

MEMORANDUM

TO: Members, Clark Fork Basin Water Management Task Force (Task Force)
FROM: Gerald Mueller
SUBJECT: Summary of the August 1, 2011 Task Force Meeting
DATE: August 2, 2011

Participants

The following people attended the Task Force meeting:

Task Force Members:

Gail Patton	Sanders County
Harvey Hackett	Bitterroot Irrigation District
Marc Spratt	Flathead Conservation District
Jim Dinsmore	Upper Clark Fork
Ted Williams	Flathead Lakers
Caryn Miske	Flathead Basin Commission
Brianna Randall	Clark Fork Coalition

Agency

Ann Schwend	Montana Department of Natural Resources and Conservation (DNRC)
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Public

Amy Fisher	Missoula Organization of Realtors
Mark Reller	Bonneville Power Administration (BPA)
Molly Smith	UM Department of Geography
John Sinrud	Northwest Montana Association of Realtors

Staff

Gerald Mueller	Consensus Associates
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Meeting Agenda

- Introduction
- June 6, 2011 Steering Committee Meeting Summary
- Updates
 - Task Force Funding and Administration
 - CSKT Compact negotiations
 - Aquatic Invasive Species
 - Other Organizations
- Possible Combination of the Task Force and the Upper Clark Fork River Basin Steering Committee
- Planning for Fall Water Supply Meeting
- Workable Storage/Mitigation System Phase 1 Proposal
- Flood Plan Administration
- Public Comment
- Next Meeting

June 6, 2011 Steering Committee Meeting Summary

No changes were made to the June 6 meeting summary.

Updates

Task Force Funding and Administration - Gerald Mueller reported that he recently signed an extension of his current contract with DNRC to provide facilitation services to the Task Force through the end of this calendar year, i.e., December 31, 2011. Funds to pay for this extension are from FY2011 funds. The Renewable Resource Grant and Loan Program (RRGLP) grant to the Task Force of \$63,000 for the FY2012-13 biennium will become available in the order of the grants approved in HB6 as DNRC receives Coal Tax funds

Ann Schwend stated that she has polled all conservation districts in the Clark Fork River basin about their interest in administering the FY2012-2013 RRGLP grant. Three conservation districts, Deer Lodge Valley, Flathead, and Granite, expressed interest in administering the grant.

Having a conservation district act as the grant administrator instead of DNRC may have two advantages. First, it would strengthen the Task Force's connection with conservation districts. It may also put the Task Force in a better position for future grant and funding opportunities. The DNRC Conservation and Resource Development (CARD) Division budget includes line items to fund the Yellowstone Conservation District Council (YRCDC) and the Missouri River Conservation District Council (MRCDC).

Question - If the Task Force grant is administered through a conservation district, who would work for whom?

Answer - DNRC would in effect be hiring a district to administer the RRGLP grant. The district would not oversee the Task Force activities. Ms. Schwend would coordinate the grant funding with the district.

Question - Are the YRCDC and MRCDC charged by statute with making recommends to DNRC concerning the State Water Plan?

Answer - No, they are not specifically referenced in the State Water Plan statute, 85-1-203 MCA, as is the Task Force. The membership of the two conservation district councils consists of representatives from each conservation district in their respective basin. Unlike the Task Force, they are not inclusive of a broad range of water interests in their respective basins. In terms of implementing the 85-1-203 recommendations, DNRC is considering how to work with the YRCDC and the MRCDC to broaden the participation in them to help develop State Water Plan sections for the Yellowstone and Missouri River basins.

Question - What is the deadline for the State Water Plan updates?

Answer - The DNRC must submit to sections of the State Water Plan for the Missouri, Yellowstone, and Clark Fork River basins to the 2015 legislature. Unfortunately, the department currently has only \$180,000 provided in HB6 to fund this work.

Question - Are the YCDC and MRCDC funds administered through single conservation districts?

Answer - Yes.

Question - Are conservation districts state entities?

Answer - They are quasi state and local government entities with locally elected boards of supervisors. They often work and share offices with the Natural Resources Conservation Service, a federal agency. Among the district responsibilities is administering the Montana's Natural Streambed and Land Preservation Act, also known as the 310 law. Conservation districts may also hold water rights in the form of water reservations.

Comment - Conservation districts have more responsibility and authority regarding water management than county commissions.

Comment - The Sanders County Commission consults with the conservation districts in permitting subdivisions.

Question - Are conservation districts involved with ground water?

Answer - Yes. Districts in eastern Montana have been involved with saline seep and, more recently, with hydraulic fracturing to develop natural gas.

Question - Will selecting one district to administer the Task Force grant create conflict?

Answer - I contacted all districts in the basin via telephone and email to solicit their interest in administering the grant. The three districts previously mentioned are interested. All three have experience in administering grants and would welcome the money from a portion of the grant to do so.

Question - Has the Task Force reached out to conservation districts to invite their participation?

Answer - Yes, over a year ago, the Task Force actively solicited members via advertisements in basin newspapers and other avenues.

Comment - We might also seek increased awareness and participation through Jeff Tiberi, the Executive Director of the Montana Association of Conservation Districts. Mr. Tiberi publishes The Montana Conservationist.

Comment - Task Force members should visit with conservation districts to explain why they might benefit from participating with us.

Response by Gerald Mueller - I will prepare information that you can bring with you in these meetings in PowerPoint and hard copy formats.

Comment - Water is our most important resource, particularly for economic development.

Comment - Conservation district supervisors tend to focus on local issues. We will need to explain how the Task Force affects local issues.

Question - Are Task Force members talking with the groups they represent?

Answer by Harvey Hackett - I report to the Bitterroot Irrigation District.

Answer by Marc Spratt - I visit with the Flathead Conservation and occasionally with the Lake Conservation District. Increasing conservation district involvement will require a protracted effort. One issue that increased the Flathead Conservation District interest was the listing of water rights for sale.

Comment - It makes sense to use a conservation district in the upper basin to administer the grant if the Upper Clark Fork River Basin Steering and the Task Force are to merge.

Task Force Action - Those members present at this meeting agreed to recommend to DNRC that the Granite Conservation District administer the Task Force FY2012-2013 RRGLP grant.

CSKT Compact Negotiations - Gerald Mueller reviewed the PowerPoint presentation made by the state at the most recent compact negotiation session on June 29, 2011. This presentation is available on the Reserved Water Rights Compact Commission web site at the following web address:

<http://www.dnrc.mt.gov/rwrcc/Compacts/CSKT/2011/June29/DraftStockwaterAllowanceSection.pdf>

The presentation reviewed the proposal for unitary water management on the CSKT reservation as well as proposals for domestic and stock allowances. If adopted in the compact, these allowances would function on the reservation in place of the exempt well provisions of state water law. Mr. Mueller stated that no new information is available about two subjects under consideration in the compact negotiation, the 11kaf of Hungry Horse releases and natural flows that the state is seeking to reserve to provide for new water development and the CSKT off-reservation water rights.

Question - Is there a target date for completing the compact?

Answer - The parties have previously stated their intent to complete the compact by 2014.

Comment - The parties intend to have a proposed compact in 2013.

Comment - My relatives settled and paid for land and water rights on the reservation when the land was opened to non-tribal ownership. Under discussion is assigning these water rights the same priority date as the CSKT reserved rights.

Question - Sanders County drilled a new well for the county shop. Have the compact discussions addressed water rights for public facilities including fire and dust abatement?

Answer - I am not aware of discussions of water rights for public facilities. The PowerPoint notes that draft ordinance would provide for appropriations rights for temporary emergency appropriations.

Question - The proposal for stock water allowances applies only for land parcels 40 acres and larger. What happens for smaller sized parcels?

Answer - I don't know, but I will pose this and the question about public facilities to Bill Schultz, the Compact Commission Administrator.

Comment - The draft proposal uses the term "engineer". State water law once included a state engineer but the law was changed eliminating this position.

Question - Under the Ft. Peck compact, enforcement falls on the Tribe. In the CSKT compact, how would water right related enforcement occur on the reservation and how would the enforcement be funded?

Answer - I will pass this question to Mr. Schultz.

Comment - I have heard a rumor that the compact will not quantify the CSKT reserved water right. Without quantification, I am unsure how adverse affect will be determined.

Response - No proposal for this section of the compact has yet been released. The summary of the February 7 Task Force meeting included the following question and answer:

Question - Will the compact specify or cap the flow and volume of the CSKT reserved water right?

Answer by Jay Weiner - Maybe. This is a complicated issue. If the reserved right is quantified numerically (either by volume or flow rate), it will likely be larger than the available supply. The Compact Commission will seek sideboards on the use of the reserved right to protect existing water users.

Mr. Weiner reviewed the draft summary with this question and answer before it was sent out.

Question - How different is the compact proposal than existing state law?

Answer - The proposal for domestic and stock water allowances is significantly different than the exempt well provisions of state law in terms of volume caps, the number of users of a single

well, the amount of land that may be irrigated, and monitoring requirements. See 85-2-306(3)(a) MCA and 36-12-101(13)ARM for the exempt well provisions of statutes and administrative rules and the PowerPoint for the proposed compact provisions addressing domestic and stock water allowances.

Aquatic Invasive Species - Caryn Miske reported on recent activities and developments related to aquatic invasive species (AIS). One inspection station is operating at Ronan on Highway 93 South. Over the July 4th weekend, 300 boats were inspected. United States Forest Service (USFS) funding is in place for a second inspection station to be located at the Clearwater Junction. An AIS program goal is to have an inspection station on Highway 2. In addition to the inspection stations, the Montana Department of Fish, Wildlife and Parks (DFWP) has roving inspectors that check boats at launching sites. DFWP no longer has an AIS coordinator located in Region 1; the position has moved to Helena. Erik Hanson, a private contractor working with the Flathead Basin Commission and other organizations, continues to assist DFWP with identifying and inspecting boats moving into and within the basin. The Flathead Lakers, the Clark Fork Coalition, and Missoula County recently obtained funding to conduct surveys of Eurasian Water Milfoil (EWM) in the basin during this summer and next. This fall, rapid response planning at the state and local level will be an AIS program emphasis.

Question - Will the EWM survey be continuing?

Answer - If funding is available, it will.

Question - Inspection stations at the state boarder would be a cheaper option than trying to surround individual lakes. What are the obstacles to locating stations at the boarders?

Answer - I agree with your premise. We should have inspection stations at Lookout Pass, Lima, Culbertson, and Wibaux. However, there seems to be push back from DFWP about the fixed inspection stations. DFWP seems to prefer keeping people on their toes with roving stations. I prefer to focus on boats coming into the state from high risk areas such as Lake Meade and lakes in the Midwest already infected with mussels.

Question - What is the role of DFWP and the Montana Department of Agriculture (DA)?

Answer - DFWP is the lead on mussels and DA on EWM.

Comment - A recent discussion at the Flathead Conservation District indicated that some DFWP inspectors at boat ramps are checking for license stickers but not AIS. When challenged, the inspectors apparently responded that AIS was not part of their job.

Response - We have been discussing with DFWP the need to cross train inspectors to include AIS.

Other Organizations

- Clark Fork Coalition

Brianna Randall recently returned from a trip to China sponsored by the Mansfield Center with representatives of other non-governmental organizations. Ms. Randall was part of a team that focused on water quality, nutrient pollution and water quantity issues. Decisions are made in China on a top down basis. However, the central environmental authority has a staff of only a few hundred staff. China is considering a very large project to move water from the south to the more heavily populated north. The scale of this project is like moving the Mississippi River flow from New Orleans to the northeastern US seaboard. There is no unused, open land in China. The hill and mountain sides are terraced for agriculture production and corn is grown in the

median of highways and cabbage on sidewalks. This September, twenty Chinese water managers will be visiting Missoula.

Question - Are there non-government organizations in China?

Answer - Yes, although recently their number has been capped and their activities are controlled.

Question - Is there a water right system for allocating water?

Answer - Yes.

- Bitterroot Irrigation District

Harvey Hackett reported that the District's pipeline had to be shut down two days last week to replace a broken expansion joint. Another expansion joint is cracked. The pipe in sections 1 and 2 of the line is old and riveted rather than welded pipe, so we expect on-going problems. Replacing this pipe would cost on the order of \$50-60 per acre, so the Irrigation District cannot afford to replace this pipe without funding assistance.

Question - How big is the pipe in these sections?

Answer - 66". In the sections replaced last year have 72" pipe. The lower diameter has an advantage of keeping the water velocity high to move sediment through the pipe.

Question - Has the District conducted a study of the impact of irrigation on late season stream flow?

Answer - We are aware of the benefit of irrigation to stream flow, but have not conducted a formal study of it. In the past, we used to provide one miner's inch of water per acre for flood irrigation. Early season flood irrigation replenished late summer low stream flow. However with the conversion from flood to sprinkler irrigation, deliveries have been reduced to ½" per acre. The reduced irrigation amount reduces stream recharge.

Question - Does flood irrigation still occur?

Answer - My estimate is that 80% of the irrigation now occurs via sprinklers. We have lost our distribution canals used for flood irrigation.

Comment - This trend of lost flood irrigation infrastructure is significant for the Task Force's idea of storing peak flow in the ground.

Possible Combination of the Task Force and the Upper Clark Fork River Basin Steering Committee

Gerald Mueller reviewed his July 19 memorandum discussing a possible combining of the Task Force and the Upper Clark Fork River Basin Steering Committee (Steering Committee) which was previously circulated to the Task Force. The memo is included below in Appendix 1.

Question - Who would constitute the committee for writing the solicitation and selecting the contractor to provide facilitation services to the Task Force beginning in January 2012?

Answer by Ann Schwend - Membership of this committee has not been decided. I want to involve Task Force members. In the past, DNRC has used a sole-source justification to contract with Mr. Mueller. CARD has decided that a competitive solicitation must be used for the pending RRGLP grant.

Comment - I am concerned about the push for projects as opposed to policy work. Many groups address water projects. Only the Task Force and the Steering Committee address policy issues.

Response - Projects are receiving increased emphasis within the DNRC. The Watershed Planning Assistance Program has decided not to fund watershed coordination, opting instead to fund projects. The CARD is not convinced that it can use RRGLP grant funds to pay for facilitation. CARD recommended removing facilitation funding from the Task Force grant. The legislature did not accept this recommendation, and restored to the grant the amount requested for facilitation services. A scope of work will have to be written for the grant, and project management could be included in it.

Comment - If the Steering Committee is merged with the Task Force, developing flow targets and a drought plan could be a specific Task Force project.

Comment - We should keep in mind the contribution of the various sub-basins to the flow of the Clark Fork. The upper Clark Fork adds about 14% of the total flow, while the Flathead provides about 56%.

Comment - The potential merger of the Steering Committee with the Task Force presents difficulties and opportunities. The difficulties include the statutory requirements, long-term funding, and the fact that the Task Force cannot receive funds directly. A long-term funding fix would be to include the Task Force as a line item in the DNRC budget.

Comment - At least four different groups have Clark Fork in their names, creating confusion about their members and roles: the Steering Committee, the Task Force, the Clark Fork Coalition, and the Upper Clark Fork River Basin Remediation and Restoration Advisory Council. Combining the Task Force and the Steering Committee may resolve some of the confusion.

Question - Why do statutory provisions constitute a difficulty?

Answer - The Steering Committee and Task Force different membership provisions. By statute members of the Steering Committee may be appointed by each of the upper basin's six county commissions and six conservation districts and the DNRC Director. The Task Force members are appointed by an entity designated by the Governor.

Question - What are the options for a legal entity capable of receiving funds?

Answer - The Task Force is now a statutory entity. It could become a line item of the DNRC budget. It might also become a private, non-profit corporation, a 501(c)(3) under the Internal Revenue Service tax code.

Comment - We should consider some sort of merger with the Steering Committee first.

Response - The Steering Committee has scheduled an August 18 meeting to consider whether it wishes to consider and options for doing so including becoming a committee of the Task Force.

Task Force Action - Those members of the Task Force present at this meeting agreed to form a committee to work with Ann Schwend to consider merger with the Steering Committee, long-term funding, and becoming a legal entity capable of accepting funds directly. Brianna Randall, Gail Patton, Marc Spratt, and Ted Williams agreed to serve on the committee.

Fall Water Supply Meeting

Gerald Mueller reviewed the planning for the fall meeting to date. Two topics have been discussed for the meeting, a review of this year's water supply and management actions taken in

response to it and a requested presentation by the Montana Bureau of Mines and Geology about the impact of this year's high flows on ground water. The meeting is to be scheduled for late October or early November. Mr. Mueller asked for Task Force member comments about meeting topics and schedule.

Comment - I suggest the meeting be scheduled for early November. This would allow an early notification to basin water interests followed up by additional notification closer to the meeting date.

Comment - We should ask the US Army Corps of Engineers to report on its flood related activities.

Comment - Natural Resources Conservation Service data are used to manage reservoirs. We should ask them to report.

Comment - We should ask Ray Nickless with the National Oceanic and Atmospheric Administration National Weather Service (NWS) to review his agencies flood predictions and actual outcomes.

Response - I will do so. I will also invite presentations by the other spring meeting participants.

Comment - We should again seek assistance from Jess Aber in setting up this meeting.

Response - I will do so; Mr. Aber's involvement was critical to the success of our spring water supply meeting.

Question - A recent newsletter from the National Association of Conservation Districts mentions the NRCS Water Management Center possibly helping conservation districts to identify potential reservoir storage sites in Montana. Does anyone have information about?

Answer - This program apparently allows the NRCS to partner with conservation districts regarding water management. We should contact Jeff Tiberi with the Montana Association of Conservation districts about it.

Workable Storage/Mitigation System Phase 1 Proposal

Gerald Mueller reviewed an outline of a proposal for phase 1 of this project, which he previously circulated to the committee of Mark Reller, Marc Spratt, and John Wheaton for comment. The outline which includes comments from Mr. Reller is included below in Appendix 2.

Mr. Spratt summarized the purpose of this project as identifying when, how much, how fast, and in how many places peak flows might be stored in the basin. He also noted that implementation of the final phase of this project would likely involve construction and management jobs over a 10 - 20 year period. He asked for feedback on the following question: Should we include as a benefit of the proposed project job creation? Highlights of the ensuing discussion follow.

Comment - How many jobs and their location is nebulous now; the project would, however, afford real work and long-term benefits.

Comment - I am nervous about using a specific number of jobs; perhaps we could indicate a possible range in the number.

Comment - At least in Phase 1 of this project, we should maintain the focus on water management, and specifically on flood control and water supply.

Comment - We will need to justify the value of this project to a broad range of interests in the Clark Fork basin and perhaps other areas as well.

Comment - Dr. Bonnie Ellis with the Flathead Lake Biological Station has conducted a ground water study identifying good and bad quality ground water. We should seek to learn about this study.

Response - I will contact her and ask for a presentation about the study at a future Task Force meeting.

Comment - I will ask DNRC hydrologists to look over the outline of this proposal and provide comments about it.

Comment - I doubt that we will have much luck changing flood management in response to one rain or temperature event.

Comment - The 2007 Chippy Creek fire has resulted in earlier runoff at least at lower elevations. Also, areas heavily grazed compact the ground so much that it cannot hold moisture. These are indication that forest and grazing management are critical to water management.

Comment - I have another example of land use affecting water management. A former 40 acre pasture has been developed with a high density of houses. This development has a single point of ground water injection to address runoff which is not adequate and basements are being flooded.

Flood Plain Administration

Jim Dinsmore discussed this topic. Granite Conservation District is experiencing several incidences of construction in flood plains in which no one apparently has taken responsibility. The county commission has approved subdivisions and the sanitarian has issued septic system permits allowing development in flood plains. Conservation districts face 310 permit decisions in situations after flooding occurs.

Question - Has the county done a flood plan study?

Answer - Yes, the county has flood plain maps.

Comment - Federal Emergency Management Agency (FEMA) mapping cost on the order of \$10,000 per mile. Houses built in designated flood plains are required to purchase flood insurance.

Comment - Regulating construction via the 310 law is a conservation district responsibility. Rather than merely addressing activity within the high water marks, the district should address the riparian zone. The Ruby Conservation District has conducted a channel migration study and is attempting to educate developers and interested parties about it.

Question - How was the channel migration study funded?

Answer - It was funded by a 223 grant.

Comment - To address development in flood plains, you should provide education for and work with realtors.

Response - The Montana Water Course has online realtor training.

Comment - The US Army Corps of Engineers recently denied a permit to rip-rap a portion of the Bitterroot River to provide flood control.

Comment - Flood control can be self-correcting. You can be subject to law suits if your actions damage downstream private property or public infrastructure.

Comment by Gerald Mueller - I will invite Missoula County to come to a future Task Force meeting and explain its approach to flood plain management.

Public Comment

There was no additional public comment.

Next Meeting

The next meeting is scheduled for 9:30 a.m. on Monday, September 12, 2011 at the Mountain Water Company Office in Missoula.

Appendix 1
Clark Fork River Basin Task Force
C/O Gerald Mueller
440 Evans
Missoula, MT 59801
(406)543-0026

MEMORANDUM

Date: July 19, 2011
To: Task Force Members
From: Gerald Mueller
RE: Task Force and Upper Clark Fork River Basin Steering Committee

The purpose of this memo is to discuss combining the Upper Clark Fork River Basin Steering Committee with the Task Force. The Steering Committee does not have funding for the coming biennium, and the Department of Natural Resources and Conservation (DNRC) Water Resources Division has suggested that it consider becoming a committee of the Task Force.

Background

The Steering Committee was the first basin scale water management planning group in Montana. It was created pursuant to 85-2-338 MCA in 1991 and charged with preparing a water management plan for the upper Clark Fork River basin, that portion of the Clark Fork basin above the Milltown Dam. In 1994, it adopted and sent to Montana's governor and legislature the *Upper Clark Fork River Basin Water Management Plan (UCFB Plan)*. The DNRC included the *UCFB Plan* into the State Water Plan in 1995. Among the *UCFB Plan's* recommendations subsequently adopted by the legislature were a permanent closure of the upper basin to most new surface water rights and an instream water leasing pilot program. A summary of Steering Committee accomplishments is available at:

http://dnrc.mt.gov/wrd/water_mgmt/clarkfork_steeringcomm/accomplishments.pdf.

Steering Committee members provided impetus for the legislative proposal leading to the creation of the Task Force, and the initial draft of what became 85-2-350 MCA was modeled on the Steering Committee statute.

A copy of 85-2-338 MCA spelling out the Steering Committee's continuing responsibilities is appended to this memo.

Since 1991, the Steering Committee was funded from private and state grant programs and DNRC operational funds. The Steering Committee did not request funding from the 2011 legislature in part because it believed that operational funds would be available in the Water Management Bureau operational budget. Because of budget reductions, this has not proven to be the case. The Steering Committee applied for a Watershed Planning and Assistance grant for fiscal year 2012, but it was not approved.

Members of the Steering Committee are appointed by the basin's six counties and six conservation districts and the director of the DNRC. A list of current members is also appended to this memo. Jim Dinsmore and Holly Franz are members of both groups. The Clark Fork Coalition is represented on both groups, but by different members.

Current Steering Committee Activities

The Steering Committee has embarked on a revision to the 1994 *UCFB Plan*. A key element of the revision would be developing a flow plan to compliment the upper basin remediation and restoration plans. The flow plan would identify instream flow targets at appropriate basin locations as well as possible sources of water to meet them and develop a drought plan. In addition to the plan revision, the Steering Committee has an active interest in the state's actions regarding the Milltown Dam water rights.

Possible Task Force and Steering Committee Combination

DNRC has asked the Steering Committee to consider becoming a committee of the Task Force focused on the upper Clark Fork. Presumably, Steering Committee members would become Task Force members and the committee would continue to focus its activities on the upper basin. The Steering Committee will consider its future at its August 18, 2011 meeting. If it so decides, the Steering Committee may make a formal request to the Task Force after that meeting.

I presently facilitate both groups, and if the Steering Committee becomes a committee of the Task Force, this dual role would continue and would be funded under the Task Force Renewable Resources Grant and Loan Program grant. Funding for both the Task Force and the Steering Committee is continuing through the end of this year using FY2011 funds. The DNRC has decided that facilitation services to the Task Force beginning in January 2012 will be determined through a competitive solicitation.

Upper Clark Fork River Basin Steering Committee Members

Name	Area or Organization Represented	Appointment Entity	Date Appointed
Bob Benson	Clark Fork-Pend Oreille Coalition	DNRC Director	1997
Stan Bradshaw	Trout Unlimited	DNRC Director	1991
Bob Bushnell	Lincoln Area Rancher	Lewis and Clark Conservation District	2010
Maureen Connor	Granite County Commissioner	Granite County Commission	2010
Don Despain	Deer Lodge Valley	Deer Lodge Valley Conservation District	2010
Jim Dinsmore	Hall Rancher	Granite Conservation District	1991
Holly Franz	PPL Montana	DNRC Director	1991
Carol Fox	Natural Resource Damage Program	DNRC Director	2003
Rebecca Guay	Anaconda-Deer Lodge County	Anaconda-Deer Lodge County Commission	2010
Michele Landquist	Missoula County Commissioner	Missoula County Commission	2010
Sen. Dave Lewis	Lewis and Clark County	Lewis and Clark County Commission	2006
Jim C. Quigley	Little Blackfoot Rancher	DNRC Director	1991
Pat Saffel	DFWP	DNRC Director	2003
Marci Sheehan	ARCO	DNRC Director	2007
Rep. John Sesso	Butte/Silver Bow Planner	Butte/Silver Bow Commission	1997
Jules Waber	Powell County Superintendent of Schools	Powell County Commission	1997

85-2-338. Upper Clark Fork River basin steering committee – membership and duties -- comprehensive management plan. (1) There is an Upper Clark Fork River basin steering committee. The steering committee has 22 members, who must be appointed as follows:

(a) Each of the six conservation districts in the basin may appoint a member.

(b) Each of the six county commissions in the basin may appoint a member.

(c) The department director shall appoint the remaining 10 committee members and any additional committee members not appointed under subsections (1)(a) and (1)(b) and shall ensure that committee membership includes a balance of affected basin interests and is in conformance with subsection (2).

(2) Steering committee members must be selected on the basis of their knowledge of water use, water management, fish, wildlife, recreation, water quality, and water conservation.

Representation on the committee must include but is not limited to representatives from affected:

(a) agriculture;

(b) conservation districts;

(c) departments of state government;

(d) environmental organizations;

(e) industries;

(f) local governments;

(g) reservation applicants;

(h) utilities; and

(i) water users not otherwise represented.

(3) Except as provided in subsection (4), steering committee members shall serve 4-year terms and may serve more than one term.

(4) Initial term lengths must be staggered in conformance with the following:

(a) conservation district appointees shall initially serve for 4 years;

(b) county commissioner appointees shall initially serve for 2 years; and

(c) as determined by the department, half of the department appointees shall initially serve for 2 years and the remainder shall initially serve for 4 years.

(5) The steering committee, consistent with the Upper Clark Fork River basin comprehensive management plan, shall:

(a) review the Upper Clark Fork River basin closure and exceptions as provided in 85-2-336 no less than every 5 years after April 14, 1995, and make recommendations to the legislature regarding necessary changes;

(b) prepare and submit a report evaluating the Upper Clark Fork River basin instream flow pilot program as provided in 85-2-439;

(c) prepare and submit a report concerning the relationship between surface water and ground water and the cumulative impacts of ground water withdrawals in each subbasin;

(d) provide a forum for all interests to communicate about water issues;

(e) provide education about water law and water management issues;

(f) identify short-term and long-term water management issues and problems and identify alternatives for resolving them;

(g) identify the potential beneficiaries of and a funding mechanism for new and expanded water storage sites;

(h) assist in facilitating the resolution of water-related disputes;

(i) provide coordination with other basin management and planning efforts;

(j) advise government agencies about water management and permitting activities;

(k) consult with local governments within the Upper Clark Fork River basin; and

(l) report periodically to the legislature.

History: En. Sec. 4, Ch. 741, L. 1991; amd. Sec. 3, Ch. 487, L. 1995; amd. Sec. 2, Ch. 353, L. 1997.

DRAFT PROPOSAL OUTLINE

July 13, 2011

Appendix 2 Potential Peak Flow Management within the Clark Fork Basin, Montana

I. Summary

- A. Purpose - This proposal would fund the initial phase of a study to test whether peak flows in the Clark Fork River Basin can be stored on the surface or in aquifers and managed to provide mitigation for the impact of additional water development in the basin on existing water rights and to lessen the flood storage requirements at existing reservoirs, and/or reduce local flood impacts
- B. Initial Phase Study Activities
 - 1. Assess where flood control relief is needed within the basin.
 - 2. Identify potential locations for water storage, either surface or groundwater.
 - 3. Estimate the rate at which water might be stored and total volume that might be stored.
 - 4. Prepare a preliminary assessment of hydrologic feasibility:
 - a. Can sufficient water be diverted to affect surface water flows?
 - b. Can water be “injected” through any means at a sufficient rate to capture surplus flows?
 - c. Coordinate with various permitting, water resource management agencies and fisheries agencies.
- C. Timing and Budget
 - 1. This study is estimated to require 18 months and \$600,000 to conduct.

II. Background

- A. Clark Fork River basin water challenges
 - 1. No water reserved for future use in the basin.
 - 2. Lower basin hydropower water rights are large enough to use almost all of the flow of the Clark Fork and Flathead Rivers all or most of the time. This means that water may not be available for appropriation in the Clark Fork and Flathead basins and any appropriation with a priority date junior to the hydropower rights is potentially subject to a water right call by the hydropower utilities.
 - 3. The Confederated Salish and Kootenai Tribes (CSKT) have reserved water rights with an 1855 water priority date that are senior to all water uses above the reservation. The state, the CSKT and the federal government are negotiating the Tribes’ reserved and aboriginal even if the lower basin hydropower water rights do not impact appropriations above the CSKT reservation, the Tribes’ reserved rights probably will.
 - 4. The Columbia River Treaty will expire in 2024. Under this treaty the US Army Corps of Engineers has utilized space in Canadian reservoirs to control floods in the US portion of the Columbia River basin. The treaty expiration may put significant pressure on the Corp to modify the flood control operation at federal and other privately held flood storage reservoirs with flood control obligations in the USA.
- B. Clark Fork Task Force
 - 1. The Task Force was authorized by state statute in 2001 and directed to write a water management plan that identified options for protecting the security of existing basin water rights and for providing for the development and conservation of basin water

DRAFT PROPOSAL OUTLINE

July 13, 2011

- in the future.
- 2. Members of the Task Force must be appointed to represent the basin in terms of geography and water interests.
- 3. Task Force adopted the *Clark Fork Basin Watershed Management Plan (Plan)* in 2004, and most of it was subsequently included by DNRC in the State Water Plan.
- C. Solution to basin water supply challenges
 - 1. Water stored in Hungry Horse reservoir may provide source of water to supply growing basin water needs and to increase the security of water uses junior to the CSKT reserved water rights and lower basin hydropower rights.
 - 2. Increased storage of peak flows on the surface or in aquifers may also provide mitigation water and reduce pressure on Hungry Horse and other basin reservoir operations to provide flood control.

III. Aquifer Storage

- A. An aquifer is an underground reservoir of water contained by unconsolidated materials (gravel, sand, silt or clay) or rock, from which groundwater can be extracted.
 - 1. An aquifer is said to be unconfined when its upper surface (water table) is open to the atmosphere through permeable material.
 - 2. A confined aquifer is a water-bearing stratum that is confined or overlain by a rock layer that does not transmit water in any appreciable amount or that is impermeable.
- B. In aquifer storage recovery (ASR) a water source, such as recycled water (e.g. derived from urban stormwater or treated sewage) or natural water (e.g. from a lake or river), is used to 'recharge' an aquifer with water under controlled conditions. The aquifer is used to store surplus water for later use or for environmental benefit.
- C. ASR field examples (80 operating fields in US as of 2007)
 - 1. Storage volumes - 100 to 270,000 acre-feet (acf)
 - 2. Well capacity - up to 8 million gallons per day (mgd)
 - 3. Well field capacity - up to 157 mgd
- D. Typical Montana aquifer values
 - 1. Unconfined, valley fill or alluvium aquifers
 - a. Kalispell Valley - 10,000 feet²/day or 5,000 gpm
 - b. Beaverhead Valley - 5,000 to 180,000 feet²/day or 5,000 gpm or more
 - 2. Confined or bedrock aquifers
 - a. Madison limestone (near Great Falls) - 500 to 20,000 feet²/day or 5,000 gpm
 - b. Eagle sandstone (near Billings) - 200 feet²/day or 50 gpm

IV. Project Plan

- A. Phase I - Define project
 - 1. Project implementation
 - a. Collect available information and develop assessment criteria
 - b. Conduct an entry-level assessment to determine:
 - i. The availability of source water
 - ii. The capacity of unused surface storage for peak flows
 - iii. The physical and legal capacity of aquifers for ASR
 - c. Select an ASR test site or review ASR efficacy at an existing known recharge site associated with flood irrigation or water spreading

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- B. Subsequent Project Phases
 - 1. Hydrologic site evaluation and design for test site
 - a. Source and ground water sampling and analysis
 - b. Ground water modeling and geochemical evaluation
 - 2. Evaluate ASR at test site
 - 3. Verify performance at full-scale operation
 - 4. Operate at full scale

V. Project Team

- A. Project oversight
 - 1. The Task Force will act as the stakeholder group to oversee and guide the project.
 - 2. Activate the Task Force's Clark Fork Basin Hydrologic Modeling Technical Advisory Committee to advise project implementation.
- B. Phase 1 project implementation
 - 1. Montana Bureau of Mines and Geology
 - a. 4 FTE
 - b. \$600,000
 - c. 18 months