

Montana Water Supply Initiative

A Watershed Approach to Updating the Montana State Water Plan 2013-2015

Summary of Phase 1 – Public Scoping Process

Introduction

The Department of Natural Resources and Conservation (DNRC) is currently updating the state water plan as directed by the Montana Legislature in Section 85-1-203 MCA. This report summarizes the results of the public scoping process conducted in the Clark Fork-Kootenai, Yellowstone, upper Missouri and lower Missouri basins between March and November 2013.

Format of Public Scoping Process

DNRC utilized contracted services to coordinate and facilitate the public scoping process. Each contractor was responsible for conducting five to six public meetings in their respective basin, recording issues and concerns raised by the public, and reporting back to DNRC. Meeting notice included interviews and paid advertisements in local papers, radio spots, listservs, regional agricultural publications, local newsletters and word-of-mouth. Public input was also collected via surveys and written comments.

Summary of Attendance at Scoping Meetings		
Basin	Meetings	Attendance ¹
Clark Fork-Kootenai	6	169
Upper Missouri	5	123
Lower Missouri	6	81
Yellowstone	6	148
Total	23	521

Public scoping in each basin followed a similar format, with contractors given discretion to modify the format to fit local needs. After a series of short informational presentations by DNRC staff, participants broke into small groups to brainstorm and discuss the water management issues they felt DNRC should address. These small group sessions concluded with each group reporting their top issues back to the larger group of meeting participants. At the end of the scoping process, each contractor worked with their Basin Advisory Council to narrow down and prioritize the issues to be addressed in Phases 2 & 3 of the state water plan update.

Going forward, DNRC will work with each BAC's technical advisory group to prepare and present information on the prioritized issues. This information will serve as the basis for each BAC to develop recommendations on options and strategies for meeting future demands while satisfying existing consumptive and non-consumptive uses. DNRC will provide a report containing recommendations for meeting Montana's future water needs to the 2015 Montana Legislature

Timeline

- Phase 1 – Establish BACs, public scoping process – 1/13 – 12/13
- Phase 2 – Data compilation, alternatives development – 12/13 – 2/14
- Phase 3 – Recommendations development – 2/14 – 5/14
- Draft Plan – 9/14
- Final plan – 12/14

¹ Participants unaffiliated with the Basin Advisory Councils or DNRC

1
2.53
72

Summary of the State Water Plan Update

Issues Scoping Process in the Clark Fork / Kootenai River Basins

Public Scoping Process

In October and November of 2013, the Clark Fork Task Force (Task Force) and DNRC hosted six public scoping meetings in the Clark Fork and Kootenai River basins to give citizens an opportunity to identify and prioritize water resources issues that should be addressed through the state water planning process (Table 1). Meeting locations were chosen based on input from the Task Force and DNRC. All meetings were publicized through via local newspaper ads, radio spots, various listservs, an online video, and word-of-mouth. Public input was also gathered by way of an online survey

Table 1: Attendance At Scoping Meetings in the Clark Fork and Kootenai Basins

Location	Date	Public Attendance
Missoula – UM Campus	Oct. 15	41
Hamilton – City Hall	Oct. 17	30
Anaconda – Fairmont Hot Springs	Oct. 24	13
Kalispell – Best Western	Oct. 29	38
Libby Dam Visitors Center	Oct. 30	21
Deer Lodge – Powell County Community Center	Nov. 13	26
Total		169

between October 15th and November 15th. The public meetings were well attended with a total of 169 participants unaffiliated with the Task Force or DNRC. The online survey generated 57 responses from individuals representing 17 unique zip codes. DNRC contracted with the University of Montana Center for Natural Resources and Environmental Policy (CNREP) to facilitate the process.

Results

Participants in the scoping meetings identified 308 individual water management issues and concerns in the Clark Fork and Kootenai River basins. CNREP staff organized all of the issues into 21 issue categories. Overarching themes included balancing existing water demands with future agricultural, municipal, and industrial needs; improving administrative and institutional tools for water management; and protecting natural systems including fisheries, in the future.

While all the issue categories are important and valid, the Task Force will not be able to address all of them in the 2015 update. Based on input received from the public, the Task Force has preliminarily decided to focus their energies on the following issue categories:

1. Meeting Future Water Demand, which includes future growth and development (industrial, municipal, and agricultural), water storage, and groundwater wells;
2. Ensuring Natural Systems Health, which includes fisheries, instream flow, riparian areas, and water quality;
3. Maintaining Water Availability, which includes water conservation and efficiency and drought readiness; and
4. Administering Water Rights, which includes the water rights change process, water rights enforcement, water allocation, and adjudication.

Next Steps

In January 2014, the Task Force and DNRC will begin work to frame each of the categories above in a way that will lead to the development of options and alternatives for water planning strategies and recommendations.

Additional Information

Montana State Water Plan 1987 – 2003

http://dnrc.mt.gov/wrd/water_mgmt/state_water_plan/historic_water_plan.asp

Montana State Water Plan – 2015 Update

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

State Water Plan Update for the Clark Fork River Basin

http://dnrc.mt.gov/wrd/water_mgmt/state_water_plan/clarkfork/default.asp

Clark Fork & Kootenai River Basins Water Resources Issues Scoping Report

http://www.dnrc.mt.gov/wrd/water_mgmt/state_water_plan/clarkfork/scoping_report.pdf

Online Video Promoting Water Planning Process in the Clark Fork and Kootenai River Basins

<http://vimeo.com/76817449>

Summary of the State Water Plan Update

Issues Scoping Process in the Upper Missouri River Basin

Public Scoping Process

In September and October 2013, the Upper Missouri River Basin Advisory Council (BAC) and DNRC hosted five public scoping meetings in the Upper Missouri River Basin to give citizens an opportunity to identify and prioritize water resources issues that should be addressed through the state water planning process (Table 1). All meetings were widely advertised in local print media and through BAC member and organizational networks. The meetings were attended by a 123 participants unaffiliated with the BAC or DNRC. Small group discussions, written comments and an online comment form served as the BAC's primary means of gathering public input. DNRC contracted with Ms. Kathleen Williams to provide coordination and meeting facilitation services for the Upper Missouri River Basin scoping process.

Table 1: Attendance at Scoping Meetings Held in the Upper Missouri River Basin

Location	Date	Public Attendance
Great Falls	Sept. 30	26
Conrad – Pondera Golf & Country Club	Oct. 1	18
Helena – Holiday Inn	Oct. 2	17
Bozeman – Holiday Inn	Oct. 8	24
Dillon – UM Western	Oct. 9	38
Total		123

Results

Participants in the scoping meetings raised a variety of concerns and perspectives on water resource management in the Upper Missouri Basin. Since many of the issues over-lapped and were inter-related DNRC's facilitator summarized them into fifteen issue "themes". BAC members met in Fort Benton on Oct 24-25th for a work session to review and prioritize the summarized issues gathered during the scoping process. The top ten themes include:

1. Increase Water Storage/Retention – including the exploration of both traditional (structural) and non-traditional (natural) options to capture high flows and retain them in the basin longer for additional flexibility in the late season and to accommodate expanded demand.
2. Better Understand and Manage Surface and Groundwater Interaction – including the conjunctive management of surface water and groundwater; the potential to use canals for aquifer recharge, the protection of senior users from exempt well depletions, and better understanding return flow conditions.
3. Recognize Water's Role in the Future of State and the Economy – including the need to provide for the continuation of existing uses while providing for growth for industry, agriculture, and municipal and recreational uses.
4. Maintain and Enhance Instream Flow – including balancing instream and agricultural needs, and incentivizing participation in flow enhancement projects.
5. Promote Local Cooperative Efforts – including the need to support and fund local watershed/user group/stakeholder cooperative efforts related to water efficiency, conservation, and pooled management.
6. Increase Amount, Centralization, Diversity, and Access to Water Data – including the importance of accurate, high-quality, consistent and accessible water resources data from varied sources; the

value of good information in fostering collaborative water management and increasing accountability in water use; and the need for additional measuring devices (and funds for them).

7. Document and Project Water Use and Relationships – including the need for information related to current water use, how those uses affect others, related trends, and projections by water use sector; the shift from agricultural land use to residential; consumptive use impacts downstream; and changing irrigation practices.
8. Improve Water Use Efficiency and Conservation – including promoting water efficiency and conservation through education and incentives; infrastructure upgrades and improvements; and potential impacts of efficiency improvements such as increased water consumption and effects on return flow.
9. Assess and Project Available Water Supply – including a better collective understanding of the water cycle, and available water; creating a water balance model for the basin; specific documentation of "available" water, including stored/contract water in reservoirs; and consideration of climate variability on supply, timing, and use, including a likely pattern of earlier snowmelt.
10. Analyze Water Transfers/Marketing/Banking and Scope of Water as Transferable Property – including the need to plan for more water transactions; the potential for water banking; and concern that increasing values of water (and the ability to sever water from the land) may impact the affordability of family farms, estates and property transfers.

Next Steps

In 2014, the Upper Missouri BAC and DNRC will refine each of the categories above and develop options and alternatives for water planning strategies and recommendations that will be forwarded to DNRC for consideration in the development of a state-wide water resource plan.

Additional Information

Montana State Water Plan 1987 – 2003

http://dnrc.mt.gov/wrd/water_mgmt/state_water_plan/historic_water_plan.asp

Montana State Water Plan – 2015 Update

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

State Water Plan Update for the Upper Missouri Basin

http://dnrc.mt.gov/wrd/water_mgmt/state_water_plan/upper_missouri/default.asp

Upper Missouri Basin Advisory Council - Issues Scoping Report

http://dnrc.mt.gov/wrd/water_mgmt/state_water_plan/upper_missouri/issues_scoping_report.pdf

Summary of the State Water Plan Update Issues Scoping Process in the Lower Missouri River Basin

Public Scoping Process

In October and November of 2013, the Lower Missouri Basin Advisory Council (BAC) and DNRC hosted six public scoping meetings in the Lower Missouri River Basin to give citizens an opportunity to identify and prioritize water resources issues that should be addressed through the state water planning process (Table 1). All six meetings were publicized through newspapers, regional agriculture publications, watershed newsletters, and television and radio stations. Paid display advertisements were also placed in newspapers serving the six areas where meetings were scheduled. The public meetings were attended by 81

Table 1: Attendance at Scoping Meetings Held in the Lower Missouri River Basin		
Location	Date	Public Attendance
Lewistown – FWP Regional Office	Oct. 8	14
Glasgow – Cottonwood Inn	Oct. 23	1
Culbertson – Public Library	Oct. 24	13
Roundup – St. Benedict's Church	Oct. 30	15
Harlowton – Kiwanis Youth Center	Oct. 31	22
Havre – Great Northern Inn	Nov. 7	16
Total		81

participants unaffiliated with the BAC or DNRC. Some participants provided written testimony for inclusion in the meeting record. DNRC contracted with Milton Mediation & Facilitation to facilitate the scoping process.

Results

Following the public scoping meetings, BAC members held a two day meeting in Lewistown to go over all of the information and issues gathered during the listening sessions and offered through written comments. Since many of the issues over-lapped and were inter-related, the BAC went through a process of assigning issues to one of five more general categories.

1. Surface Water Availability and Quality – which includes information required to determine the amount of water that is legally and physically available for existing and future uses; options to capture additional spring runoff; voluntary conservation programs, or in the case of industrial water use, development of recycling technology; addressing aging infrastructure, effects of poor water quality on domestic and agricultural uses; and better coordination among the state agencies charged with managing water quantity and quality.
2. Groundwater Availability and Quality – which includes mapping and characterizing aquifers that might provide opportunities for future uses; increased understanding of recharge rates, quality, and usage of groundwater; better understanding of the interactions between groundwater and surface water; and long-term monitoring of wells to gather information on changes in water quality and groundwater levels in response to climate variability and nearby water use.
3. Water Management – which includes fair enforcement of water rights decrees; protection of senior water rights; the need for streamflow gages to support the work of water commissioners; and management of water levels in reservoirs in the Lower Missouri basin is critical to recreational uses and to the businesses that depend upon those uses.

4. Future Needs – which includes recognition that Montana will need more water rather than less in the future; factors, including climate change, that may affect water supply; changes in the timing of spring run-off may impact access to available water necessitating revisions of water management practices; and recognition that water quantity and quality are directly related, and that poor water quality impacts some types of beneficial use.
5. Implementation Strategies – which include reservations about how a state-wide water use plan can be implemented; the need for local watershed organizations to serve as examples of the positive results of communication and collaboration on local water management issues; and the need for the state-wide water use plan to be adaptable and responsive to changing water resource supply and demand.

Next Steps

Members of the Lower Missouri BAC will meet again in January, 2014, to begin the process of developing alternatives and recommendations that will be forwarded to DNRC for consideration in development of a state-wide water resource plan.

Additional Information

Montana State Water Plan 1987 – 2003

http://dnrc.mt.gov/wrd/water_mgmt/state_water_plan/historic_water_plan.asp

Montana State Water Plan – 2015 Update

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

State Water Plan Update for the Lower Missouri Basin

http://dnrc.mt.gov/wrd/water_mgmt/state_water_plan/lower_missouri/default.asp

Lower Missouri River Basins Water Resources Issues Scoping Report

http://www.dnrc.mt.gov/wrd/water_mgmt/state_water_plan/lower_missouri/scoping_report.pdf

Summary of the State Water Plan Update Issues Scoping Process in the Yellowstone Basin

Public Scoping Process

To gather citizen input on water management issues and concerns, the Yellowstone Basin Advisory Council (BAC) and DNRC hosted a series of six public meetings across the Yellowstone Basin during March, April, and May (Table 1). Meetings were publicized via radio spots, newspaper ads, direct mail and personal solicitation. The public meetings were attended by 148 participants unaffiliated with the Yellowstone BAC or DNRC. Roundtable discussions, Q-Sort surveys, demographic surveys, and submittal of written comments

Location	Date	Public Attendance
Billings – MSU Billings, Downtown Campus – Kickoff Meeting	March 18	8
Glendive – Dawson College	March 27	24
Big Timber – Carnegie Library	April 12	43
Forsyth – Public Library	April 24	32
Billings – MSU Billings, Downtown Campus	May 7	30
Billings – MSU Billings, Downtown Campus – Wrap-up Meeting	May 8	11
Total		148

served as the BAC's primary means of gathering public input. DNRC contracted with Montana State University, Billings to provide coordination and meeting facilitation services for the Yellowstone scoping process.

Results

Participants in the scoping meetings raised a variety of concerns and perspectives on water resource management in the Yellowstone Basin. Over 34 hours of roundtable discussions were documented via audio-recordings. In addition, notes were collected by scribes assigned to each discussion table. Analysis of the notes and recordings resulted in a list of 28 separate, but often related, key issues and concerns voiced by the public. The Q Sort surveys revealed three concerns that are important across the basin: 1) water management will become more complex; 2) the lack of water information hinders water development; and 3) the key issue for water planning is to prepare for severe droughts and precipitation events. In addition, 17 parties submitted written comments, ranging in focus from concerns over instream flows, to concerns over upper basin and lower basin priorities.

While all the issue and concerns raised by the public are important and valid, the Yellowstone BAC will not be able to address each of them in the 2015 update. Based on input received from the public, the Yellowstone BAC has preliminarily decided to focus their energies on the goal of increasing water availability for existing and future users by addressing the following issues:

1. Drought Readiness – At issue are drought preparedness and the mechanisms available to assist users in the effective allocation of water during drought.
2. Water Information – At issue is the adequacy of existing water information, along with its availability and ease of access.

3. Integrated Water Quality and Quantity Management - At issue is the means by which the seemingly contradictory goals of increasing beneficial use of water and maintaining water quality are balanced in the existing administrative and regulatory framework.
4. Water Administration and Beneficial Use - At issue is the adequacy of the existing water administrative system and its ability to enable water users to achieve fairness under the law.
5. Watershed Planning - At issue is the capacity to solve water-related problems at the watershed-level.
6. Groundwater/Surface Water Nexus - At issue is the adequacy of existing resources to adequately characterize ground and surface water for purposes of informed water resource decision-making.
7. Instream Flow Maintenance - At issue is the sufficiency of existing mechanisms to maintain instream flows within the prior appropriation doctrine.
8. Water Storage - The desire to store unappropriated water for later release and beneficial use is long-standing. Any evaluation of opportunities for storage of water needs to include: enhanced wetland and floodplain function, the effects of flood irrigation on late-season flows, aquifer storage and retrieval possibilities, and off-stream multi-purpose storage.

Next Steps

The Yellowstone BAC is currently working to frame each of the categories above in a way that will lead to the development of options and alternatives for water planning strategies and recommendations.

Additional Information

Montana State Water Plan 1987 – 2003

http://dnrc.mt.gov/wrd/water_mgmt/state_water_plan/historic_water_plan.asp

Montana State Water Plan – 2015 Update

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

State Water Plan Update for the Yellowstone River Basin

http://dnrc.mt.gov/wrd/water_mgmt/state_water_plan/yellowstone/default.asp

Yellowstone River Basin Advisory Council – Membership & Report of 2013 Public Scoping Activities

http://www.dnrc.mt.gov/wrd/water_mgmt/state_water_plan/yellowstone/scoping_report/default.asp