

Proceedings of the Clark Fork River Basin Roundtable

**The University of Montana
University Center Theater**

May 6, 2009

Convenors:

**The Clark Fork River Basin Task Force
The University of Montana Department of Geography
The Montana Department of Natural Resources and Conservation**

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FOREWORD

On May 6, 2009, the Clark Fork River Basin Task Force, the University of Montana's Department of Geography, and the Montana Department of Natural Resources and Conservation co-convened a conference entitled "Clark Fork River Basin Roundtable." The Task Force and other co-sponsors organized the conference in order to convene all of the watershed groups and other entities in the Clark Fork River basin so they could discuss watershed issues that the basins and sub-basins face.

Unfortunately for the basin, as the region gets more populated and development increases, the amount of water will not grow concurrently. There is a perception that ground and surface water are nearly fully appropriated in the basin and, in any case, as the demand for water increases, solutions will have to be invented in order to most efficiently serve the needs of industries and residents.

The conference agenda was focused on steering people into sub-basin groups to discuss issues relevant to each sub-basin, then discussing the Clark Fork River basin as a whole in a plenary session. There was also discussion describing the background of the Clark Fork Task Force, along with opportunities for funding for watershed projects in the Clark Fork River basin.

The director of the DNRC opened the conference. A total of 45 individuals attended the conference as registrants, and approximately 12 other individuals including UM students and faculty, and other citizens of the Clark Fork Basin, attended certain panels.

Enclosed in these proceedings are an executive summary, a summary of each presentation, and copies of the presentations. The proceedings, presentations and audio recordings are available on-line at:

http://dnrc.mt.gov/wrd/water_mgmt/clarkforkbasin_taskforce/default.asp .

INTRODUCTION

The Clark Fork Task Force is a statutorily created basin water management group charged first with developing and then with implementing a water management plan for the Clark Fork River basin in Montana. The Task Force and other co-sponsors organized this conference to convene all of the watershed groups and other entities working on water-related issues in the Clark Fork River basin to engage in the following activities:

- To share information about current water management activities and research as well as plans in the basin;
- To identify common issues and concerns and next steps for addressing them; and
- To identify opportunities for greater collaboration between the organizations.

Representatives of the following types of watershed organizations working in the Clark Fork River basin were encouraged to attend:

- Watershed groups and councils;
- Conservation district supervisors and staff;
- Irrigation district officials;
- County commissioners and planners;
- City officials and planners;
- Tribal government officials and staff; and
- Water-related nongovernmental organizations.

The participants of the conference broke into four sub-basin groups, one each for the Mainstem Clark Fork, Blackfoot, Bitterroot, and Flathead sub-basins. Each group was directed to discuss the following talking points:

- Who is doing what (i.e., what watershed planning, restoration and other water management related activities are underway)?
- What issues and concerns exist in the watershed? What are the most pressing concerns?
- How can the issues and concerns be addressed? How can we work together more effectively?

Following the conclusion of the sub-basin break-out discussions, the groups reconvened to present their findings.

This proceedings summarizes the information presented at the conference.

WELCOME

To begin the conference, Mary Sexton, Director of the Montana Department of Natural Resources and Conservation (DNRC), addressed the role of watershed groups in state water management planning. She said that there are two types of watershed groups in Montana. One type is represented by basin groups, (such as the Clark Fork River Basin Task Force or Task Force), that focus on basin-wide issues and have a fair amount of autonomy. Other than the Task Force, the two other groups newly authorized by Senate Bill 303 (2009) to engage in such activities include Water User Councils in the Yellowstone and Missouri River basins. The second type of group is represented by smaller watershed groups which typically have a focus on on-the-ground projects related to water quality, fisheries habitat, etc., of which there are over 100 statewide.

Sexton addressed the various roles the DNRC plays in water resources management in the state. She mentioned that accountability, as concerns decision making, and funding (for watershed and water planning activities) are two of the main issues the DNRC deals with. The DNRC is also strongly engaged in educating the public on various water management issues, Sexton said, as public outreach is very important.

According to Sexton, the DNRC fared very well in the 2009 State Legislative session. House Bill 40, which is intended to make a significant change in how the DNRC processes permits for new appropriations, was passed. Senate Bill 120 also made it through the legislative process, where the petition process for establishing Controlled Groundwater Areas (CGAs) was modified to allow the DNRC to “designate or modify permanent or temporary CGAs” whereas before this could only be done by local petitions.

Clark Fork River Basin Task Force

Dr. David Shively, Associate Professor of the Department of Geography at the University of Montana, provided an overview of the roundtable. He mentioned that the conference was meant to provide a forum in which various watershed groups could discuss the work that they are doing, and to provide them with opportunities to learn from one another and identify areas for collaboration. After Dr. Shively spoke, Gerald Mueller, the Facilitator of the Task Force, introduced the Task Force, the Basin water management plan, and the ongoing Task Force activities.

The Task Force has been a statutory entity since 2001. Section 85-2-350, Montana Code Annotated, specifies the Task Force membership and responsibilities. The Task Force responsibilities include writing a water management plan to protect the security of basin water rights (accomplished in September 2004), and providing for the orderly development and conservation for water in the future. Other Task Force responsibilities include identifying short-term and long-term water management issues and problems and alternatives for resolving them; identifying data gaps regarding basin water resources, especially groundwater; coordinating water management by local basin watershed groups, water user organizations, and individual water users to ensure long-

term sustainable water use; providing a forum for all interests to communicate about water issues; advising government agencies about water management and permitting activities in the Clark Fork River basin; consulting with local and tribal governments within the Clark Fork River basin; making recommendations to the DNRC for amendments to the state water plan; and reporting to the DNRC and the legislature.

There are a few major Task Force initiatives that have taken priority for the organization. One is securing the basin water supply for future consumptive uses and while increasing the security of existing water rights. The Task Force is also focused on identifying and addressing challenges facing the prior appropriation doctrine as it is applied in Montana. Mueller noted that there is a problem with the basin's water supply, as there is no supply reserved for future consumptive uses in the basin and more senior lower basin water rights constrain the legal availability for new rights as well as putting many junior rights at risk. Because of that, the Task Force recommended that the DNRC negotiate a contract with the U.S. Bureau of Reclamation (BOR) for a long-term lease of water stored in the Hungry Horse Reservoir. In the event of that happening, basin water users would lease Hungry Horse water from the DNRC at cost. The 2007 Montana State Legislature modified existing statutes to facilitate such a contract, and appropriated \$260,000 to begin contract negotiations with the BOR. The DNRC requested a contract with the BOR for 100,000 acre-feet of Hungry Horse water for municipal and industrial uses. The contracting process is underway.

Challenges facing the Prior Appropriation Doctrine were also discussed. One of the main challenges is the lack of institutional capabilities and resources and growing demands for a limited resource are eroding the effect of the prior appropriation doctrine. Also, the growing development of groundwater, coupled with recent court rulings and legislation, increases both the importance and complexity of managing ground and surface water interactions. Montana is unique compared to other prior appropriation states in that it does not provide a general priority for domestic water uses. The 35 gpm/10 acre-feet groundwater permit exemption has increased reliance on individual wells for domestic water supply. Also, federal laws, regulations and licenses increasingly constrain water management and use outside the framework of state water law.

PLENARY SESSION

After the meeting participants met in sub-basin groups, they reconvened to share and discuss what occurred during the breakout session. A summary of what each sub-basin group discussed follows.

Clark Fork (Mainstem)

Issues

Land management, public management styles all affect watershed health. Also, communication between land managers is important.

Restoring and maintaining **water flows** is a priority.

Climate change: natural and/or anthropogenically influenced- and what impacts **climate change**, and its potential impacts for the basin, is a concern for the sub-basin.

Nutrients: from disturbances and point and non-point sources; point sources are being scrutinized, but non-point source pollution is of increasing importance.

Old and new **Superfund sites** continue to be a concern. There is continued tertiary contamination from the sites. Now, the town of Superior is being impacted.

The basin must be vigilant with **management of growth and development in floodplains** as riparian areas are affected by growth.

There is worry about the impacts of **septic systems on waterways**, along with what effects pharmaceuticals might have on the health of the river.

The learning curve of pertinent issues, regulations, and policies for new and old landowners is high. Learning all that landowners need to know is overwhelming.

There is a need for a **clearinghouse of information**.

Funding is a problem – some sources are becoming tighter. Funding for restoration is easier to find than for planning.

Activities

Planning

There is a ten year **tri-state nutrient reduction plan** that is moving to a regulatory approach. The plan will hopefully reduce phosphorus and nitrate levels.

Currently, there is growth planning at the county level.

Total Maximum Daily Loads (**TMDLs**) are coming on board.

There are plans for Racetrack and Cottonwood Creek.

Water restoration coalition in the Upper Clark Fork is conducting **flow and entrainment studies** as well as **irrigation studies**. There is also a study analyzing the impacts of **diversion**.

Restoration

Other issues identified included: in-stream flows, Confederated Salish and Kootenai Tribe (CSKT) and reserved water rights, landowners and improving efficiencies of water use and return flows. **TMDLs are being enforced** in the Upper basin. The Natural Resource Damage Program (NRDP) has issued a roadmap for restoration – especially for the mainstem. There is the **East Valley Forest Stewardship program** in the upper basin, which will log to restore streams. Avista Utilities is looking to purchase **conservation easements** and **land purchases** for flow and water quality protection.

There is a fish ladder at the Thompson Falls PPL facility. Other **restoration projects** include: Gold Creek and Brown gulch projects, Trout Unlimited in Ninemile Creek basin – **abandoned mine reclamation and restoration projects**, Grant Creek floodplain redesign, Milltown Dam and transfer of water rights to the state (who will manage?). Stimulus money is available for **road rehabilitation** to reduce sedimentation. There may also be a **new Superfund site** in Superior.

Regulation

New Montana nutrient standards are coming online (variances? – a working group is examining this issue w/ DEQ). **Exempt wells** and their cumulative impacts need to be examined. Subdivisions need regulations to fix **septic/well issues**. The question of **individual permits vs. community systems** needs to be examined. There are **new floodplain maps** coming to some parts of basin. Missoula County will conduct a **pilot Channel Migration Zone mapping project**. Avista Utilities is not allowing septic on its properties adjacent to the river in the lower 50 miles of the basin. The **Endangered Species Act** is in effect for bull trout and Hungry Horse waters. **State nutrient standards** are coming out for all tributaries and rivers.

Education

The **Channel Migration Zone Pilot study** should bring about regulations and education. The Watershed Restoration Coalition in upper basin says they will bridge the gap between agriculture and conservation. The Montana Water Trust created a **Rattlesnake Creek brochure**, while the Clark Fork Coalition created a **landowner guide for stream care**. The **Clark Fork Watershed Education program** will educate middle schoolers on watershed science, along with NRDP/Superfund outreach. The **Deer Lodge Outdoor Education Center** is completed. The **Deer Lodge - Garrison - Greenway trail** should be finished this summer (along Silver Bow Creek). The Conservation Districts in Sanders County and Missoula County had **watershed festivals**.

Brainstorming to solve problems needs to take place.

Communication is key for creating solutions!

Many activities are in progress. **Ongoing workshops and conferences to share information** would be important – especially to filter outcomes for the general public. These outcomes should have parts for public consumption, supported with web resources, newsletter(s) to groups and/or public, and a clearinghouse for information including water conversions, such as how much water is used by residential homes and gpm - lawn water use versus toilets. Also, **technical information should be made more accessible to landowners**, though it is unsure if the Clark Fork Coalition is already doing this. The **Clark Fork Task Force should continue to work with legislators**. Parties also might not be a bad idea. It was suggested to don't just use email for communicating with each other and the public.

Blackfoot

Presenters: Megan – Clearwater Resource Council

Brian McDonald – Blackfoot Challenge

Fred Lurie– Trout Unlimited

Issues

There are two primary issues: **water quantity** and **water quality**.

For **water quality**:

Upper, Middle, Lower TMDLs are established, but much water quality success has been made due to **fisheries improvement projects**.

Point source and **non-point source pollution** affects water quality in the Blackfoot basin. **Mike Horse Dam** is a point source of pollution. **Erosion** from natural and anthropogenic sources, including roads, eroding banks, and upland sediments are non-point sources. Much progress has been made in tribes with fisheries projects.

Water quality restoration plans are linked to TMDLs, which can be used by anyone.

Monitoring is severely needed for all water and fish parameters!!!

Fish, Wildlife and Parks has a restoration plan.

The best promoter of projects is **highly visible, on-the-ground projects**.

Land use is an issue in Clearwater.

Individuals with expertise joining local groups is very important – personnel and expertise is a limitation for progress.

What makes things happen? The novel *A River Runs Through It* and the **McDonald Meadows Gold Project** proposal galvanized people and funds to accomplish much.

For **water quantity**:

The **Drought Management Plan** (2000) – slips off the radar screens of locals, but the **water energy efficiency program** is playing an important role in modifying irrigation practices.

There are no huge **supply/demand imbalances** in the Upper Blackfoot.

Monitoring and enforcement are lacking and are important to have.

The **loss of USGS gage funding**, such as the loss of Nevada Creek Gage, is a problem.

More information is needed for this basin about **surface water/groundwater interactions**.

Communication between key staff people for groups is important to continue progress.

A question that arose during the discussion: is there any critical work that needs yet to be addressed that hasn't been yet? Which can be considered now given previous successes in the basin?

Bitterroot

The Bitterroot Forum, Montana Water Trust, and the Lolo Watershed Group are watershed groups involved in the basin.

The forum came together as groups in the basin wanted to bring in agricultural community for discussion and education.

Water and the **right to be using water** is a concern, especially establishing who has rights (agricultural, recreational, fish).

As for irrigation in the Bitterroot River basin, **flood-based irrigation being converted to sprinkler-based irrigation** is an issue.

Growth in the Bitterroot River basin continues to be an issue.

Aging infrastructure is a cause for concern, as people are unsure how to fund maintenance.

The Bureau of Reclamation has been an active partner in the Bitterroot River basin with

Non-Bureau of Reclamation infrastructure repair and maintenance.

Agricultural landscape & conversion in the main Bitterroot River is different than **forest landscape issues** in Lolo.

There appears to be a **national lack of understanding about water resources and monetary needs**. Water quality issues are fairly well-addressed, but not quantity issues.

As for **water marketing**, the Bureau of Reclamation is available for pursuit of such an activity (perhaps in conjunction with the Montana Water Trust).

Sub-basin plan from Bonneville Power Administration/North West Power and Conservation Council – This is also occurring in the Blackfoot, Kootenai, and Flathead basins, which already have plans in place. These plans are **integrating biological and water management** for fish and wildlife habitat needs.

Dewatering of streams is something that needs to be continually monitored in the Bitterroot basin.

As for **erosion**, many 310s are in the basin due to channel migration and development.

New development is an issue.

Cross-jurisdictional relations need to be strengthened.

As the number of exempt wells continues to grow, the **impacts associated with exempt wells** needs to be understood.

Water rights are being **separated from apportioned lands**.

Neighbor-to-neighbor partnerships are key. Partnerships should start locally and move out.

Participate – have local leaders become knowledgeable and able to communicate local concerns and issues to Water Protection Programs.

Drought mitigation is not addressed. Harvey Hackett says to irrigate early and hard to establish strong return flows as a solution.

Powell County has a quarter-section minimum lot size in the Blackfoot portion of that county.

Gerald Mueller said the **water quality/quantity bifurcation** has been attempted to be dealt with by the state in the past, but to no avail.

An audience member asked if the [state] constitutional right to clean and healthful environment lead to rectifying this disconnect. Gerald Mueller responded that the constitution also recognizes private property rights, and that we may see this arise in courts in future. The **public trust doctrine** was invoked in regards to stream dewatering in the Bozeman court, but the decision in favor of this was ultimately overturned.

Flathead

Projects

The **Bigfork stormwater project** is meant to steer away water into Flathead Lake.

The **Woods Bay Sewer District project** is also in effect.

Funding has been allocated by the state legislature for a **wastewater management district** over the entirety of the Flathead basin.

Flathead county river commission needs to figure out how to employ **Bureau management practices** to improve water quality.

The League of Cities is developing **TMDLs for non-point sources** (based on information from the DEQ Nutrient Working Group).

There is a **LIDAR mapping project** for the Flathead floodplain, wetlands, riparian, shallow aquifers. This is being executed by Flathead and Lake Counties and the City of Whitefish (funded by DNRC Renewable Resource Grant RRG funds).

The CSKT is developing a memorandum of understanding regarding TMDLs.

Compact negotiations continue to be underway between the CSKT and the state government.

Water quality efforts, including combating both point and non-point source pollution, are occurring all over the basin.

Kerr Dam operations/management responsibilities will be given to the CSKT in 2015.

As for **trans-boundary issues** (involving projects in Canada) – the **British Petroleum Cline Mountain** (coal mining mountain-top removal) project is temporarily pushed out (Cline is on hold); but, some prospecting is still happening. **Rio Tinto** is now in the Elk Basin doing subsurface mining, but historically these mining projects went to the surface. The Flathead Basin Commission is part of the steering committee for the Crown Managers project. The relationships between agencies are good, but the relationships between state and provincial governments are not.

Federal Irrigation Project – a Cooperative Management Entity (CME) is to be established with the CSKT and local irrigation districts.

There are **mitigation projects for Hungry Horse and Kerr Dams**, as well as for fisheries.

Water right workshops for Realtors are being conducted.

Lakeshore work by tribes in Polson and Blue Bay?

The **Stillwater TMDL project** is ongoing.

The Flathead Conservation District (FCD) is undertaking a large media campaign to raise money to **mitigate dam impacts on fish**.

Planning for FCD includes involvement with the 310 program, realtor education, landowners (ranchettes) participating in Flathead Basin Commission and other groups.

Research is being undertaken on **climate change** and **water quality**.

The University of Montana – IceWater project is working on **surface/groundwater interactions** and **human dimensions of water use in the basin**.

An **invasive species management plan** is to be developed for Flathead Lake.

The Flathead River basin is considering a **water quality district**.

Critical lands mapping needs to be done, along with shallow aquifer mapping, concerns with pharmaceuticals, etc.

Issues

The **basin's water budget** needs to be quantified!

Impacts from human use need to be better understood.

GIS can be used for subdivision approvals to find adequate water.

We need to pay attention to the **ecosystem's resiliency**, along with **sustainable activities in the basin**. We need to find out how the hydrological system is sustaining the water related values in the basin. We need more and better knowledge about the system and its status.

Climate change needs to be considered regarding water quality and quantity.

Growth and its **relation to water quality and quantity** needs to be explored - TMDLs.

Should we focus on changing human expectations for the basin for the future?

How to Address these Issues

Improved and comprehensive measurement and monitoring needs to be implemented.

Cyber-infrastructure should be created for measuring and monitoring.

Water use efficiency should be improved.

The question of **who is responsible for water management** – local or centralized - needs to be clarified, with local management being the preferable option.

There is a need for **continued inter-basin dialog**. The basins must meet with a goal to accomplishing something tangible. In order to accomplish this, a **simple strategic plan** should be developed.

Roundtable Action Items/Next Steps

An informational sheet on funding sources was distributed by Ann Schwend.

Questions from Ann:

Who should be responsible for water management?

Who owns the Task Force water plan? How was it developed?

Gerald: Hydropower water rights and future growth issues were ironed out in an agreement between Avista and State, and dropped by FERC. Then the Clark Fork Task Force formed to develop the water plan. Appointments were initially made by the Montana Consensus Council in a self-selected manner, then worked to develop a plan meeting the legislature's directive. The plan looked for the best solution for all parties involved.

Why look to the Hungry Horse Reservoir for water? (question from Harvey Hackett – asked Gerald to describe this)

Brianna – the enforcement issue is key.

Ann Schwend mentioned that without a water cop, our local dialogue is very important. Education, involving legislators in local water issues, and getting people out on the ground are all important in contributing to local dialogue.

More technological assistance is needed by all sub-basins (which was recognized in the

audience by nods). The implementation of cyber-infrastructure and dissemination of information and data needs to happen.

As for what improved inter-basin dialogue looks like, suggestions included an email listserv for group managers and directors of groups, other forums, big parties, and more events of this sort (roundtable conferences).

Ann Schwend and the DNRC are involved with the Montana Watershed Coordinating Council. The Council was described as currently loosely organized and underfunded.

It is key that the Montana Water Resources Association and Mike Murphy are involved with efforts such as this.

Larry Draper and canal-related organizations should be consulted.

As for education, partner with groups that already do this (Clean Water Education Partnership, Watershed Education Network, etc.). The Montana Watershed Coordination Council is using VISTA position to do more education.

Groundwater is an issue that wasn't addressed fully enough here – should devote more attention to this.

State & Other Watershed Funding

See handout (Appended at rear).

Tester's Watershed Management Act is for all western states, under the public lands omnibus bill. The bill is to be filtered through the Department of Interior and the BOR, and is still in process for implementation. For capacity building for watershed groups, Tier 1 (new groups) can get up to \$100,000, Tier 2 groups \$200,000, and up to \$1 million for large organizations. This may present opportunities for collaborations.

Renewable Resource Grant and Loan Program Planning Grants, the DNRC has funds for consultants to develop larger projects for later funding by legislature, and Reclamation and Development Grants Program Planning Grants are very similar for mine reclamation work.

For DEQ 319 grants, annual applications are due in September.

The Montana Fish, Wildlife & Parks Department have a Future Fisheries program, and fish screens and passage program (see website).

The DNRC has irrigation development program loans.