian would have an interest in the outcome. We do not feel secure that our white neighbors would feel that the Indian is entitled to the full value of the Indian resources which are being foreclosed; and the alternatives of arbitration or suit in the Court of Claims should be accorded us.

3. TIME AND MANNER OF MAKING COMPENSATION

The bill now provides simply either for a contract with the Confederated Tribes or for a taking under the power of eminent domain. Under usual standards, that means—if the taking is by eminent domain—a suit in the U.S. district court where the land is situated under a declaration of taking, followed by a trial of the issue of value. Any judgment would have to be returned in terms of dollars; the dollars would go to the tribal account, and there would be immediate demands of the tribal membership for a per capita payment—an equal share—of the resulting moneys. The amount involved would not be large enough for any substantial capital improvement by any of the members; experience shows that such per capita payments of a moderately large amount would be quickly dissipated. Both the asset would be gone and with it the income and the means and hopes for improvement of the Flathead people.

Were it not for the pendency of this proposal, we could exploit two low head dams on our reservation. We have the powersites, and they have been reserved by law for more than half a century. We know that at least one power company is anxious to build the two low head dams—which will produce the greatest part of the energy which even can be produced at Knowles; for Flathead Lake provides tremendous reservoir capacity and regulation in a manner which will insure great production from these units. If our experience at Kerr Dam—Flathead site No. 1—were followed, under which we get annual rentals for the exploitation of the tribal damsite, we would have substantial annual compensation with which to run our loan programs, pay small per capita payments—which now can be borrowed against for worthwhile purposes, such as outfitting children with clothing for the new school year—and for continuing income for the betterment of our people. It is like income from stock or bonds which any non-Indian might have acquired by inheritance and which, if not cashed, can produce a continuing income for his benefit.

We, therefore, want, if this project is to be built, to get what we might get out of the alternatives if it were not built: that is, annual payments fully equal to the exploitable value of our damsites and other property—the income from grazing, timber, fishing, hunting, and like matters—and we want it revalued—as our rentals at Kerr Dam are to be revalued—from time to time to reflect the increased value of low-cost hydroelectric power in comparison with alternatives that are available.

Even more, we would like a block of power to be disposed of by the tribes from time to time as good business judgment might dictate. We have seen how a similar block of power reserved by the white people on the so-called Flathead "Indian" irrigation project—operated by the Bureau of Indian Affairs and less than 18 percent of the

membership of which is Indian—has increased from time to time over the years and is expected by those people to pay not only their construction costs but their O. & M. charges as well. We have seen the charts of the Corps of Engineers which predict a similar tremendous increase in the value of power over the course of the immediate future as these few valuable damsites are exploited and the alternative is thermal power. We feel that since the Flathead people have by treaty maintained the exploitable values in these damsites, it is only just that they—and not the United States by grabbing the Indian property away from them—should realize the tremendous increment in value which it is known will accrue from the head developed on tribal lands.

4. ALTERNATIVE LANGUAGE OF S. 1226

We have heretofore proposed, and renew our proposal, that section 6 be restated to read as follows:

SEC. 6. (a) The Secretary is authorized and directed to negotiate a contract with the Confederated Salish and Kootenai Tribes of the Flathead Indian Reservation in Montana (hereinafter in this section referred to as the "Tribes"), providing for an easement in the United States for the project to the extent of tribal lands and powersites which will be occupied by the project. Any restriction on contracts conveying any easement in tribal lands, whether imposed by Federal law or the constitution or charter of the Tribes, shall not be construed to prohibit negotiation and consummation of the contract here referred to by the Secretary or the tribal council of the Tribes. Any contract thus negotiated may, at the election of either the Secretary or the tribal council of the Tribes, be subject to popular referendum in accordance with the Tribes' constitution and bylaws.

(b) In the event no contract shall become effective pursuant to subparagraph (a) hereof, then at the election of the Tribes the terms of the acquisition of the easement shall be fixed either by arbitration or by an action to be brought by the Tribes in the United States Court of Claims or in the United States District Court for Montana, as they may choose. If by arbitration, the Secretary may select one arbitrator, the Tribes one, and the two a third, in accordance with the usual course of arbitration. No arbitrator shall have any interest in the tribal estate, nor shall be in the regular employment of the Tribes or the United States. Arbitrators selected by the parties shall be paid by and as agreed by the party selecting them; the third shall be paid by the Administrator at not to exceed usual rates for such services. In the event terms of the acquisition are settled by a court, the court shall not be limited to the rendition of a money judgment, but shall in its determination take into account and provide for terms in accordance with the provisions of subsection (c) hereof.

(c) Any contract for or determination of the terms of the acquisition of an easement shall provide full and fair annual compensation for the loss of the exploitable values of tribal damsites within the Flathead Indian Reservation which will be inundated by the project, and the loss or impairment of other tribal property including, without limitation, lands (grazing, farming, timber, mineral, hunting and other); improvements and crops thereon or resources therein; public works and improvements, including roads; and impairments through limited access to tribal enterprises or tribal resources even though not inundated or taken for immediate use by the project. Authorization is hereby given for any or all of the following: (1) Compensation, or partial compensation, in kind, as by furnishing an allotment of power to the Tribes; (2) to the extent compensation in kind is not made, reevaluation of the exploitable values of tribal power resources inundated by the project at reasonable intervals to the end that taking of the power potential of the tribal lands shall not hereafter result in a profit to the United States at the expense of the Tribes; and (3) retention by the Tribes of exclusive disposition of fishing rights within such portion of the reservation as is inundated by the reservoir.

If the matter be so urgent that full consideration cannot be given the Indian interests and the serious economic and human problems

which are wrapped up in it, together with all the moral problems which arise from this kind of violation of the treaty in order to give the white man something which he urgently insists upon, then we suggest that the matter be left for the sober consideration and reflection of the next Congress where (with the aid of appropriate Government agencies), the tribes can prepare and present to the Congress the many and impelling considerations which are involved. This could be done by striking section 6 as it now appears, and letting it read as follows:

SEC. 6. There are hereby reserved for further consideration by Congress all matters respecting the property and rights of the Confederated Salish and Kootenai Tribes of the Flathead Reservation, Montana, including the extent of tribal title to be taken for the project, the means of determining compensation, and the time and means of making payment therefor.

Mr. Chairman, I ask that this study entitled, "Background of the Problems of the Indians of the Flathead Reservation," be included in the record.

The CHAIRMAN. It is so ordered.
(The study is as follows:)

BACKGROUND OF THE PROBLEM OF THE INDIANS OF THE FLATHEAD RESERVATION AND THEIR DAMSITES

Should the Knowles multipurposes project on Flathead River, Mont., be authorized by Congress If so, should the Indian interest be treated as is proposed?

This pamphlet is intended to show the economic, social, and legal background of a crisis which is thrust upon the Indian people of the Flathead Reservation, Mont. The crisis is one that has arisen before in dealings between white men and Indians. The white man feels strongly that he can make better use of the Indian resource than can the Indian. Therefore he proposes to seize it for his own.

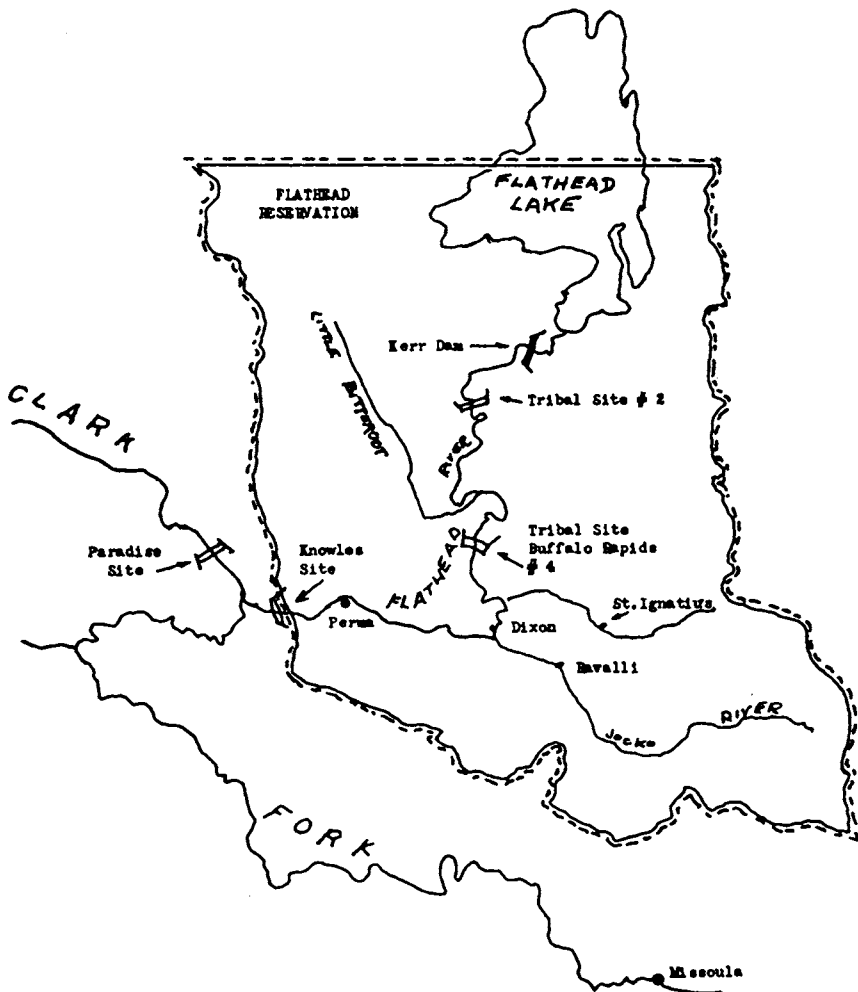
This he would do by satisfying the minimum requirements of the law of eminent domain—even though it would cost less money to make alternative provisions to protect legitimate tribal interests. A statute now on the verge of adoption by Congress fails to face realistically the disastrous results to these Indian people which will follow unless better provision is made respecting the extent of Indian tribal property to be taken, the means of fixing its value, and the time and manner of making payment for it.

In the Flathead crisis the Indian people are aware of the present-day value of the resources involved, which they have owned since time immemorial. They do not oppose full development of those resources. They ask to be allowed to share in the development.

IN BRIEF

The Confederated Salish and Kootenai Tribes of the Flathead Reservation, Mont., own two feasible hydroelectric damsites (shown on the preceding diagram as "Tribal Site No. 2" and "Tribal Site Buffalo Rapids No. 4") pursuant to their Treaty of Hell Gate of 1855. Private developers have assured the tribes of their interest in building low-head dams on these sites. If so developed, they would yield the tribes rentals, paid either in cash or in power which in turn could be resold, of probably not less than one-third of \$1 million and possibly much more by the time final engineering estimates are in and licenses issued.

But one of these sites, and more particularly other, larger storage sites just off the reservation, have been eyed for years by the Corps of Engineers of the Army. In June 1959 the Board of Engineers for Rivers and Harbors on the Columbia River and tributaries forwarded to Washington its recommendation that a site a few hundred feet off the reservation be authorized for Federal hydroelectric development. That site is known as the Knowles damsite. It will cost more than a quarter of a billion dollars; it will store water almost exclusively on the reservation; it will flood out the two economical tribal damsites; it will cause serious social and economic hardship to the tribal members on the reservation.



The Knowles project was proposed for authorization in S. 1226 (Murray and Mansfield) and H.R. 5144 (Metcalf), 86th Congress, 2d session. After hearings by the Senate Interior and Insular Affairs Committee, that committee now is about to report the bill favorably, convert the project to a Corps of Engineers project and have it added on the omnibus rivers and harbors bill, H.R. 7634, which has already passed the House and is due for early report in the Senate. As the latest (No. 3) committee print of S. 1226 has it, the entire interest of the tribes would be taken on pain of eminent-domain proceedings.

1. While the tribes oppose the project's being built at all we believe the serious likelihood is that it will be authorized notwithstanding. In that event, the language to cover Indian rights is disastrous:

(a) It provides for taking "all right, title, and interest" of the confederated tribes. No more than an easement is necessary.

(b) The tribes must agree to the price of the Secretary of the Army or face eminent-domain proceedings. But we cannot risk fair consideration of our rights by a jury of our non-Indian neighbors.

(c) A single cash payment to the Confederated Tribes would result in a boom (while the money lasts) and bust (when the Indian people try to go on relief, which is largely withheld from them in Montana).

2. The bill should provide (a) for taking no more than an easement for flooding our lands; (b) for valuation by contract, arbitration, or suit not only locally but in the Court of Claims; and (c) for annual compensation, which since two feasible tribal damsites will be flooded out by the Government dam, can be made wholly or partially in kind, as by furnishing an allotment of power to the Confederated Tribes.

3. If instead Congress feels further development of these problems is necessary, then in the authorization all matters affecting tribal rights should be reserved for further consideration by Congress.

The background of the problem at Flathead

The lands involved are the original domain of these Indian people; their ownership has been guaranteed by treaty with the United States.—When white men first came to what is now northwestern Montana, they found there the Salish and Kootenai Tribes in undisputed possession and control of a vast area of land. By the Treaty of Hell Gate of July 16, 1855, 12 Stat. 975, article 1, this vast acreage was ceded to the United States, reserving (art. II) from the cession, however, a relatively small area including the south half of Flathead Lake and Flathead River beyond the site known as Buffalo Rapids No. 4. So far as these lands and waters are concerned, the treaty has never been modified or changed in any way. For when the Flathead Reservation was opened to non-Indian settlement, the Secretary of the Interior was authorized to reserve from location, entry, sale, or other appropriation, all lands chiefly valuable for powersites. Act of March 3, 1909, 35 Stat. 781, 796, section 22. Where allotments had been made to Indians within the powersite reserves, the Secretary was authorized to exchange other lands for them. Act of April 12, 1910, 36 Stat. 296, section 25.

After describing our reservation (shown on the diagram which is part of this pamphlet), article II of our 1855 treaty provides:

"All of which tract shall be set apart, and, so far as necessary, surveyed and marked out for the exclusive use and benefit of said Confederated Tribes as an Indian reservation. Nor shall any white man, excepting those in the employment of the Indian department, be permitted to reside upon the said reservation without permission of the Confederated Tribes, and the superintendent and agent. And the said Confederated Tribes agree to remove to and settle upon the same within 1 year after ratification of this treaty. * * *" (12 Stat. at p. 976.)

Article III provides for public roads through the reservation, then says in part—

"The exclusive right of taking fish in all the streams running through or bordering said reservation is further secured to said Indians; * * *" (12 Stat. at p. 976.)

We Indians who entered into the Treaty of Hell Gate are now actually a Federal corporation under the name "Confederated Salish and Kootenai Tribes of the Flathead Reservation, Montana." We were organized and incorporated under sections 16 and 17 of the Indian Reorganization Act of 1934 (25 U.S.C. § 476-7). It is provided by section 16 of the Indian Reorganization Act (25 U.S.C. § 476) that the constitution of an organized tribe invests it with the right and power "to prevent the sale, disposition, lease or encumbrance of tribal lands, interests in lands, or other tribal assets without the consent of the tribe." The constitution of the Confederated Tribes was approved by the Secretary of the Interior, October 26, 1935, and in article 6 thereof empowers the tribal council—

"(a) To regulate the uses and disposition of tribal property, to protect and preserve the tribal property, wildlife and natural resources of the Confederated Tribes, * * *

"(d) To approve or veto any sale, disposition, lease, or encumbrance of tribal lands and tribal assets which may be authorized or executed by the Secretary of the Interior, the Commissioner of Indian Affairs, or any other agency of the Government: *Provided*, That no tribal lands shall be sold or encumbered or leased for a period in excess of 5 years, except for governmental purposes."

In addition, the Secretary of the Interior, on April 21, 1936, submitted a corporate charter which was duly ratified by the Confederated Tribes and which conferred among others the power generally to own and operate and dispose of property, except that (par. 5(b)(1)):

"No sale * * * may be made by the tribe of any land, or interests in land, including water powersites, * * * now or hereafter held by the tribe within the boundaries of the Flathead Reservation."

The charter in paragraph 5(f) accorded the power "to make and perform contracts and agreements of every description, not inconsistent with law or with any provisions of this charter * * * including contracts with the United States or the State of Montana or any agency of either for the development of waterpower sites within the reservation: *Provided*, That all contracts * * * involving the development of waterpower sites within the reservation, shall be subject to the approval of the Secretary of the Interior or his duly authorized representative."

Legal position of the tribes and their damsites.—When the white man first came to our country, we owned and controlled these lands to the exclusion of anyone else whatsoever. Even if there had never been a treaty, the Supreme Court has recognized from earliest days that the Indians' "right of occupancy is considered as sacred as the fee-simple of the whites." *Mitchel v. United States*, 9 Pet. 711, 746. From the time of the earliest discoveries by Europeans and until and following the founding of the United States, the Indians "were admitted to be the rightful occupants of the soil, with a legal as well as just claim to retain possession of it, and to use it according to their own discretion." *Johnson v. McIntosh*, 8 Wheat. 543, 574. "* * * the Indians' right of occupancy has always been held to be sacred; something not to be taken from him except by his consent, and then upon such consideration as should be agreed upon." *Minnesota v. Hitchcock*, 185 U.S. 373, 388-9. With the Treaty of Hell Gate of July 16, 1855, 12 Stat. 975, however, this right of occupancy became a contract right to which the faith of the United States is pledged. Under a treaty entirely similar to that of the Treaty of Hell Gate, the Supreme Court has flatly ruled that "the right of perpetual and exclusive occupancy of the land is not less valuable than full title in fee." *United States v. Shoshone Tribe*, 304 U.S. 111, 116, citing cases.

Where there has been a treaty of cession with provision for a reservation out of the aboriginal land, the Supreme Court has said, *Gaines v. Nichols*, 9 How. 356, 365, that the Indian "holds, strictly speaking, not under the treaty of cession, but under his original title, confirmed by the Government in the act of agreeing to the reservation." Or, as was said in *United States v. Winans*, 198 U.S. 371-381, "the treaty was not a grant of rights to the Indian, but a grant of rights from them—a reservation of those not granted."

From time to time there have been some questions raised and some misunderstanding by Federal officials of the scope of the title dating from aboriginal times—that is, whether the Indians, who had everything in the area before they made the cession retained everything in what they reserved, or whether they had no "compensable interest" in such property as the exploitable values of their damsites. At one time a bill to make payment to the Crow Tribe in connection with its Yellowtail Dam site was vetoed on the ground there was no such "compensable interest." This, it appears, was a misunderstanding of the rights of a tribe, such as the Flatheads, which antedated the rights of white owners or the State of Montana or the United States itself, and which are guaranteed by treaty. The mistake of law in the Yellowtail Dam veto has now been judicially recognized; and right in Montana it has been held that the Indians own under their treaties the exploitable value of the powersite as a powersite. We call attention to *United States v. 5,677.94 Acres &c.* (Mont., 1958), 162 F. Supp. 101. The matter should never have been in doubt anyway so far as the Flathead Reservation is concerned; for it was passed upon by the U.S. Court of Appeals for the Ninth Circuit some 18 years ago in terms which we have always felt make obvious the basic rights of the Confederated Tribes in these reservation lands under our Treaty of Hell Gate. *Montana Power Co. v. Rochester* (C.A. 9th, 1942), 127 F. 2d 189.

The legal position of the Flathead Tribes can be understood a little better if it is borne in mind that they constitute a government—not just a hundred years ago when a solemn treaty was negotiated with that government by the United States, but a government having current executive, legislative, and judicial functions recognized by the Indian Reorganization Act itself and in the 1935 constitution to which we have referred. The situation is in some respects comparable to that relating to other projects in the Columbia River which would flood up into Canada. The United States has for years carried on negotiations on the complex problems involved. So far as our courts are concerned, the matter is a political one, involving intergovernmental relations of treaty and negotiation; Canada could not come into the U.S. court to enjoin a development which infringed its soil.

Nor can we. Though our legal rights are plain beyond all doubt, we are a government; dealings with our affairs by the US Government, so far as is concerned whether to override our treaty to this extent, is in the political field. We cannot stop it with court action—only by appeal to the political conscience of our country. *Lone Wolf v. Hitchcock*, 187 U.S. 553, 565-566.

Tribal sites No. 2 and Buffalo Rapids No. 4.—Preliminary permits on our tribal sites No. 2 and No. 4 were held during the middle 1950's by Montana Power Co., which is the licensee of the existing dam on the reservation (Kerr Dam) and which pays the tribes rentals (at a rate fixed many years ago and subject to reappraisal) of at least \$225,000 a year. That company thoroughly explored both sites, and filed with us and the Federal Power Commission the results of its explorations, which proved both sites entirely feasible. Because of the pending study of site No. 4 (Buffalo Rapids) by the Corps of Engineers for a possible high dam (raising the entire pool to the level of a dam at site No. 2) and of studies of the Paradise Site and the Knowles Site (which would raise the entire pool to the same level), we could not induce that company to proceed with development. We have been looking for other possible developers under Federal Power Commission license. We are given to understand that the maximum values to the tribes from exploiting these two sites would be two inexpensive low dams which would make use of the entire head. This appeals to us, too; for it would save substantial grazing and agricultural lands between site No. 4 and site No. 2 which would be inundated by any of the proposals of the Corps of Engineers.

Apparently the Corps of Engineers wants larger storage to run its downstream hydroelectric plants. For our own dams adequate storage and regulation of flow would be furnished by Flathead Lake and Kerr Dam and upstream storage.

We employed an engineer to give us a preliminary, rough estimate of the annual rentals we might reasonably expect from our sites. Our electrical engineer (Mr. Barry Dibble, of Redlands, Calif.) more than 2 years ago fixed the annual rental at \$355,000. From the fact that the Corps of Engineers found annual benefits in even the less-economical high dam at site No. 4 of \$504,000, we feel it is entirely possible that greater exploitable values will be realized for the tribes if these sites are left for private development.

Urgency for authorizing the Knowles-Paradise project.—At the last hearings on S. 1226, the Chief of Engineers represented that unless early authorization is given the vast storage project under consideration, Canada (which has a substantial portion of the Columbia River Drainage within its borders) may beat this country to the punch and itself establish sufficient storage dams to turn the generators in the great U.S. dams on the Columbia itself. Then, under our arrangement with Canada, we would be compelled to deliver half the additional kilowatts generated with the new Canadian storage to Canada in payment for the storage. But if this Knowles-Paradise project is started first, then the entire downstream benefits inure to the United States.

This is apparently the rationalization upon which this project is to be rushed through Congress in its late days. We are not aware to what extent, if at all, Congress has considered saving a third of a billion dollars (or nearly a half of a billion if Paradise be chosen instead of Knowles) and receiving free of any cost one-half of all the additional kilowatts Canada would make available at its own expense.

Is it Knowles? Or Paradise?—Knowles floods only the Flathead River and tributaries, and only within the Flathead Reservation. So long as only Knowles is being considered, opposition of people in the valley of the Clark Fork (which would additionally be flooded by Paradise) is reduced. Several additional towns would have to be relocated if Paradise is built. As introduced, the bill (S. 1226) would have authorized Knowles (estimated cost 2 years ago \$234,910,000 (Rept. U.S. Army Eng. Div. No. Pac. June, 1958), "Water Resource Development, Columbia River Basin, report brochure"; 1 year later, \$235,021,000), or, under section 2(a), "any site between 2 miles upstream, and 8 miles downstream from the site recommended in such review report", which would have authorized Paradise (estimated cost more than 3 years ago about \$456 million). As proposed for report, the authorization is now proposed to be confined to the Knowles site. Thereby, substantially no lands outside the boundaries of the reservation are to be flooded. Either Knowles or Paradise would flood exactly the same reservation lands.

It is unnecessary to take more from the tribes than an easement.—The proposal (Committee Print No. 3) on S. 1226, pending before the Senate Committee on Interior and Insular Affairs, is that the tribes shall convey "all right, title,

and interest of the tribes and their members in and to any tribal or individually owned land required for carrying out the purposes of this Act", with a provision for making just compensation (a matter which would follow as a matter of law anyway from the proposed taking).

This is far more of the tribal property than the United States needs to take to build and operate a dam. That can be done with an easement, without the need for taking other interests in the tribal lands, such as hunting and fishing rights, timber, minerals, grazing, and the like. Undoubtedly some greater amount of tribal lands will be needed for the initial construction than will be needed afterward; and under a mere easement these would revert in the tribes and the United States would need to pay only for the temporary use. The bill envisions (revised sec. 9) acquisition of lands outside the reservoir area necessary for ownership of sufficient lakeshore frontage and adequate adjacent areas for recreation and related matters. This foresees transforming what at present is subsistence fishing by tribal members into mere sport for the white man. It is unnecessary to the fundamental project and is not germane to the great need felt for authorizing it now. No more should be taken than is necessary to the building of the dam and related works themselves and the required reservoir area. The provision should be merely for an easement.

What property of the tribes will be lost.—Probably the greatest cash value which we will lose by the building of Paradise will be our two valuable hydroelectric sites. With them, unless some change is made in the proposal, will go our hopes and plans for a tribal income which, from Kerr Dam, has helped many of our people get on their feet and become some of the most progressive and accomplished Indian people anywhere. We have helped our people with high school and higher education. Small per capita payments we make, together with individual income from tribal-enterprises such as our annual Christmas-tree-cutting program, have kept many of our less-well-adjusted people off tribal relief; and we have been enabled with tribal funds to help substantially in the relief and welfare load with respect to those people who simply cannot, because of age or disease, support themselves. We need to do better; we are learning; and we have hopes—unless they be dashed by the heedless seizure of our property without concern for how that seizure is to be handled for our welfare. Thus, our annual per capita payments have been available as security for essential small loans to enable parents to clothe their children so they could go to school in the fall.

We will lose some 16,000 acres of tribal grazing lands, now the finest grazing on the reservation, where our Indian stockmen's associations graze their Indian-owned cattle, some for summer grazing, others without supplemental feeding from the first of November to, sometimes, the middle of February. These lands are absolutely irreplaceable. The shock to the Indian economy will be profound.

There will be interference with our hunting, and fishing, and to some extent with our Christmas-tree crop. There will be impairment of access to tribal enterprises, such as our forest operations, remaining tribal grazing, and our Hot Springs Bath enterprise. We have no assurance that the tremendous reservoir to be filled by Knowles Dam will not as a matter of geological fact quench the hot springs at Hot Springs, Mont., where we have built a bath house at a cost in excess of \$450,000 of tribal money. There will be interference with some of our governmental functions, such as policing the reservation.

While not tribal lands but individual property, about 3,000 acres of individually allotted lands held in trust by the United States for individual Indians will be lost—with no provision for replacing or rehabilitating the Indian people, or seeing that lands they secure are in turn placed in trust. In addition, thousands of acres of white-owned lands—or at any rate, lands owned in fee simple, most of which are white-owned—are affected.

Water rights possibly taken.—For the first time in the committee print it has been proposed (sec. 3(d), p. 21) that the Knowles project shall be subordinate to water rights "whether now or hereafter existing, valid under State law." Indian water rights exist under Federal law, and are neither recognized nor protected by State law. Does this mean that there would be a taking of Indian water rights which have been consistently recognized by the courts as stemming from Federal treaties and statutes? If so, the prospective liability of the United States in connection with this project could go to unforeseen limits; the seizure of property from the Indians is far more grievous.

That the Indian rights are clear is established by many cases. See *Winters v. United States* (207 U.S. 564 (1908)); *United States v. Ahtanum Irrig. Dist.* (236 F. 2d 321 (C.A. 9th, 1956), cert. den. 352 U.S. 988).

Whether taken with this great additional liability of the United States on this project, or not (since irrelevant to the purpose of the bill), the bill should make the matter plain. Because of the extreme consequences to the Indian people, we urgently ask that there be no taking of these Indian water rights. We suggest, accordingly, that the words "or Federal" be inserted after the word "State" in the phrase we have quoted. (Committee Print No. 3, p. 21, line 12.)

How any necessary tribal property should be acquired.—While the Confederate Tribes on the whole have excellent relationships with their neighbors, determining the value of tribal assets which will be lost if the project is built raises problems which the tribes should not be compelled to endure. No Indian could sit, for instance, on a condemnation jury if the land is obtained "in accordance with the rules applicable under eminent domain proceedings." For such Indian would have an interest in the outcome. We do not feel secure that our white neighbors would feel that the Indian is entitled to the full value of the Indian resources which are being foreclosed; and the alternatives of arbitration or suit in the Court of Claims should be accorded us.

Time and manner of making compensation.—The bill now provides simply either for a contract with the Confederate Tribes or for a taking under the power of eminent domain. Under usual standards, that means (if the taking is by eminent domain) a declaration of taking in the U.S. district court where the land is situated, followed by a trial of the issue of value. Any judgment would have to be returned in terms of dollars; the dollars would go to the tribal account, and there would be immediate demands of the tribal membership for a per capita payment—an equal share—of the resulting moneys. The amount involved would not be large enough for any substantial capital improvement by any of the members; experience shows that such per capita payments of a moderately large amount would be quickly dissipated. Both the asset would be gone and with it the income and the means and hopes for improvement of the Flathead people.

Were it not for the pendency of this proposal, we could exploit two low-head dams on our reservation. We have the power sites, and they have been reserved by law for more than half a century. We know that at least one power company is anxious to build the two low-head dams. If our experience at Kerr Dam (Flathead site No. 1) were followed, under which we get annual rentals for the exploitation of the tribal damsites, we would have substantial annual compensation with which to run our loan programs, pay small per capita payments (which now can be borrowed against for worthwhile purposes, such as outfitting children with clothing for the new school year); and for continuing income for the betterment of our people. It is like income from stock or bonds which any non-Indian might have acquired by inheritance and which, if not cashed, can produce a continuing income for his benefit.

We, therefore, want, if this project is to be built, to get what we might get out of the alternatives if it were not built: that is, annual payments fully equal to the exploitable value of our damsites and other property (the income from grazing, timber, fishing, hunting, and like matters); and we want it revalued (as our rentals at Kerr Dam are to be revalued) from time to time to reflect the increased value of low-cost hydroelectric power in comparison with alternatives that are available. Annual payments would also reduce the capital cost of the project, reducing what would have to be borrowed.

Even more, we would like an allotment of power to be disposed of by the tribes from time to time as good business judgment might dictate. We have seen how a similar block of power reserved by the white people on the so-called Flathead Indian irrigation project (operated by the Bureau of Indian Affairs, less than 18 percent of the membership of which is Indian) has increased from time to time over the years and is expected by those people to pay not only their construction costs but their operation and maintenance charges as well. We have seen the charts of the Corps of Engineers which predict a similar tremendous increase in the value of power over the course of the immediate future as these few valuable damsites are exploited and further demand must be met with thermal power. We feel that since the Flathead people have by treaty maintained the exploitable values in these damsites, it is only just that they—and not the United States by grabbing the Indian property away from them—should realize the tremendous increment in value which it is known will accrue from the head developed on tribal lands.

Alternative language of S. 1226.—We have heretofore proposed to the Senate committees that section 6 of the Committee Print No. 3 be restated to read as follows:

"Sec. 6. (a) The Secretary is authorized and directed to negotiate a contract with the Confederated Salish and Kootenai Tribes of the Flathead Indian Reservation in Montana (hereinafter in this section referred to as the "Tribes"), providing for an easement in the United States for the project to the extent of tribal lands and power sites which will be occupied by the project. Any restriction on contracts conveying any easement in tribal lands, whether imposed by Federal law or the constitution or charter of the Tribes, shall not be construed to prohibit negotiation and consummation of the contract here referred to by the Secretary or the tribal council of the Tribes. Any contract thus negotiated may, at the election of either the Secretary or the tribal council of the Tribes, be subject to popular referendum in accordance with the Tribes' constitution and bylaws.

"(b) In the event no contract shall become effective pursuant to subparagraph (a) hereof, then at the election of the Tribes the terms of the acquisition of the easement shall be fixed either by arbitration or by an action to be brought by the Tribes in the United States Court of Claims or in the United States District Court for Montana, as they may choose. If by arbitration, the Secretary may select one arbitrator, the Tribes one, and the two a third, in accordance with the usual course of arbitration. No arbitrator shall have any interest in the tribal estate, nor shall be in the regular employment of the Tribes or the United States. Arbitrators selected by the parties shall be paid by and as agreed by the party selecting them; the third shall be paid by the Administrator at not to exceed usual rates for such services. In the event terms of the acquisition are settled by a court, the court shall not be limited to the rendition of a money judgment, but shall in its determination take into account and provide for terms in accordance with the provisions of subsection (c) hereof.

"(c) Any contract for or determination of the terms of the acquisition of an easement shall provide full and fair annual compensation for the loss of the exploitable values of tribal dam sites within the Flathead Indian Reservation which will be inundated by the project, and the loss or impairment of other tribal property including, without limitation, lands (grazing, farming, timber, mineral, hunting and other); improvements and crops thereon or resources therein; public works and improvements including roads; and impairments through limited access to tribal enterprises or tribal resources even though not inundated or taken for immediate use by the project. Authorization is hereby given for any or all of the following: (1) Compensation, or partial compensation, in kind, as by furnishing an allotment of power to the Tribes; (2) to the extent compensation in kind is not made, reevaluation of the exploitable values of tribal power resources inundated by the project at reasonable intervals to the end that taking of the power potential of the tribal lands shall not hereafter result in a profit to the United States at the expense of the Tribes; and (3) retention by the Tribes of exclusive disposition of fishing rights within such portion of the reservation as is inundated by the reservoir."

If the matter be so urgent that full consideration cannot be given the Indian interests and the serious economic and human problems which are wrapped up in them, together with all the moral problems which arise from this kind of violation of the treaty in order to give the white man something which he urgently insists upon, then we have suggested to the committees that the matter be left for the sober consideration and reflection of the next Congress where (with the aid of appropriate Government agencies) the tribes can prepare and present to the Congress the many and impelling considerations which are involved. This could be done by striking section 6 as it now appears, and letting it read as follows:

"Sec. 6. There are hereby reserved for further consideration by Congress all matters respecting the property and rights of the Confederated Salish and Kootenai Tribes of the Flathead Reservation, Montana, including the extent of tribal title to be taken for the project, the means of determining compensation, and the time and means of making payment therefor."

(The committee proceeded to other business.)

APPENDIX

(The following letters and statements were received for inclusion in the hearing record:)

HEADQUARTERS, DEPARTMENT OF THE ARMY,
OFFICE OF THE CHIEF OF ENGINEERS,
Washington, D.C., April 8, 1960.

HON. JAMES E. MURRAY,
Chairman, Senate Committee on Interior and Insular Affairs,
U.S. Senate.

DEAR MR. CHAIRMAN: In accordance with telephone requests on April 7, 1960, from Mr. Mapes of your staff, this letter confirms a correction on the division engineer's report on the Columbia River, as discussed with Mr. Mapes, by a member of my staff.

The last paragraph on page 179 of the report states that the Knowles project would generate an average of about 1,323 million kilowatt-hours of energy annually at the site, and would add 1,200 million kilowatt-hours annually at downstream plants. The latter figure is an intermediate estimate of the downstream effect with the project in the last added position, whereas the proper figure should be 2,330 million kilowatt-hours annually based on the project operating in the system.

This correction does not affect the power benefits attributed to the Knowles project.

Sincerely yours,

E. C. ITSCHNER,
Lieutenant General, USA, Chief of Engineers.

STAFF NOTE.—As is apparent, the above revision constitutes a substantial increase in the amount of annual energy attributable to the Knowles project over the figures provided in the division engineer's report on the Columbia River, although not in the monetary value of such benefits, since the corrected figures were used to arrive at such monetary evaluation.

The figures for the annual energy production attributable to the Knowles and Paradise projects as presented in the division engineer's report are as follows:

	<i>Annual energy production</i>	<i>Kilowatt-hours</i>
Paradise Dam:		
At site.....	-----	2, 024, 000, 000
Downstream.....	-----	2, 497, 000, 000
Total.....	-----	<u>4, 521, 000, 000</u>
Knowles Dam:		
At site.....	-----	1, 323, 000, 000
Downstream.....	-----	1, 200, 000, 000
Total.....	-----	<u>2, 523, 000, 000</u>

Knowles percent of Paradise, 56 percent.

The revised figures for Knowles Dam are as follows:

		<i>Kilowatt-hours</i>
Knowles Dam:		
At site.....	-----	1, 323, 000, 000
Downstream.....	-----	2, 330, 000, 000
Total.....	-----	<u>3, 653, 000, 000</u>

Knowles percent of Paradise (revised), 81 percent.

ROCKWOOD & SYKES,
Kalispell, Mont., March 9, 1960.

HON. JAMES E. MURRAY,
U.S. Senator From Montana,
Washington, D.C.

DEAR SENATOR MURRAY: I am enclosing herewith the statement which was presented at the hearing in Missoula concerning S. 1226. In order that there be no misunderstanding. I want it clearly understood that the conservation groups do not intend, from a conservation standpoint, to oppose the Knowles project. In fact, district No. 1 and most of the local groups have endorsed the project from a conservation standpoint. The purpose of the appearance was to call attention to omissions in the bill as it pertains to fish and wildlife conservation and recreation.

The reason I am writing you is that unfortunately at the hearing, because I was unable to attend, my statement was delivered to the members of the committee by Mr. James E. Murphy who presented the statement of the Kalispell Chamber of Commerce. This was done because, as the spokesman for the Kalispell Chamber of Commerce, Mr. Murphy appeared neither in opposition nor in support of the project but in opposition to the bill in view of what the chamber felt was omitted contrary to the interests of western Montana and Montana. I sincerely hope that all measures and reservoir projects in western Montana will include the provisions mentioned in my statement so that full use of the resources can be realized by the people of Montana as well as the entire country.

Sincerely yours,

ROBERT C. SYKES.

STATEMENT OF ROBERT C. SYKES, PRESIDENT, DISTRICT NO. 1, MONTANA STATE
WILDLIFE FEDERATION

My name is Robert C. Sykes and I am president of District No. 1 of the Montana State Wildlife Federation. District No. 1 consists of more than 35 conservation groups, with a membership in excess of 10,000. I appear at this time relative to S. 1226 solely from the standpoint of conservation, and any remarks made herein are to be considered as solely confined to the problems of good conservation.

All that we conservationists can expect or can reasonably ask for is that reasonable and necessary limitations on other uses be definitely established so that fish and wildlife recreations be one of the truly valuable uses of a multiple-purpose reservoir.

It has been said that wherever there has been good conservation practiced, you will find good fish and wildlife recreation, because they go hand in hand. In the past and for the last several years almost all money and attention has been expended and directed in downstream studies of reservoir construction. This has left little or nothing for upstream and headwater studies. Now the attention and need for reservoirs is concentrated in the upstream areas. Therefore, adequate studies must be made now, not after an upstream reservoir is built. Plans must be made now and during construction, not afterward. Time to prevent or cure an ailment is prior to or during the period of illness, not at the time of an autopsy. The construction of reservoirs in the past has shown many errors and problems that are created by storage dams. Some of these are as follows:

1. Reservoirs are ideally suited for rough fish but not game fish unless considerably more attention is directed to the maintenance of a game fish population.
2. Fluctuation of the water levels directly affects the habitat, including food supply, which in turn affects the types and amount of wildlife recreation.
3. The blockage of a drainage interferes with the spawning runs of that entire drainage and results in an entirely new fishery problem.
4. The fish and wildlife problems created by a storage reservoir is a continual one and exists prior to, at the time of and after construction of the project and with a considerable continuing expense.
5. Drawdowns from the storage reservoir must be limited in amount and during certain periods of the year in order to maintain a reasonable fish and wildlife use. If this is not done, the expense of maintaining minimal fishery and wildlife recreation is prohibitive.

In the submission of any bill for consideration by the U.S. Congress, it is respectfully requested that the following measures be made a part of any such bill:

1. That provisions be made for the creation and establishment of a definite low-water level below which no drawdown can be permitted, and that fluctuation periods be definitely established in order to give real recognition to fish and wildlife recreation as a part of the multiple use of the project.

2. That a full and complete study be made of fish and wildlife recreational problems prior to the actual construction of the project.

3. That an annual allocation of reasonable, sufficient and necessary funds be provided for out of operating revenues for fish and wildlife recreation, including the propagation and establishment of such recreation.

4. That all studies of a reservoir, not only be concerned with the project itself, but also the reasonable impacts such project has on the drainage affected by that project.

It is respectfully submitted that S. 1226 be amended to include the above necessary measures in order that the proposed project be a multiple-purpose project, giving reasonable and necessary attention to the fish and wildlife use which it so warrants.

We are pleased to notice the provisions for public access and acquiring of public lands for fish and wildlife recreation in S. 1226. We do not feel that the bill as written has the safeguards which are reasonable and necessary in order to give fish and wildlife recreation its proper concept and perspective in a multiple-use reservoir.

ROCKWOOD & SYKES,

Kalispell, Mont., March 15, 1960.

HON. JAMES E. MURRAY,
*U.S. Senator from Montana,
Washington, D.C.*

DEAR SENATOR MURRAY: I am very pleased to receive your letter of March 8, concerning your bill 1226 on the Knowles Paradise Dam. As you will notice from my statement presented at the hearing in Missoula as president of district No. 1 of the State wildlife federation, we believe that section 4(a) is not specific enough as it pertains to development of recreational facilities and the preservation and development of fish and wildlife resources and recreation. It is my opinion, based upon past recommendations of the Corps of Engineers that little or no consideration except lipservice has been given to the problems of recreation as it pertains to multiple-purpose dams. We notice that a detailed study as to the power potential of the two projects has been submitted right down to the last kilowatt and dollar. However, as to what is necessary for the development and preservation of fish and wildlife resources and recreation is mere nebulous generalities since there is no plan showing what is intended or in what way fish and wildlife resources would be affected and what specific plan is intended for their preservation. It is for those reasons that we feel that such a study should be made. It is to be noted that a section in the high Mountain Sheep Dam bill requires that a study be made on the effects of the dam construction on fish and the plans for preservation of fish and wildlife recreation. We strongly urge that such a study be made and that such a preservation be included in your bill. We also strenuously object to the corps request to await the results of studies being undertaken by the Outdoor Recreation Resources Review Commission as they are at this time requesting legislation for dam construction. If there is to be any waiting, we request that the entire project await the results of such studies.

We strenuously urge that sufficient moneys be made available for a complete and detailed study of the fish and wildlife recreation in Hungry Horse Dam as well as any problems that have arisen due to reservoir storage and recommendations for fish and wildlife recreational preservation as it pertains to particular problems created by the construction of the dam and storage of the waters of Hungry Horse. Such a study would be very pertinent and furnish information that would be applicable to most of the other reservoir projects in western Montana.

In submitting this letter, I ask that the requests set out in the statement presented at the hearing be seriously considered and, from a conservation standpoint, amendments to your bill to include these recommendations would, in my opinion, make the bill acceptable to the groups I represent.

Respectfully yours,

ROBERT C. SYKES,
President, District No. 1, Montana Wildlife Federation.

U.S. SENATE,
Washington, D.C., March 21, 1960.

Mr. ROBERT C. SYKES,
*Attorney at Law,
Conrad Bank Building,
Kalispell, Mont.*

DEAR Mr. SYKES: I was pleased to have your March 9 letter which made it clear that conservation groups do not intend, from a conservation standpoint, to oppose the Knowles project and further pointing out that most of the local groups have endorsed the project. I shall see to it that this viewpoint is made clear to the members of my committee. I hope that hearings on S. 1226 by the irrigation subcommittee will be scheduled very soon now that the civil rights debate is coming to a close.

I would like your advice on one point relative to your letter in which you mentioned the Knowles project. As you know, the bill S. 1226 would give the Secretary of the Interior authority to choose between Knowles and Paradise sites. Most, if not all, of the testimony at the field hearing which favored construction of a Federal dam indicated preference for the Paradise site. Do I correctly assume that the conservation groups in your area support either site from a conservation standpoint?

Sincerely yours,

JAMES E. MURRAY.

P.S.—The Irrigation and Reclamation Subcommittee, at my request, has just set Tuesday, March 29, to hold further hearings on S. 1226. However, this particular hearing will be to take the testimony of executive agencies only, inasmuch as they were excluded from the field hearing at Missoula in order to give the fullest amount of time possible to local interests.

J. E. M.

ROCKWOOD & SYKES,
Kalispell, Mont., March 30, 1960.

HON. JAMES E. MURRAY,
*U.S. Senator,
Washington, D.C.*

DEAR SENATOR MURRAY: In reply to your letter of March 21, I will state that it is my opinion the conservation groups in my area have no objection to either Knowles or Paradise sites providing the suggested amendments as they pertain to fish and wildlife and which are set forth in my statement presented at the hearing are included in the bill.

Sincerely yours,

BOB SYKES, *President, District No. 1.*

U.S. SENATE,
COMMITTEE ON INTERIOR AND INSULAR AFFAIRS,
April 12, 1960.

Mr. ROBERT C. SYKES,
Kalispell, Mont.

DEAR Mr. SYKES: I want to thank you for your letter of March 30 relating to S. 1226 and the amendments thereto proposed by District No. 1 of the Montana State Wildlife Federation. Your ideas were most helpful to us in preparing an amended version of the bill.

I am enclosing a copy of the committee print of the amended bill which has been prepared for the consideration of the Subcommittee on Irrigation and

Reclamation. In connection with your recommendations, you will note that the following changes have been made:

1. At the top of page 3 a proviso is included to limit the drawdown of the reservoir to a minimum level of 2,620 feet above mean sea level, as proposed in the Corps of Engineers review report. While this might not have been necessary, in the light of the earlier provision concerning operation and maintenance of the project, I thought there was no harm in including it as a specific provision in the bill.

I do not believe it is feasible to establish definitely the fluctuation periods for the project water level because of the necessity of meeting climatic variations by the project's operation. However, as I am sure you recognize, the reservoir would in any event be full from the first of June through at least September of each year, and in many years might not be drawn down to the minimum level in the wintertime.

I believe this maintenance of the water level at the full 2,700 feet throughout the summer would largely take care of the problem of recreation in the project area.

2. I believe the responsibilities given to the Board on page 6 of the committee print would largely provide for the fish and wildlife recreational problems which you refer to. However, to assure the full consideration of the whole question, I have added section 7(b) on pages 17 and 18 of the committee print to provide for the preparation of the kind of study you suggest by the Secretary of Interior and the Board. You will note that this specifically refers to the project drainage area which, of course, encompasses a much larger area than the project area itself.

Concerning your suggestion that funds be allocated from operating revenues for fish and wildlife recreation, I think it better to permit such funds to be provided in the customary manner under the appropriation process rather than allocated directly from the operating revenue of the Bonneville Power Administration. Such a precedent could only add to the bookkeeping problems of the Administration, and I feel certain that the agency charged with responsibility for fish and wildlife can estimate and obtain the funds necessary to handle this problem.

I think that with these improvements the Knowles Dam project will have a tremendously beneficial effect on the fish and wildlife resources of the Flathead Valley. With adequate planning in advance, the adverse impact should be minimized and the developmental aspects of the project used to the fullest for the propagation of these resources. An example of this is the suggestion by John Craighead that prior to the flooding of the reservoir, a shovel and bulldozer operation should be inaugurated to cut behind many of the ridges projecting into reservoir area. This would provide that such areas, instead of being peninsulas, would be islands in the reservoir; this, of course, would be ideal nesting habitat for the wild fowl which are now one of the major resources of the area.

It is this kind of advance planning which makes a project like this creative rather than destructive of our wildlife population.

Sincerely yours,

JAMES E. MURRAY, *Chairman.*

KALISPELL, MONT., *March 24, 1960.*

HON. JAMES MURRAY,
The Senate, Washington, D.C.

DEAR SENATOR MURRAY: The Daily Missoulian and Spokesman Review carry stories stating that you are once again in favor of the Knowles and Paradise projects on the lower Flathead River in western Montana.

This raises doubts in the minds of the people of the upper Flathead Valley that again an attack on Flathead Lake is in the making. As you well know, Senator Murray, the dams on the lower Flathead River below the Montana Power Co.'s dam at Polson will not qualify as Federal multiple-purpose projects, due to the fact that they add nothing in flood control or navigation to the great Columbia River Basin and are only run of the river power projects in a section of the river already having the following projects operative at present in this short stretch of river from Flathead Lake to the Idaho border; namely, Kerr Dam at Folsom, Thompson Falls Dam, Cabinet Gorge Dam, Noxon Rapids Dam, and Albeni Falls Dam across the border in Idaho.

The Knowles and Paradise Dams cannot qualify as needed hydroelectric power projects nor do they add anything to water storage, navigation, or flood control and are therefore entirely superfluous and will not qualify as a Federal multiple-purpose project at all.

Senator Murray, the people of western Montana know this and do not like your stand on this vital issue.

Let us get on with the great Libby project on the Kootenai River in north-western Montana.

Very truly yours,

T. B. MOORE, M.D.,
R. H. GATISS,
*Executive Vice President,
First Federal Savings & Loan.*

STATEMENT OF DENNIS A. DELLWO, CHARLO, MONT.

By way of introduction: I am one of the old homesteaders who settled the former Flathead Reservation when it was thrown open in 1910. I was in public work from the start. Farm Bureau, community affairs, petitions for this or that, then, since the creation of the irrigation districts, required by Congress 30 years ago, I have been the secretary of and one of the Commissioners of the Flathead District. The board of that district has sent me to Washington a number of times to assist in setting up a permanent and workable type of economic structure here. When one has worked that long with and for this area, and lived with it to see it bloom as this area has bloomed, he cannot well remain passive when something so destructive as the proposed dam near Paradise is being promoted. I aim to resist the proposal, and have resisted it because:

First, the proposal of this monstrous thing is virtually being put to a vote through making it a partisan issue. What right do we have, who presumably will not be hurt, to determine that a large group of other people shall be destroyed: In large degree they would be just that—destroyed.

Second, the dam would flood right at 80,000 acres and destroy an outstanding beauty spot, of not only Montana but of the whole West and make of that area, where the tourist has feasted his eyes, which has been the pathway of man into and out of western Montana since man came, a place of mud and slime, with all the filthy creatures and the stench and death which would permeate such an area.

Third, the perimeter of the proposed storage is estimated at 400 miles, up into the solvent cliffs which abound along both sides of the canyon, miles of which, undermined by the creeping seepage, with their own under-drainage dammed off, will topple their mountainous mass into the reservoir. Recreational areas. Where would one find it? How would he get to it?

Fourth, then, the most brutal of all, the dispersal of around 5,000 people, humans, their compact communities, villages, church and school groups, neighborhood groups close to one another as a large family, scattered as so much rubbish: their buried dead desecrated; a type of destruction for which there can be no commensurate compensation.

Fifth, the Moiese, Dixon, and Agency areas of the Flathead project: 13,000 acres now highly developed with superior farms and farmsteads, would be reduced to the picture of death. Those areas would be within the upper levels of the proposed storage, where the water would annually be pulled down.

The Moiese area very early went into quite an exclusive irrigation type of farming. Also project features supplying that area required costly construction of storage and canals, representing right at \$1 million to build. In addition to the irrigation system, there now is a very costly electrical transmission system. It is too bad the promoters of this dastardly thing could not be required to live the rest of their lives along the rim of the reservoir especially during the "pull-down" seasons. I am sure that would bring them to repentance for their evil and selfish work.

Does anyone dispute this portrayal? No, they do not. But they contend that the advantages to the rest of us would be so great that the victims should be glad of the sacrifice.

What advantages could there be? Not even one advantage can be assured to Montana or to those of us who will be left upstream to see and smell the thing. One can sniff beforehand the monsoons moving up the canyon summer evenings,

slowly absorbing the filth-laden vapors as they pass over the 30-odd miles of mud flats. The usual handouts are being offered to us. A reserve of power. The Flathead District has had striking experiences with the lack of stability upon which such reserves are resting.

CONGRESS IS COMPLETELY UNABLE TO MAKE ANY SUCH RESERVE. THE TIME OF CONGRESS IS LARGELY SPENT PASSING LAWS AND IN CHANGING THE LAWS IT HAS ALREADY PASSED

They propose to irrigate 60,000 acres of new land. Where is that land? Who is asking for irrigation? The lands they have in mind are, by soil and topography, clear "out" so far as irrigation is concerned. The owners do not want irrigation.

If this monstrous thing be done, the promoters will be accursed by coming generations. They should die in shame.

We have built a sound economic structure here. We do not want it undermined.

I am sure I recite the prayer of thousands now enjoying what we have here when I say: "Please leave us be".

LAW OFFICES OF RICHARD P. HEINZ,

Polson, Mont., February 19, 1960.

HON. JAMES E. MURRAY,
U.S. Senate, Washington, D.C.

HON. ROBERT S. KERR,
U.S. Senate, Washington, D.C.

MY DEAR SENATOR MURRAY AND SENATOR KERR: Recently I received a printed copy of part 3 of hearings before the Select Committee on National Water Resources, U.S. Senate, 86th Congress, 1st session, pursuant to Senate Resolution 48 covering the hearings conducted at Billings, Mont., on October 9, 1959, and at Missoula, Mont., on October 12, 1959. At pages 541 and 542 there appears a statement of the Polson Chamber of Commerce dated October 12, 1959, and addressed to the Honorable Robert S. Kerr a chairman of the Senate Select Committee on National Water Resources. My name appears at the end of that statement purportedly as a signatory thereof and as a member of the legislative committee of the Polson Chamber of Commerce.

I would like to say, first, that I have no dispute with the Polson Chamber of Commerce and the many fine gentlemen who are members of that organization. Their work in the promotion and improvement of our community, particularly in matters of public relations and business cooperation, has been of great benefit to us who live and work in this beautiful area of Montana.

I am sorry to say, however, that I am not now, nor have I ever been, a member of the Polson Chamber of Commerce. I have not contributed or paid dues to the organization, attended any of its meetings, nor participated in any way in the work of its legislative committee. The views expressed by Mr. A. L. Helmer and such other members of his committee who may have assisted in the preparation of the statement to which I refer are not all shared by me and, I am sure, are not all shared by many who are members of the Polson Chamber of Commerce. For these reasons I would like to record an objection to the use of my name as a sponsor of the answers and recommendations appearing in the statement submitted to the select committee at the Missoula hearings in October 1959.

In addition, I understand that a further communication written by Mr. A. L. Helmer and approved by the directors of the Polson Chamber of Commerce was sent to the members of the Senate Committees on Interior and Insular affairs protesting the manner in which the hearing on S. 1226 was held in Missoula on December 15, 1959. I did not attend the hearing and have no knowledge of the manner in which it was conducted or the validity of any of Mr. Helmer's objections. If my name appears as a signatory of that letter or as a member of Mr. Helmer's committee I must again strenuously object for the reasons I have stated.

A copy of this letter is being sent to the Polson Chamber of Commerce and to Mr. A. L. Helmer to the end that my name not be used again without my knowledge or permission.

Sincerely yours,

RICHARD P. HEINZ.

NATIONAL AUDUBON SOCIETY,
New York, March 24, 1960.

HON. CLINTON P. ANDERSON,
Chairman, Senate Subcommittee on Irrigation and Reclamation,
Senate Office Building,
Washington, D.C.

DEAR SENATOR ANDERSON: Your subcommittee scheduled hearings March 3 on S. 1226, the bill to authorize the Knowles Dam on the Flathead River in Montana, a hearing which was postponed because of the civil rights debate. Enclosed is a statement prepared for presentation in behalf of the National Audubon Society. Since the new date for the hearing is as yet uncertain and it may not be possible for me to be present, I respectfully request that my statement be held in the file for inclusion in the record of the hearing.

In this statement we call attention to the damage that would accrue to the National Bison Range if Knowles Dam, or the alternate Paradise Dam, were to be constructed. We recommend provision in the legislation for replacement of the flooded and damaged lands.

Thank you for your attention to this request.

Sincerely,

CARL W. BUCHHEISTER, *President.*

STATEMENT OF NATIONAL AUDUBON SOCIETY

The National Audubon Society recognizes the need for additional flood-control storage and hydroelectric development in the Columbia Basin. We believe dams to accomplish these desirable ends can, and should be planned in such a way and at locations to avoid unnecessary or undue damage to wildlife resources. We wish respectfully to call to the committee's attention the fact that the proposed Knowles Dam on the Flathead River would do serious damage to the National Bison Range and to the herd of buffalo this great reservation was established to preserve. It would cause losses, too, in deer and other valuable wildlife.

The damage to the bison and the deer would result from the flooding of winter-browsing area along the Jocko River, Misson Creek, and other tributary streams. Upon inquiry we learned from the Bureau of Sport Fisheries and Wildlife that this flooding would affect some 2,100 acres of the 19,000-acre reservation. The adverse effect upon the game herds would be far greater, however, than this 11-percent acreage proportion would indicate. This is because the lands to be flooded are critical winter range in years of severe weather. The animals can feed in the lowlands, and only in the lowlands, when the uplands are locked in winter snow.

In addition another 3,000 acres of the bison range would be rendered partially useless by proposed railroad relocation which would cut off access from the main area.

The craggy buffalo is one of our great national symbols. It fed and sustained the Lewis and Clark Expedition and countless later explorers and pioneers who opened the great West to the American dream.

Its herds, which once roamed the Midwest and Great Plains in uncountable millions, finally fell before the market hunter, the cow, and the plow. But before this magnificent creature disappeared completely from our continent, and almost at the last gasp before extinction, early conservation leaders acted to save it. President Theodore Roosevelt asked Congress to establish the National Bison Range, and Congress so acted in 1908. The Congress appropriated \$40,000 to buy the land from the Flathead Indians and pay the cost of fencing it. Then the American Bison Society raised \$10,000 by popular subscription to buy the animals to stock the range. The only sources of stock at that time were a few small herds owned by private individuals.

Today the National Bison Range supports from 300 to 500 buffalo, the size of the herd varying with range conditions from year to year. These are the lineal descendants of the great and storied buffalo herds of the wild west before the days of the cowboys, and the legends of which have thrilled the small boys of every succeeding generation, whether they have been readers of the exploits of Buffalo Bill or 20th century fans of western movies and TV dramas.

Here on the National Bison Range in Montana is one of the few places where this magnificent specimen of the native American fauna can still be seen in its natural setting. Here it grazes in numbers sufficient to stir the imaginations

of latter-day descendants of Merriwether Lewis, William Clark, and William Cody. Many millions of Americans would be unhappy if serious damage befell their National Bison Range.

The Audubon Society respectfully requests that in any legislation authorizing construction of the Knowles Dam, or of Paradise Dam for which Knowles has been advanced as an alternative, provision be made for acquisition of suitable lands to take the place of the areas to be flooded or reduced in accessibility in the National Bison Range.

We urge the adoption of such other measures as may be recommended by the Fish and Wildlife Service to mitigate the probable losses of goose-nesting areas and other wildlife habitat. Should Paradise Dam be authorized instead of Knowles, our recommendations would be the same.

We thank you for this opportunity to present the views of the society.

MISSOULA, MONT., December 15, 1959.

Ro S. 1226.

HON. JAMES E. MURRAY,
Chairman, and Members of the Interior and Insular Affairs Committee,
U.S. Senate.

GENTLEMEN: Our district council is a proponent of Senate bill 1226 but recommends construction of Paradise Dam rather than the Knowles project.

Our district council is composed of 18 local unions with a combined membership of approximately 3,000 and representing an estimated 4,000 to 4,500 workers in the logging, lumbering and related industries of western Montana, as follows:

Local number and location :	Local number and location—Continued
1909, Polson.	2800, Missoula.
1965, Somers.	2812, Missoula.
2116, Seeley Lake.	2925, Livingston.
2405, Kalispell.	2933, Hamilton.
2409, Helena.	3021, Bozeman.
2581, Libby.	3029, Columbia Falls.
2685, Missoula.	3038, Bonner.
2719, Thompson Falls.	3072, Hot Springs.
2797, Columbia Falls.	

The vast majority of our members, approximately nine-tenths, live and work in the western Montana counties immediately surrounding, and directly affected by, the proposed Paradise Dam project. These counties are: Missoula, Ravalli, Lake, Sanders, Flathead, and Lincoln.

Five of our local unions are located in Missoula County: one in Ravalli County; one in Lake County and two in Sanders County. The combined membership of these nine locals totals nearly 1,500, approximately half the membership of our council.

At a 1957 convention of our council, composed of more than 40 delegates elected by the local unions, a resolution favoring immediate Federal construction of Paradise Dam was adopted with only 1 dissenting vote. Of the delegates present, 90 percent were from the counties mentioned above; 75 percent were from the counties immediately surrounding the proposed Paradise Dam reservoir and excluding Flathead and Lincoln Counties.

Nearly every semiannual convention since that time has taken some action, financially or otherwise, to support immediate construction of Paradise Dam.

We notice also that other labor organizations, where the influence of our local unions is felt, are on record as proponents of Paradise Dam. These organizations include various central labor bodies throughout the areas where our local unions exist.

Therefore, it can safely be concluded that the citizens of the State of Montana who are members of our organization and who reside in the area of western Montana directly affected by the proposed Paradise Dam are preponderantly in favor of its immediate construction.

The reason most commonly advanced in resolutions adopted by our local unions and by our district council is the desire for a stable industrial expansion of western Montana to offset the seasonal and unstable employment opportunities of the logging and lumbering industry upon which much of the economy of western Montana is now based.

We have noted that the only major nonlumber additions to the industrial economy of the State of Montana in the past 20 years or more were made possible by the hydroelectric power and water storage provided by Hungry Horse Dam in Flathead County.

We have noted further that through the entire history of construction of hydroelectric plants by so-called private power interests in Montana, not one important unit of industrial expansion has been provided within the State except to the mining and smelting operations of a firm directly related to the major power producer.

This has led to a stifling of free enterprise in developing the natural resources for which the State of Montana is noted throughout the Nation.

It has led also to a lack of employment security; a lack of diversity in job opportunities and advancement and a lack of any hope for a future within the State of Montana for the sons and daughters of our working people who have ambitions to rise above the limited opportunities afforded within our State.

For example, our working people know of the wide variety of mineral deposits within the State that have gone undeveloped and unused for lack of sufficient firm power at a low enough cost to attract processors and manufacturers to the State.

Vast phosphate and other mineral deposits have gone unused and of no value to the economy of the State with no effort on the part of private power companies to produce enough power to develop them.

With the completion of Hungry Horse Dam and its resultant allocation of power to be used within the State, a major chemical manufacturer was attracted to the State and is now providing employment security to a new community within the State as well as to citizens of nearby communities; the owners of previously undeveloped mineral lands and the workers engaged in the mining and transportation of the minerals.

Our people know also that the aluminum processing plant now located near Hungry Horse Dam and providing year around employment for hundreds of persons in an otherwise seasonally employed and unemployed area would not have been located there through any effort of any private power company.

Our people know that present privately owned power-producing facilities on the Clarks Fork River and privately owned power-producing facilities now under construction on the Clarks Fork River are for the purpose of producing power for industrial areas in other States and that there is no means by which that power or the usage of it, can be confined to the State of Montana by any action of the people of Montana or any governmental agency.

Those are the reasons of the rank and file workers in the logging-lumbering industry for their support of Federal construction of Paradise Dam and other dams as well, in order that Montana water, stored in Montana, will be allocated by legislative process to the improvement of Montana agriculture and in order that power generated by Montana water will be allocated by legislative action to industrial expansion within the State of Montana before either water or power are released for downstream areas in other States.

These are the sentiments of the workers in the logging-lumbering industry based upon their experience with seasonal unemployment in their industry and with no other industry to turn to for employment.

These are the sentiments of workers based on their experience with a declining economy in the Montana lumber industry and based upon a rapidly declining source of raw materials for diversified job opportunity within the Montana lumber industry.

These are the sentiments of workers who have toiled a lifetime within the unstable and seasonal economy of the Montana lumber industry; who have raised their children, educated them in Montana schools and colleges, then bid them goodby as they sought opportunities in other States not available to them in the restricted industrial economy of Montana.

We view the Knowles site as an acceptable but not a desirable substitute for Paradise Dam from the standpoint of long-range multipurpose water storage, power generation, and economic development of Montana.

Respectfully submitted.

MONTANA DISTRICT COUNCIL, LUMBER &
SAWMILL WORKERS' UNIONS,
By ROBERT C. WELLES,

Executive Secretary.

LIBBY, MONT., *December 15, 1959.*

To Hon. JAMES E. MURRAY,
*Chairman, and Members of the Interior and Insular Affairs Committee of the
 U.S. Senate.*

GENTLEMEN: Local union No. 2581 has nearly 1,000 members and represents most of the working people of Lincoln County, Mont. We are, of course, ardent supporters of Libby Dam in our home locality. However, we do not agree with certain chambers of commerce, etc., who claim to oppose Senate bill 1226 on grounds that they favor construction of Libby Dam first. We realize that the construction of Libby Dam and the construction of Paradise Dam are in no way related and neither are the problems confronting the proponents of both dams such as we are.

Local 2581 wishes to be recorded as a proponent of Senate bill 1226 and at the same time to record our preference for construction at the Paradise site rather than the Knowles site.

In recording our position, we are in accord with the entire labor movement of the State of Montana which favors the construction of both Libby and Paradise Dams at the earliest possible dates for each of the two projects. We believe both to be necessary to the full development of Montana water resources for the benefit of Montana citizens as well as the citizens of the United States residing in downstream States. We do not favor postponing the construction of Paradise Dam on any pretext whatsoever.

Respectfully submitted.

LUMBER & SAWMILL WORKERS LOCAL 2581,
 By WILLIAM SHAWL,
*United Brotherhood of Carpenters &
 Joiners of America.
 Business Representative.*

PLEASANTVILLE, N.J., *March 28, 1960.*

Senator CLINTON ANDERSON,
*Chairman, Subcommittee on Irrigation and Reclamation,
 Senate Interior and Insular Affairs Committee,
 Washington, D.C.*

DEAR SENATOR ANDERSON: I am very disturbed to hear that the planned Knowles Dam in Montana will flood a vital part of the National Bison Range. When your committee takes this up I urge you to avoid damage to this valuable area. I think the average citizen would be concerned with such a threat to a national animal if they knew of it. We have too few good buffalo herds left.

Very truly yours,

FRANKLIN S. HIRST.

HOT SPRINGS, MONT.,
December 11, 1959.

Mr. PAUL HARLOW,
Thompson Falls, Mont.

DEAR MR. HARLOW: I have read the pros and cons on the hearings held on the Paradise Dam, and while there were some sound arguments on both sides, it still seems to me that there is only one dam to work for, and that is the Paradise Dam. Looking at it from an engineering standpoint it would be very impractical to put a lot of money into a dam at Knowles, when the same money and the same dam located at Paradise dam site would harness both rivers instead of just the Clarks Fork or Missoula River.

We believe that there are certain interests in Montana that would like to kill this project so they could have the dam site when they may want it, but we would like to see the resources of western Montana developed during our time and get industry in Montana while there is still time to do so.

Let us take a look at the prospects for our sons and daughters of Montana, raised in Montana, educated in Montana, at the cost of the taxpayers of Montana, and as soon as they get through high school or the University of Montana, they have to leave Montana to look for work, as there is no work in Montana for them. In other words, we the taxpayers of Montana support our schools to educate our children for the benefit of other States. Why do we do it?

When they hold the next hearing at Missoula in December, I think these thoughts should be considered, and also make it clear that the power generated at the Paradise Dam is to be sold to any or all industries located in Montana, first and after our power has fully satisfied all Montana wants then it could be transmitted to other industry out of the State of Montana.

Thanking you for the interest and your devoted time to this project, I am,
Yours very truly,

J. F. BEEBE.

PETITION

FEBRUARY 1960.

To Senator James E. Murray and Committee Members of the Committee on Interior and Insular Affairs, Washington, D.C.:

We, the undersigned, support S. 1226, a bill which will provide for the construction of the Paradise Dam, a project vitally necessary to the progress of Montana and the Nation.

(The above petition was subscribed to by 716 individuals. Their names are on file with the committee.)

×



UNIVERSITY OF MINNESOTA



3 1951 D02 087 149 U