

Building Strong Collaborative Relationships for a Sustainable Water Resources Future:

STATE OF MONTANA

SUMMARY OF STATE WATER PLANNING

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The findings contained in this report are based on the information collected from the literature search and interviews for this initiative and should not be construed as an official Department of the Army position, policy or decision unless so designated by other official documentation.

STATE OF MONTANA

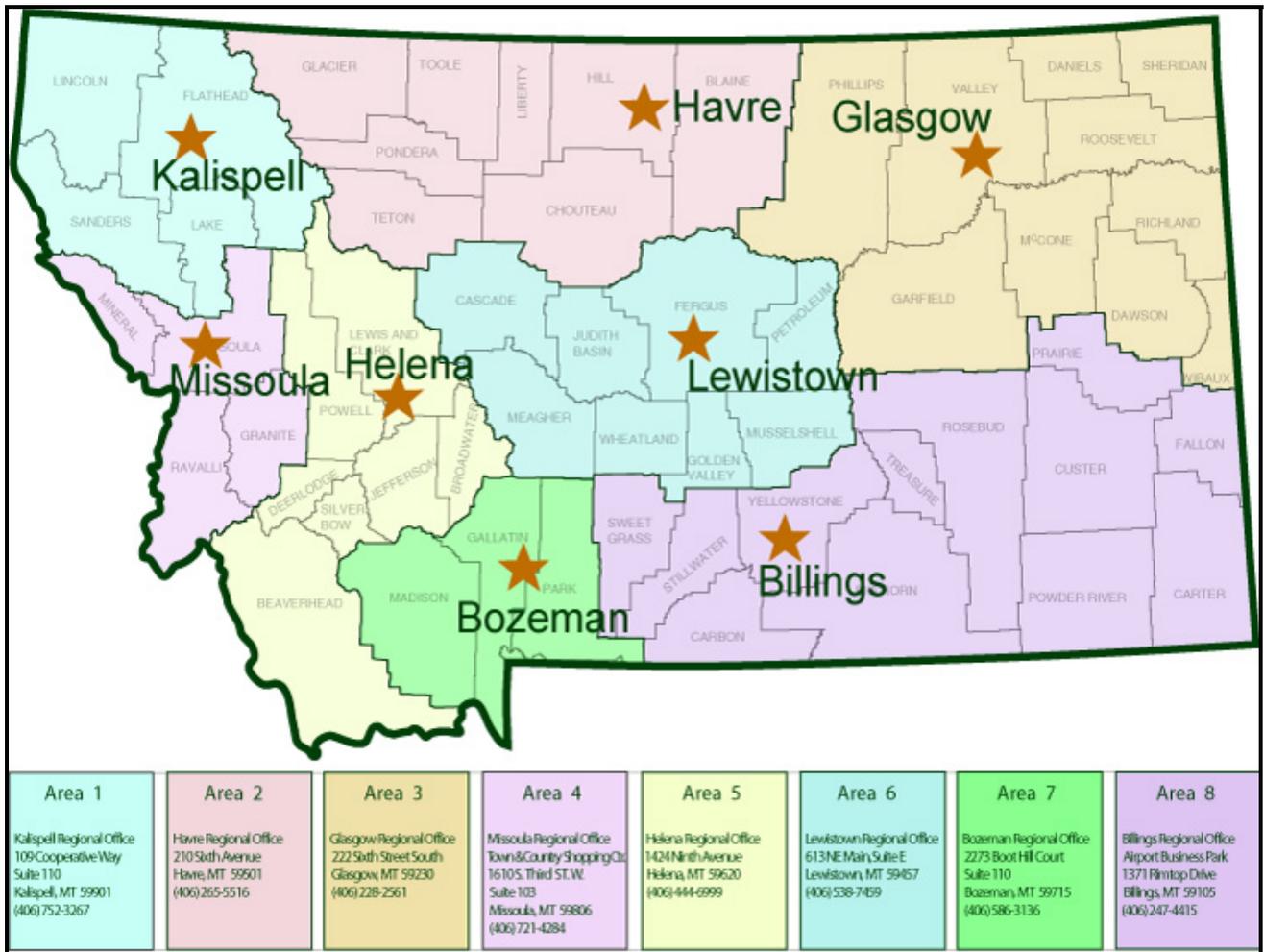


Figure 1. Regional Water Offices

1. RESPONSIBLE STATE AGENCIES/REGIONAL ENTITIES

The Montana Water Resources Division (WRD), within the Department of Natural Resources and Conservation (DNRC), is the water policy agency for the State of Montana. WRD is responsible for the use, development and protection of Montana’s water. WRD is tasked with developing and recommending water policy to the DNRC director, governor, and legislature. Eight regional offices, as shown in Figure 1, and five state water bureaus make up the WRD. The regional offices are primarily responsible for water rights administration and floodplain management assistance to local governments. The five bureaus include: (1) Adjudication, (2) Water Management, (3) Water Rights, (4) State Water Projects, and (5) Water Operations [Source [1]]. Their responsibilities include ([Source [2]]):

1. Adjudication – assists the Montana Water Court with water rights claims and provides the Water Court with basin summary reports (the remainder 30 basins out of 85 are due by 2015)
2. Water Rights – assists the Water Court with adjudication, new water rights, changes in water rights, and maintaining the water right records
3. State Water Projects – operation and maintenance of state owned water projects: 22 dams, 250 miles of irrigation canals, and one 10-megawatt hydropower facility
4. Water Operations
 - a. Dams Safety – ensures that dams with the potential to cause loss of life downstream if they fail are properly built, managed, and maintained
 - b. Floodplain Management – assists the 110 local floodplain management programs in reducing loss of life, property damage, and loss of functional floodplain with wise planning
 - c. Water Measurement Program – provides technical information and water measurements for stream diversions where disputes or dewatering impacts have ensued
 - d. Board of Water Well Contractors – enforces water well construction standard and licenses well drillers and contractors.

Within WRD, the Water Management Bureau (WMB) is responsible for planning processes and development of the Montana State Water Plan. Responsibilities of the WMB include (Source [2]):

- Developing and analyzing policies on statewide water resource issues
- Representing and protecting Montana’s water interests in regional and international river basins
- Providing water education and outreach programs
- Assisting local watershed groups and water users in solving water management problems
- Providing water right and other types of technical support to DNRC bureaus, Reserved Water Rights Compact Commission, and other governmental entities

Key agency contacts are provided in Table 1.

Table 1. Key Agency Contacts

DNRC – Director	WRD – Administrator	Water Management Bureau – Chief
Mary Sexton 1625 Eleventh Ave PO Box 201601 Helena, MT 59620 (406) 444-2074 http://dnrc.mt.gov/default.asp	John Tubbs 1424 9th Avenue PO Box 201601 Helena, MT 59620-1601 (406) 444-6601 jtubbs@mt.gov http://dnrc.mt.gov/wrd/default.asp	Vacant 1424 9th Avenue PO Box 201601 Helena, MT 59620-1601 (406) 444-6633 http://dnrc.mt.gov/wrd/water_mgmt/default.asp

Several Montana state agencies also conduct water planning processes and participate in water policy development. The Montana Department of Environmental Quality (DEQ), among their many duties, is responsible for issuing water permits and providing assistance to entities interested in protecting Montana waters. The Permitting and Compliance Division and the Planning, Prevention and Assistance Division host the bureaus within DEQ that pertain to water management. Additional local, state, and federal agencies currently involved with Montana's water resources are listed in Table 2.

Table 2. Entities Involved in Montana's Water Resources Planning

Agency	Duty
Montana DEQ – Planning, Prevention, and Assistance Division	Water Quality Monitoring, Develops Watershed Restoration Plans
Montana DEQ – Permitting and Compliance Division	Water Protection and Water Quality Information
Natural Resource Information System	Comprehensive Water Resources Data Management
Montana Water Center	Sponsors Water-Related Research, Provides Education
Montana Water Course	Supports Water Resource Decision Making, Provides Education
Montana Watershed Coordination Council	Encourages Citizen Participation in Watershed Discussions, Provides Information
Montana Fish, Wildlife, and Parks	Angler and Recreation
Montana Ground-Water Information Center – Montana Bureau of Mines and Geology	Groundwater Data
U.S. Environmental Protection Agency	Wetland & Watershed Information
U.S. Geologic Survey – Montana Water Science Center	Long-Term Quantitative and Qualitative Data for Streams, Reservoirs, and Groundwater; Short-term Interpretive Water Resource Investigations
Natural Resource Conservation Service – Montana Water and Snow	Drought Information, Riparian & Floodplain Management, Snow Surveys, Urban Conservation, Water Quality, Water Resources
U.S. Bureau of Reclamation – Reservoir Storage	Manage, Develop, and Protect Water and Related Resources

2. STATE/REGIONAL WATER PLANNING STATUS

Montana has a long history of water planning. The Montana Irrigation Commission developed an irrigation plan by county from 1919 – 1921 (Source [3]). In 1934 the State Water Conservation Board was established in which the focus on water planning was mainly water project development for agriculture. Initially aimed toward providing relief from the Great Depression, in 33 years (1932 to 1965), 180 projects were constructed with federal funding. During this time, the State Water Conservation Board was also tasked with collecting information that was slated for creating a comprehensive state-wide water conservation plan. A comprehensive plan was never completed; however, the information and experience that was gathered was eventually put toward the first state water planning document (Source [4]).

From 1965 to 1981, the U.S. Congress passed the Water Resources Planning Act, which defined the nation's concept of water planning and provided states with funding for planning activities. The Act also created river basin commissions to oversee planning for the development and protection of the nation's major river basins. The result of the river basin plans proved to be expensive with an inability to generate action (Source [2]).

The *Framework Report: A Comprehensive Water and Related Land Resources Plan for the State of Montana* was completed in October 1976 as Montana's first state-wide water planning document. The legal authority for the Framework Report was the Montana Water Resources Act of 1967, which designated the Montana Water Resources Board as the responsible agency for developing the plan. In 1971, the Water Resources Board became the Water Resources Division under the DNRC. The Framework Report was intended for two uses:

1. *Serve as a reference for legislators, government officials, individuals, and organizations interested in existing conditions governing the availability, use, and management of water within the state*
2. *Used in comprehensive river basin planning as a guide regarding approaches to solving short- and long-term water problems* (Source [5]).

The Framework Report may be viewed at:

http://dnrc.mt.gov/wrd/water_mgmt/planning_reports/framework/default.asp

From 1981 – 1987, President Reagan ended grant funding for state water planning and eliminated the river basin commissions. With limited funding, Montana changed its planning focus to the most pressing water problems and solutions. Despite a lack of funding, state water planning was deemed important by the state of Montana. Importance was highlighted in the U.S. Supreme Court Ruling: Colorado vs. New Mexico, 1984 in which a state's water plan could benefit a state's position in court (Source [4]).

In 1987, the DNRC decided on a new strategy for developing a state water plan. This strategy was modeled after an approach used by Kansas in which a collection of short, individual management issues with pamphlet-style components would make up the state plan. This format was believed to be flexible allowing for regular plan updates (Source [6]). The DNRC also decided that a water planning approach allowing individuals and groups affected by water

management decisions to directly participate in management decisions and policy/program development will result in collaborative problem solving (Source [7]). With the advent of a new strategy came the State Water Planning Advisory Committee to oversee development of the state plan. This Council consisted of directors of DNRC, Department of Health and Environmental Sciences, and the Department of Fish, Wildlife, and Parks; a governor representative; four legislatures; two members of the public in the water management field (Source [8]).

Montana's State Water Plan 1987 to 1999 consists of 15 plan sections individually prepared by the Water Resources Division in collaboration with: the Governor's Office; the Board of Natural Resources and Conservation; the Legislature; the Legislature's Water Policy Committee; the State Water Plan Advisory Committee; a DNRC appointed Steering Committee; and the public. The DNRC is responsible for formulating and adopting *Montana's State Water Plan* under Section 85-1-203, Montana Code Annotated (Source [8]). The Plan is split into two Parts:

Part 1 – Background and Evaluation

- [State Water Plan Development: A Revised Approach](#) – January 1987
- [Montana State Water Plan Handbook](#) – January 1993
- [State Water Plan Implementation Update](#) – September 1993
- [State Water Plan Evaluation - Decision Summary](#) – November 1994
- [Evaluation of the State Water Planning Process and Implementation](#) – August, 2003^{Quest. 1}

Part 2 – Plan Sections

- [Agricultural Water Use Efficiency](#) – February 1989
- [Instream Flow Protection](#) – February 1989
- [Federal Hydropower Licensing and State Water Rights](#) – February 1989
- [Water Information System](#) – February 1989
- [Water Storage](#) – December 1990
- [Drought Management](#) – December 1990
- [Integrated Water Quality and Quantity Management](#) – November 1992
- [Upper Clark Fork River Basin Water Management Plan](#) – December 1994
- [Montana Groundwater Plan](#) – February 1999
- [Clark Fork Basin Water Management Plan](#) – January 2005

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

More recent reports that are not included in the State Water Plan are:

- DNRC Water Resources Division Strategic Plan 2005 to 2010
- Governor's Report on Water Shortage – January 2007
- Governor's Drought Report – May 2008 (Governor's Drought Advisory Committee 2-15-3308 MCA. For more information please see www.drought.mt.gov).

The DNRC Water Resources Division Strategic Plan 2005 to 2010 was created to guide the work of the Water Resource Division in addition to giving legislators, the executive branch, and the public an understanding of the work and goals of WRD. The idea of the Strategic Plan is to

create a work plan at the beginning of the year and then assess the completion of the work plan at the end of year. Evaluations will follow with an allocation of resources and staffing needs to plan for the next year (Source [9], [10]).

The current status of Montana's water planning is stated below:

The height of the state water planning process was from 1988 to 1993. This was when the Water Policy Committee was active in the legislature. Since 1993, there has been more focus away from statewide policy and working more on a watershed basis.

MWCC Montana Ground Water Work Group Meeting Minutes, Nov. 29, 2007.

http://mwcc.montana.edu/about/workgroups/docs/GW_MWCC_Minutes_Nov2007.doc

3. WATER MANAGEMENT VISION AND GOALS

Water Resources Division Motto: "The Water Resources Division promotes and coordinates the wise use and conservation of Montana's water resources for current and future generations."

<http://dnrc.mt.gov/wrd/default.asp>

Water Resources Mission Statement:

The Water Resources Division is responsible for promoting and coordinating the beneficial use, conservation, protection, and development of the Montana's water resources. The Water Resources Division carries out its duties for the purpose of promoting the general welfare and economic and social prosperity of the people of Montana. Sound coordination of the development and utilization of the state's waters allows the Water Resources Division to protect existing uses and to promote adequate future supplies for domestic, industrial, agricultural, recreation, the conservation of water for wildlife, aquatic life, and other beneficial uses (Source [9]).

WRD Strategic Plan 2005 to 2010

Priorities

- Water Rights Adjudication
- Water Rights Data
- State-owned Dams and Canals
- Water Project Transfers
- Water Right Processing
- Interstate and International Waters

Goals, Objectives, and Tasks

The WRD Strategic Plan lists five overall goals and objectives for 2005 to 2010:

Goal 1: Maintain and Improve Safety and Protection of Lives and Property for Dams and Water-related Safety Issues.

Goal 2: Protect State Water Interests.

Goal 3: Enhanced Internal and External Communication, Information, and Education on Water Resources.

- **Objective 1:** Enhance collaboration on education and outreach throughout the Division by seeking opportunities to engage in cross-bureau and regional activities.
- **Objective 2:** Form Water Resources Advisory Board composed of key nongovernmental interest groups.

Goal 4: Ensure Protection of Water Rights, Conservation of Water Resources, and Orderly Development of New Supplies.

Goal 5: Provide Efficient and Consistent Implementation of Water Resources Division Programs.

- **Objective 1:** All work units develop, share, and evaluate yearly work plans that are linked to strategic plan.
- **Objective 2:** Ensure the division is well organized to accomplish our mandates and that staff responsibilities are clearly defined, communicated, and coordinated.

The Goals and Objectives specific to Water Management Bureau, tasked with planning, include:

Goal 1: Provide citizens, governments, and local watershed groups with the information needed to make informed water resource allocation and management decisions.

- **Objective 1:** Compile a comprehensive inventory of Montana water resources by watershed, as funds are made available.
- **Objective 2:** Provide sound technical information on controversial surface water and groundwater water rights applications and change in use applications and determine how they might impact other water users.
- **Objective 3:** Work with water users; watershed groups; and other local, state and federal government agencies to access and use information to make informed decisions on preventing and resolving water use conflicts, improving basin-wide water management, cumulative impact assessments on river channels and water uses, and developing and implementing drought management plans in a timely and professional manner.
- **Objective 4:** Provide state expertise to rehabilitate the St. Mary canal and diversions works and the enlargement of Fresno Reservoir by 2009.

Goal 2: Protect Montana's water from external threats.

- **Objective 1:** Work to persuade the International Joint Commission to reopen the 1921 IJC Order that apportions the flows of the Milk and St. Mary Rivers by December 2005.
- **Objective 2:** Work with Parks Canada and British Columbia government to protect the water resources in the North Fork of the Flathead River Basin in Montana.

- **Objective 3:** Develop a technical foundation and legal strategy for implementing the Yellowstone River Compact.
- **Objective 4:** Determine whether Columbia River system operations and downstream water development are affecting flows, reservoir levels, and associated resources in Montana.
- **Objective 5:** Protect Montana's interests in the operations of Fort Peck Dam and Reservoir and the Missouri River downstream of the reservoir.
http://dnrc.mt.gov/wrd/pdfs/wrd_strategicplan05.pdf

The DNRC updates the WRD Strategic Plan in its entirety every six years with the next update occurring during fiscal year 2011. A small steering committee will be created, an outline determined, and a timeline established with the new plan being complete at the end of 2011 (Source [11]).

DNRC WRD 2009 Biennium Goals

The DNRC WRD has the 2009 Biennium Goals published specific for each bureau on their website at: http://dnrc.mt.gov/About_Us/goals.objectives/water.asp. Since the Water Management Bureau is the bureau responsible for state planning, the water management goals, objectives, and status are stated below. Each goal includes the corresponding Montana Code Annotated (MCA) as mandated by the Montana State Legislature.

- Goal 1: As a part of the State Water Plan, develop statewide water plan sections that help Montana resolve water resource conflicts and problems in an efficient and effective manner (85-1-101 and 85-1-203, MCA).
- Goal 2: As a part of the State Water Plan, provide staff support and planning assistance to local watershed user groups in solving water resource problems (85-1-101 and 85-1-203, MCA).
- Goal 3: Conduct technical analyses on water right and other water projects and management issues (85-2-311; 85-2-316, 85-2-402, and 85-2-508, MCA).
- Goal 4: Protect Montana water resource interests in regional and international water allocation and management decisions (85-2-223, MCA).
- Goal 5: Develop and maintain a data inventory of the state's water resources (85-1-203, MCA).
- Goal 6: Mitigate the impacts of drought (2-15-3308, MCA).
- Goal 7: Provide Water Resource Education (85-1-101 and 85-1-203, MCA).

4. SCOPE OF WATER RESOURCES PLANNING AND MANAGEMENT

According to the *Water Plan Handbook*, 1993, Montana's most critical water management problems include: interstate water allocation, reserved water rights, water use efficiency, instream flow protection, groundwater management, and nonpoint source pollution (Source [7]).

Montana State Plan

The nine main "pamphlet" style documents, Part II Plan Sections, that address the critical water management issues either directly or indirectly, are listed below:

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

1. Agricultural Water Use and Efficiency – February 1989 (4 pages)
2. Instream Flow Protection – February 1989 (5 pages)
3. Water Information Systems – February 1989 (5 pages)
4. Federal Hydropower Licensing and State Water Rights – February 1989 (4 pages)
5. Water Storage – December 1990 (19 pages)
6. Drought Management – December 1990 (9 pages)
7. Integrated Water Quality and Water Quality Management – November 1992 (17 pages)
8. Upper Clark Fork Water Management Plan – December 1994 (70 pages) – prepared by the Upper Clark Fork River Basin Steering Committee
9. Clark Fork Basin Water Management Plan – January 2005 (11 pages) – prepared by the Clark Fork River Basin Task Force

Not officially part of the State Plan are the *Governor's Report on Water Storage* (January 2009) and *Governor's Drought Report* (May 2008), *Managing Montana's Water: Challenges Facing the Prior Appropriations Doctrine in the 21st Century* (July 2008),

5. PARTNERSHIPS, STAKEHOLDER, AND PUBLIC INVOLVEMENT

According to the *Strategic Plan 2005-2010*, Montana considers major water resources stakeholders *anyone interested in the safety, quantity, allocation, use, or management of water* (Source [3]). The Montana Watershed Coordination Council (MWCC) serves as a statewide coordination network for state agencies and private groups to collaborate. Over 50 watershed groups are included in MWCC network. The MWCC website states:

Each local watershed group is an independent manifestation of each community's interest, energy, activism, and character. Citizen groups are able to participate directly in decision making and problem solving, as well as initiating local cleanup, conservation, and data gathering/ecosystem research project. <http://mwcc.montana.edu/groups/default.asp>

As previously stated, the entities involved the State Water Plan, according to the *Montana State Water Plan Handbook*, 1993, include: the Department of Natural Resources and Conservation; Governor's Office; the Board of Natural Resources and Conservation; the Legislature; the Legislature's Water Policy Committee; the State Water Plan Advisory Committee; a DNRC appointed Steering Committee; and the public. The public, from Montana's perspective, has

been critical to planning process. The Handbook, lists the importance of the public as being essential to developing and implementing a state water plan. The public involvement process at the time of the Handbook is listed below:

1. Workshops and Special Meetings
2. Scoping Meetings
3. Steering Committees
4. Public Meetings on Preliminary Plan Sections
5. Public Hearings on Plan Adoption
6. Consultations
7. Written Comments
8. Mailing List

6. OUTCOMES ASSESSMENT PROCESS

Montana's planning process does not have a formal quantitative assessment process. The state's planning efforts have focused on specific watershed and/or local water provider needs, and community needs. Progress is assessed in terms of implementing and managing water resources to meet watershed needs and meeting recommendations of watershed/basin plans.

7. NEEDS, CHALLENGES AND CRITICAL PRIORITIES - INTERVIEW INSIGHTS

The state has seen a major shift in the last 10 years in the way they use water resources. Much of this change has been the result of growth, especially along river and stream and riparian corridors. Some areas of the state are experiencing rural and urban growth onto agricultural lands; especially along river valleys. In some cases growth in the agricultural areas has lead to either increased reliance on ground water or transfers from agricultural surface water rights. Along the Clark Fork growth and drought have lead to increased needs for water and the state is working with the Bureau of Reclamation to identify some solutions.

The state is also seeing growth in some of the more pristine areas which creates a greater challenge in meeting both domestic/municipal and ecosystems needs. Ensuring protection of high value fisheries with the specter of climate/hydrology changes is also a challenge.

Other priorities and needs include:

- Addressing areas where there is increased competition for water supply and increased focus on groundwater use.
- Aging water resource infrastructure, both federal and state owned projects.
- Development in riparian wetlands along the river bottom and associated land use planning issues.
- Developing and maintaining more information/inventories of the state's water resources.
- Addressing drought and hydrologic variability.
- Providing instream flows for ecosystem protection especially where there are high value fisheries.
- Addressing reserved water rights.

- Addressing water quality in impacted areas including non-point sources of water quality impairment.
- Reservoir and river sedimentation is an issue in some areas.

Identifying and securing additional funding, technical support, and consensus regarding the next steps in the state planning process will help address these challenges and priorities.

8. REFERENCES

Much of the language and information in this summary comes directly from reports published by the Montana Department of Natural Resources and Conservation/Water Resources Division.

- [1] DNRC, Water Resources Division – About-Us
http://dnrc.mt.gov/wrd/about_us/about_wrd/default.asp
- [2] DNRC, Water Resources Division – Overview of Bureaus
<http://dnrc.mt.gov/wrd/bureaus/overview.asp>
- [3] The Framework Report, 1976 – Part 1, page 5
http://dnrc.mt.gov/wrd/water_mgmt/planning_reports/framework/default.asp
- [4] State Water Plan Development: A Revised Approach, 1987, Page 3
http://dnrc.mt.gov/wrd/water_mgmt/montana_state_waterplan/default.asp
- [5] The Framework Report, 1976 – Foreword
http://dnrc.mt.gov/wrd/water_mgmt/planning_reports/framework/forward.pdf
- [6] State Water Plan Development: A Revised Approach, 1987, Page 7
- [7] Montana State Water Plan Handbook – Page 3
http://dnrc.mt.gov/wrd/water_mgmt/montana_state_waterplan/pdfs/montana_state_water_plan_handbook.pdf.
- [8] Montana State Water Plan Handbook – Page 5
- [9] DNRC Water Resources Strategic Plan 2005 – 2010, Page 1
http://dnrc.mt.gov/wrd/pdfs/wrd_strategicplan05.pdf
- [10] DNRC Water Resources Strategic Plan 2005 – 2010, Page 19
- [11] DNRC Water Resources Strategic Plan 2005 – 2010, Page 20
- [12] DNRC Water Resources Strategic Plan 2005 – 2010, Page 3
- [13] DNRC Water Resources Strategic Plan 2005 – 2010, Page 4 and 5
- [14] Technical Memorandum on the Western State’s Survey: Framework Water Plan, Level II, October 2006, http://waterplan.state.wy.us/plan/statewide/west_state_surv.pdf

Additional Websites:

Montana Drought Information www.drought.mt.gov
 Montana Water Center <http://watercenter.montana.edu/>
 Montana Department of Environmental Quality <http://www.deq.state.mt.us/>
 Natural Resource Information System <http://nris.mt.gov/>
 Montana Water Center <http://watercenter.montana.edu/>
 Montana Water Course <http://www.mtwatercourse.org/>
 Montana Watershed Coordination Council <http://mwcc.montana.edu/>
 Montana Fish, Wildlife, and Parks <http://fwp.mt.gov/default.html>

Montana Ground-Water Information Center <http://mbmggwic.mtech.edu/>
US Bureau of Reclamation, Reservoir Storage <http://www.usbr.gov/gp/water/rflow.cfm>
NRCS Montana Snow Survey Program <http://www.mt.nrcs.usda.gov/snow/>
USGS Water Resources of Montana <http://mt.water.usgs.gov/>