

**Upper Clark Fork River Basin Steering Committee**  
**Meeting Summary**  
**May 25, 2010**

**Introductions**

Gerald Mueller, members of the Upper Clark Fork River Basin Steering Committee (Steering Committee), and others in attendance introduced themselves. Those in attendance included:

<b>Members</b>	<b>Group/Organization Represented</b>
Stan Bradshaw	Montana Trout Unlimited (TU)
Senator Dave Lewis	Senate District 42
Jules Waber	Powell County
Jim Dinsmore	Granite Conservation District
Mike McLane	Montana Department of Fish, Wildlife and Parks (DFWP)
Bob Benson	Clark Fork Coalition
Holly Franz	PPL Montana, LLC
Tom Mostad	Natural Resource Damage Program (NRDP)

**Public**

Rankin Holmes	Clark Fork Coalition
Bryce Andrews	Clark Fork Coalition
Chris Brick	Clark Fork Coalition

**Agency**

Ann Schwend	Department of Natural Resources and Conservation
Steve Sando	United States Geologic Survey (USGS)
Wayne Berkas	USGS

**Staff**

Gerald Mueller	Facilitator
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**Agenda**

- Review summary of the April 28, 2010 Meeting
- Updates
  - Water Policy Interim Committee
  - Water Words
  - Other Organizations
- USGS Streamgages on the Upper Clark Fork
- Clark Fork Coalition Water Flow and Irrigation Projects
- Basin Water Management Plan Outline
- Dry Cottonwood Creek Ranch Overview
- Public Comment
- Next Meeting

**April 28, 2010 Meeting Summary**

The Steering Committee made no changes to the April 28, 2010 meeting summary.

## Updates

Water Policy Interim Committee (WPIC) - Gerald Mueller reported that the WPIC met on May 11 and 12. Two items on the WPIC agenda may be of interest to the Steering Committee. One was consideration of a bill draft addressing marketing of water rights for mitigation. The other was a list of possible legislative topics labeled “Water à la carte, Water and Wastewater Management Options.” Holly Franz discussed these two items.

A committee charged by the WPIC originally discussed an alternative that would have created a pre-approved “bank” of water rights for mitigation. The owner of the rights would seek a water right permit change by filing a hydrogeologic study that would identify the area in which the water could be marketed for mitigation. Purchasers of the marketed water would not have to conduct a subsequent hydrogeologic study. Based on comments objecting to this approach, WPIC decided to consider a more limited idea for possible legislation. It dropped the pre-approval idea in favor of allowing an applicant for marketing to seek DNRC approval of the historic consumptive use of the water rights to be marketed for mitigation. This would identify the amount of water that could be available for marketing but the location and timing would have to be addressed in the customer’s subsequent hydro-geologic study included in a water right change application. A marketer receiving DRNC approval would have a 20-year period to complete some or all of the marketing transaction without a risk of abandoning the water right involved. The marketer would have to file annual reports with DNRC on the status of the transactions. The goal of this legislation would be to encourage use of community rather than exempt wells. WPIC will circulate a revised draft of the marketing legislation for comments for consideration prior to its July meeting.

*Question - What groups were represented on the committee that WPIC asked to develop the content for the marketing legislation?*

Answer by Holly Franz - I represented PPL Montana. The other groups with representatives on the committee included Trout Unlimited, the Senior Water Right Coalition, the Montana Association of Realtors, the Montana Farm Bureau, and the Montana Water Resources Association.

*Question - Was DNRC represented?*

Answer - Terri McLaughlin attended the meetings of the committee.

The second item was the water and wastewater management options. The WPIC discussed three possible pieces of legislation. One would limit exempt wells by identifying the maximum number of wells on a parcel of a specific size. This idea is favored by Senator Wanzenried; the WPIC did not seem to favor this approach. A second would require a septic drain field to be located on the septic owner’s property. WPIC seemed to support this idea. A third would clarify the authority of counties to require community wells.

Water Words - Gerald Mueller reported that the groups partnering in the *Water Words* newsletter, the Clark Fork Coalition, the Watershed Restoration Coalition, the Blackfoot Challenge, and the Steering Committee, are planning a second issue this summer. It would address the remediation/restoration projects underway in the basin.

Other Organizations - Tom Mostad reported that the Montana Department of Fish, Wildlife and

Parks (DFWP) and the Natural Resource Damage Program (NRD) recently completed a draft prioritization of the tributaries in the upper Clark Fork River basin for fishery enhancement. This effort began in 2007 and has assessed, scored and ranked fishery habitat and resources of about 100 stream reaches of tributaries of the Clark Fork in the upper basin. The draft report is available and will soon be posted on the NRD web site. Mr. Mostad passed out copies of the report on disks. NRD will shortly begin a 60-day comment period on the draft report.

Senator Lewis stated that the City of Helena recently proposed land applying its waste water treatment plant effluent via a ditch owned by the Helena Irrigation District. The effluent would be mixed with the irrigation water carried by the ditch. The area served by the district has elevated levels of nitrates in the ground water. The sources of the ground water are the city waste water treatment plant (30%), individual septic systems (30%) and agricultural operations (30%). The district has not agreed to this proposal, and it has stimulated draft legislation that would ban similar effluent discharges into irrigation canals. This legislation has been controversial within the irrigation district membership, and the district has not taken a position on it.

### **USGS Streamgages on the Upper Clark Fork**

Wayne Berkas, Chief of the USGS Hydrologic Surveillance and Analysis Section, and Steve Sando, Chief of the USGS EPA Superfund Project, reported on stream gauging in the upper Clark Fork using a PowerPoint presentation entitled, "USGS Streamgages on the Upper Clark Fork, 2010." The USGS currently operates 245 stream gages in Montana. Of this total, 4 are privately funded, 35 are funded under the USGS National Streamflow Information Program (NSIP), 113 are funded by other federal agencies, and 93 are funded through the Cooperative Water Program with state, local, tribal agencies. The list of the gages noting the cooperating funding entities is as follows:

#### **Cooperators within Upper Clark Fork Basin**

12323240 – Blacktail Creek at Butte	Mt BMG
12323250 – Silver Bow Creek below Blacktail Creek, at Butte	Mt BMG
12323600 – Silver Bow Creek at Opportunity	EPA
12323670 – Mill Creek near Anaconda	EPA
12323700 – Mill Creek at Opportunity	EPA
12323710 – Willow Creek near Anaconda	EPA
12323720 – Willow Creek at Opportunity	EPA
12323750 – Silver Bow Creek at Warm Springs	EPA
12323760 – Warm Springs Creek near Anaconda	EPA
12323770 – Warm Springs at Warm Springs	Mt FWP
12323800 – Clark Fork near Galen	EPA
12323840 – Lost Creek near Anaconda	EPA
12323850 – Lost Creek near Galen	EPA
12324200 – Clark Fork at Deer Lodge	Mt FWP
12324400 – Clark Fork ab Little Blackfoot Creek, nr Garrison	EPA
12324590 – Little Blackfoot River at Garrison	Mt DNRC
12324680 – Clark Fork at Goldcreek	Mt FWP
12331500 – Flint Creek near Drummond	Mt DNRC
12331800 – Clark Fork near Drummond	EPA

12334510 – Rock Creek near Clinton	Mt DNRC
12324550 – Clark Fork at Turah Bridge, near Bonner	EPA
12340000 – Blackfoot River near Bonner	USGS
12340500 – Clark Fork above Missoula	EPA

There are several reasons to gage streams:

- To understand long-term trends in hydrology through statistics such as the annual departures from mean annual stream flow over the period of record;
- To achieve short-term goals such as water management within the water year;
- To enable stream flow forecasts;
- To develop statistics such as the 7-day average discharge;
- To conduct analysis of phenomena such as the flood-frequency; and
- To understand water quality processes such as constituent concentrations and loads.

USGS has recently initiated the Water Alert System that will allow users to designate one or more stream gages and set specific triggers for email alerts regarding the selected parameters. The web address for the system is as follows.

<http://water.usgs.gov/wateralert/>

*Question - Could you set an alert to receive an email every day from the Water Alert System about low flows?*

Answer - The alert may not be sent every day, but it would be set when the threshold level you designate would be crossed.

*Question - Is this service free?*

Answer - Yes.

*Question - I suspect that many people would be willing to pay a fee for this service. Could you set one?*

Answer - A fee for the Water Alerts would be difficult to establish.

*Question - Are you planning outreach regarding this service? It would be good public relations.*

Answer - Yes. We are planning outreach to various water user groups.

*Question - Your list indicates that four private entities fund stream gages. Who are they?*

Answer - There are two private entities; Fidelity Exploration and Development (a coal-bed methane development company) funds one gage on the Tongue River and Jefferson River Watershed Council (a non-profit organization) funds 3 gages in the Jefferson River Watershed.

*Question - When you receive funding from a private entity or another government agency, can you tie that funding to a specific monitoring site?*

Answer - Yes, we do so through joint funding agreements.

*Question - Are all of the gages funded by EPA permanent?*

Answer - The EPA is committed to the Upper Clark Fork for about 50 years, but they may discontinue some of the tributary gages as the need for those gages diminish.

*Question - Are you attempting to maintain all of the upper Clark Fork gages or do expect some to be whittled back?*

Answer - We intend to maintain all of the core gauging stations; some may be added.

*Question - What is the duration of your agreements with cooperators?*

Answer - The agreements are annual.

*Question - Has your funding for stream gages been cut?*

Answer - Our funding for the Cooperative Water Program has not been cut, but we have not received the increases necessary to meet increasing costs. We expect level funding for the next three or four years. As a result of level funding in the face of increasing costs, we have had to decrease the USGS share of the funding from 50% to less than 50%, increasing the funding burden on our cooperating agencies. In some cases, NSIP funds were used to make up the shortfalls. This year (2010) NSIP received a significant increase in funds (about 10%) due in part to support from the Western Water Users Association.

*Question - What is the annual operating costs for a gage?*

Answer - About \$16,000 for a full year, \$10,000 for eight months, and \$5,000 for three months. Installing a new gage costs about \$2,000.

*Question - Are the EPA gages fully funded?*

Answer - Yes.

*Question - Does USGS operate all of the gages?*

Answer - Yes. Most of our gauges measure stream elevation and we correlate that to discharge through rating curves. We visit each gauge about 10 times a year to measure the discharge and adjust the rating curves.

*Question - Do you rely on other agencies for on-site work?*

Answer - Sometimes the USGS trains other agency personnel so they can maintain gages and rating curves. For example, DNRC's Mike Roberts operates four gauges in the Big Hole River watershed, and the USGS quality assures his work. Mike's gages are displayed on the USGS Web-page and archived in the USGS data base.

*Question - Are there plans for retaining the 14 EPA gages in the basin?*

Answer - One gage, on Silverbow Creek near Opportunity (12323600), will be orphaned after this season. While it provides important information about flow and water quality, this gage is between operable units and EPA is not committed to retaining it.

*Comment - We need to know which remediation/restoration goals are informed by stream gages and which critical stream reaches have or need gages. This information could be included in the water management plan revision.*

*Comment - DFWP pays for thermographs at USGS gages to measure stream temperatures and set fishing closures. USGS gage information also aids the operation of our instream flow leases. All of DFWP stream gauging funds come through the Fisheries Bureau. DFWP received no*

*general fund dollars. All of our funding comes from license fees and federal excise taxes. The governor recently nixed our license increase proposal, so our funding will be tight. In eastern Montana, there are 374 stream reaches with no stream gages. DFWP has instream flow on 23 streams that are not gaged.*

*Question - Does DFWP lack gauging stations in this basin?*

Answer - All of our Murphy rights in the Clark Fork River basin have gages.

*Question - Are the USGS gages integrated into the Natural Resources Conservation Service (NRCS) Snowtel system?*

Answer - Yes. NRCS uses information from USGS gages.

*Question - In your PowerPoint presentation you showed a gage located on the Missouri River that has about 120 years of record. Do the gages in the upper Clark Fork have records as long?*

Answer - No. A typical gage age in this basin would be about 31 years. The Clark Fork gages above Missoula and at St. Regis have been measuring flow since 1929.

*Question - Who funded the gage on Racetrack Creek?*

Answer - The USGS operated a gage on Racetrack Creek below Granite Creek, near Anaconda from 1914-17 and 1957-73. The USGS has operated about 800 gage through the state.

*Question - Will you describe the StreamStats program?*

Answer - StreamStats is a web-based tool with an interactive hydro-geography map. You can click on a stream line and various hydro-geographic data are available such as the drainage area, basin characteristics such as climate and land use, any stream gauging station, and long-term statistics. It will also fill data where stream gauging stations are not available using regression equations to generate synthetic flow data.

*Question - Is this program on the web now?*

Answer - No. It is under development for Montana, and is probably two years away. StreamStats is available for Idaho.

## **Clark Fork Coalition Water Flow and Irrigation Projects**

Rankin Holmes described Clark Fork Coalition water flow and irrigation projects underway in the area of the upper Clark Fork basin from Garrison to Warm Springs, the area designated Reach A in the Superfund cleanup using a PowerPoint presentation entitled, "Upper Clark Fork River – Flow Restoration Projects – (Reach A)." He addressed two groups of projects, one involving the Westside Ditch and one involving Racetrack Creek. He noted that Dennis Workman in work done for the Steering Committee identified two flow targets for the Clark Fork River in this area, 40 cubic feet per second (cfs) at Galen and 90 cfs at Deer Lodge.

Westside Ditch - Four phases are planned for this project:

- Phase 1: Acquisition of Cline Family Property = 700 acres + 185 shares in the Westside Ditch Company (WSDC) = ~14.9 cfs (direct flow), ~11.47 cfs (senior priority).
- Phase 2: Split-Season Lease of 14.9 cfs instream annually, Leasing 600 acres back to Cline Family, Begin development of 100 acre WB.

- Phase 3: Piping of Ditch: Salvage Seepage - Protect ~10-20cfs to Headgate, Installation of Fishscreen, Restore Modesty Creek, Little Modesty Creek and Lost Creek with Clark Fork River.
- Phase 4: Develop 100 acre Off-Stream Storage for UCF Water bank.

The estimates of the water that this project might produce are:

- Phase 2: ~ 2200 AF / 14.9 cfs (split-season lease)
- Phase 3: ~ 2400 AF – 4800 AF / ~ 10cfs – 20cfs (Piping)
- Phase 4: Potential Water Bank ? acre-feet

*Question - You would acquire land and water from the Clines?*

Answer - Yes. According to the 1955 Water Resources Survey, 77% of the land irrigated under the Cline's water right are located on the east and downhill side of the ditch.

*Question - Are the ditch losses moving back to the river?*

Answer - The return flow question will be addressed by hydrologists.

*Question - Have you talked with the people who rely on ditch seepage to fill their water rights?*

Answer - Yes. Some users and wells may be affected by lining the Westside Ditch. We plan to prioritize segments of the ditch for lining. Some ditch users have a problem with the seepage making their land too wet to hay. Legally, no one is entitled to ditch seepage. Return flows from irrigation are different.

*Question - What is the total number of shares in the WSDC?*

Answer - There are 620 shares, and the Clines own 185.

*Question - Are you considering combining the Whalen and Westside ditches?*

Answer - Yes. The two ditches are only 10 feet apart and at times must be sandbagged to keep them apart. There is only one water right holder on the Whalen ditch.

*Question - Do you plan to reconnect Modesty and Little Modesty Creeks to the river?*

Answer - Yes. Seepage from these creeks is intercepted by the Westside Ditch. Presently, flow from these creeks can submerge the Westside Ditch headgate.

*Question - How would you remove the irrigation pump from the Clark Fork River at Sager Lane?*

Answer - As Dennis Workman found, the 250 hp pump at Sager Lane effectively dewateres the river. The pump is used to irrigate land to the west and above the Westside Ditch. If this land could be irrigated from the ditch, this pump could be removed. The pump owner is willing to change his water supply to the ditch. Doing so would provide carriage water for other ditch users.

*Question - My understanding is that the conversion of the ditch to a pipeline has had an initial assessment but not an engineering design. Am I correct?*

Answer - An engineering design has not been completed. In 2001-2002, the NRCS funded work by Gateway Engineering that resulted in a \$5 - 6 million cost estimate to put the ditch in a pipe including a siphon under the Powell ditch.

Racetrack Creek Project - The phases of this project may include:

- Phase 1: This project was described at the last Steering Committee meeting and would involve purchasing a 433 acre-feet irrigation storage right in Racetrack Creek Reservoir and converting it to instream flow. Over a 44 day period during a portion of July through September this storage could equate to a flow of 5 cfs. A past court decision pegged the loss of water on the creek to the headgate at 10%. Additional loss would occur from the headgate to the mouth of Racetrack Creek. Carriage water would be required to transport the 5 cfs to from the lake to the mouth of the creek.  
Phase 2: Salvaging water from the conversion of flood to sprinkler irrigation 800 acres supplied by the Cement ditch. This project could supply carriage water for the Phase 1 5 cfs
- Pressurized Pipeline Project: The Morrison Ditch would be retired and its flow combined with that of the Cement Ditch would be transported to the water users via a pressurized pipe.

The estimates of the water that this project might produce are:

- Phase 1: 433 acre-feet (stored water).
- Racetrack Creek Lake Project Phase 2: ~ 750 acre-feet (salvage water).
- Racetrack Creek Project 2: Pressurized Pipeline ? acre-feet (Current Ditch Seepage in Morrison Ditch = ~ 1200 - 2800 AF).

*Comment - An existing water right exchange may prevent retiring the Morrison Ditch.*

Response - I am aware of the exchange and have discussed it with the water users. At a recent meeting, the users agreed to the concept of retiring the Morrison Ditch and combining its flow with the Cement Ditch waters in a pressurized pipe to transport it to the places of use of the Morrison and Cement Ditch water users. If accomplished, this project cost would eliminate the water users' pumping costs (\$200,000 - \$400,000 annually) and keep water in Racetrack Creek. The water users brought this project to me.

*Question - How large would the pipe be?*

Answer - 54 inches at the top. The users have considered the details of the project.

*Question - The pipe would be pressurized by gravity rather than pumping?*

Answer - Yes. The pressure would have to be reduced before water could be supplied to the irrigation sprinklers.

*Question - Could the pressurized flow be used to generate electricity? If it could, then the project might be funded by issuing bonds repaid by the sale of the electricity.*

Answer - We are looking into this possibility. If it comes about then this project might improve agriculture production, keep more water in Racetrack Creek and improve the fishery and produce electricity. In the NRD and DFWP tributary fisheries enhance prioritization that Tom Mostad discussed earlier in this meeting, Racetrack Creek was the fourth highest priority in the basin.

*Comment - A key issue for this project is what DNRC will recognize as salvageable and therefore protectable below the headgate. DNRC rules have narrowed what is protectable.*

*Comment - The Hohenlohe Case which is being considered by the Montana Supreme Court may have a bearing on the protectable amount.*

## **Basin Water Management Plan Outline**

Gerald Mueller reviewed the initial draft of an outline of the revision of the 1994 *Upper Clark Fork River Basin Water Management Plan*. The draft outline, which had been previously supplied to Steering Committee members, is included below in Appendix 1. Mr. Mueller stated that he would revise the outline pursuant to comments at this meeting and put the revision on the agenda of the next meeting. Mr. Mueller suggested that after the Steering Committee is comfortable with the outline, it convene a meeting of basin watershed groups and other interests to discuss the outline and solicit their participation in the plan revision. Highlights of the Steering Committee discussion follows.

*Comment - The Plan should provide the record of precipitation and dry year patterns from past years.*

Response - I anticipate that section hydrology section of the basin information (III. A.) would include the history of basin flows in the form of a hydrograph.

*Comment - The section on water uses (III. C.) should include both consumptive and non-consumptive uses.*

*Comment - As a part of the state water plan, DNRC is attempting to update information on irrigated lands. If available, this information should be included in the section on basin information.*

*Comment - I am not sure what developing a basin flow plan to correspond to the remediation and restoration plan means.*

*Comment - Instead of corresponding to the remediation and restoration plans, the flow plan should compliment them.*

*Comment - The Natural Resource Damage Program may start to collect wetted perimeter data that identifies fishery flow targets. We may also entertain a project to do so.*

*Comment - The outline should include a summary of remediation and restoration plans in section III.*

*Comment - We have heard that Seeley Lake needs additional water to meet its population growth. The outline should include an accounting of future basin water needs.*

*Question - Why are aboriginal tribal water rights an issue in the upper basin?*

Answer by Mike McLane - The Confederated Salish and Kootenai Tribes (CSKT) have a Stevens Treaty which guarantees their right of taking fish at all usual and accustomed places. The CSKT argue that this phrase means that they have an aboriginal water right for instream flows necessary to support the fishery. The CSKT are interested in aboriginal rights in the upper Clark Fork, Bitterroot and Kootenai basins.

*Question - Could a compact be negotiated with the CSKT without providing for aboriginal rights?*

Answer by Mike McLane - The state has not recognized aboriginal rights, and since the compact is

being negotiated, it may not include aboriginal rights. The CSKT are unlikely to agree to just give them up, however.

*Comment - The plan revision should address basin water rights and economic and demographic trends.*

## **Dry Cottonwood Creek Ranch Overview**

Bryce Andrews, Dry Cottonwood Creek Ranch Manager, provided an overview of the ranch. It is co-owned by the Clark Fork Coalition and two investors. It consists of 2,300 deeded acres, a state lease, and a United States Forest Service (USFS) allotment shared with three other families. The ranch allows the Clark Fork Coalition to view the Superfund cleanup from a different perspective and gives the organization a direct stake in its outcome. The goal of the ranch management is to provide demonstration ground for the cleanup while maintaining an innovative and profitable agricultural operation. This year the ranch will build six miles of riparian fencing along Dry Cottonwood Creek up to the USFS boundary and use a range rider and mobile electric fence to allow more intensive cattle management and protect riparian areas. Next year, we will conduct hydrologic study to assess how surface water use impacts ground water. The Clark Fork Coalition brings the scientific expertise of its staff and its connections to agencies to its agricultural operation.

*Question - Will you monitoring along the riparian fence?*

Answer - Yes. Substantial monitoring is conducted now. We have upland transacts and photo points on the USFS allotment.

*Question - Who is funding the range rider and riparian fencing?*

Answer - Funding for the fencing will be provided by the DFWP Future Fisheries Program; we share range rider funding with other USFS allottees. The USFS had observed damage from cattle grazing.

*Question - Is Dry Cottonwood Creek dry? It is flowing now?*

Answer - Whether it flows depends on the month and reach. It flows year round in the upper reaches and supports a native cutthroat trout fishery. In the lower reaches it generally flows during the summer months.

*Question - Do you intend to reconnect the creek to the river?*

Answer - Reconnecting is one of the things we will look at in next year's hydrologic study.

*Question - Is the creek connected to its flood plain?*

Answer - We will look at this in next year's study.

*Question - Do others own water rights on the creek?*

Answer - Yes. There is one upstream user to our rights.

*Question - One of your goals is to maintain the ranch profitability?*

Answer - One of our goals is to achieve profitability. We participate in the DFWP block wildlife management and the Natural Resource Conservation Service conservation programs. We are

attempting to demonstrate that all of the ranch value is not vested solely in our cattle.

*Question - Do you pay property taxes?*

Answer - Yes.

### **Public Comment**

There was no additional public comment.

### **Next Meeting**

The next two meetings were scheduled for Wednesday, June 23, 2010 at St. Mary's Center in Deer Lodge and Wednesday, September 1, 2010. The June agenda will include the Natural Resources Damage Program prioritization of tributaries in the upper Clark Fork River basin for fishery enhancement, basin water right permitting activities during 2006-2010, discussion of the basin closure, review of the revised plan revision outline, and plans for a meeting with basin watershed and other interested groups regarding the plan revision. The agenda for the September meeting will include discussion of the water right change process.