

Exploring the Need and Feasibility of Modifying Montana's Water Quality Standards to Improve the Protection of Wetlands and Water Quality



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Presentation



- Planning process for establishing a strategy to consider the development of Wetland WQS
- EPA Wetland Program Development Grant
- Potential benefits of wetland water quality standards

Planning Process

- Reviewed existing guidance, information, and wetland assessment methods to develop a strategy.
- Attended EPA's CWA §401 Water Quality Certification and ASWM's Wetland Water Quality Standard Webinars
- Montana became a ASWM pilot state
- Series of meetings with management
 - Provided case studies
- Applied for an EPA Wetland Program Development Grant to investigate the need and feasibility of wetland WQS

Example State and Tribal WQS that Protect Wetlands



- Wyoming
- Montana Tribes
 - Assiniboine and Sioux, Northern Cheyenne, and Salish and Kootenai Tribes
- <http://www.epa.gov/region8/water/wqs/statetribal.html>

Guidelines/Resources

- Environmental Law Institute. 2008. **Study of State Wetland Programs: Status, Trends, & Model Approaches**
http://www.eli.org/program_areas/state_wetlands.cfm
- Kusler, J. and J. Christie. 2012. **Wetland Water Quality Standards for States**. Association of State Wetland Managers.
<http://www.aswm.org/wetland-programs/water-quality-standards-for-wetlands/2785-wetland-water-quality-standards-for-states>
- Maxted, John, Doreen Robb, and Bob Shippen. 1990. **National Guidance Water Quality Standards for Wetlands**. Washington, DC: U.S. Environmental Protection Agency, Office of Water Regulations and Standards, Office of Wetlands Protection.
<http://www.epa.gov/owow/wetlands/regs/quality.html>

Wetland Assessment Methods

(Potential Water Quality Standard Implementation Tools)

- MONTANA DEPARTMENT OF TRANSPORTATION
 - Montana Wetland Assessment Method
 - http://www.mdt.mt.gov/other/environmental/external/wetlands/2008_WETLAND_ASSESSMENT/2008_MWAM_MANUAL.PDF
- MONTANA NATURAL HERITAGE PROGRAM
 - Landscape-Level Wetland Assessment
 - Rapid Wetland Assessment Method
 - Intensive Wetland Assessment
 - <http://mtnhp.org/wetlands/>

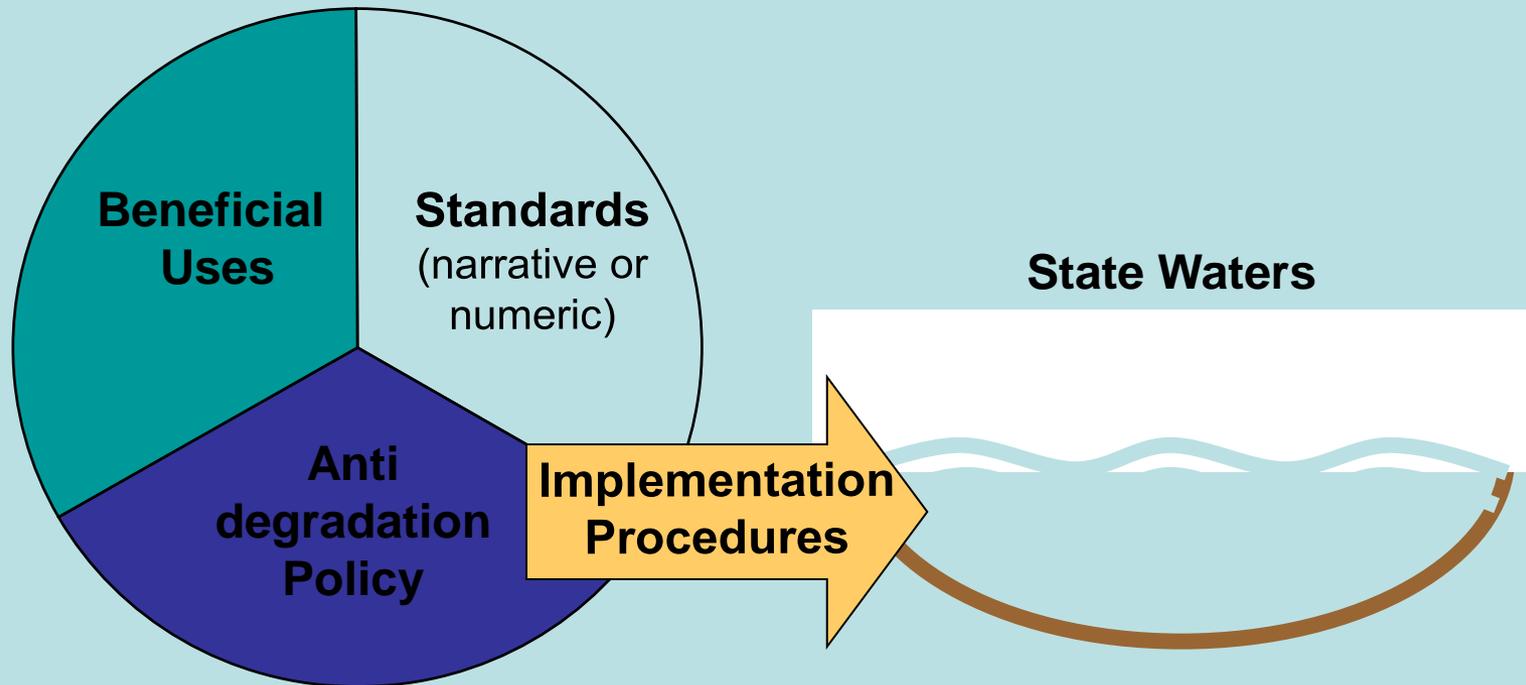
Wetland Program Development Grant

- Establish an advisory committee
- Identify gaps in wetland protection
- Investigate approaches for modifying Montana's WQS to improve wetland protection.
- Consider developing a Riparian Protection Policy.
- Evaluate how implementation of proposed WQS would affect Montana DEQ programs (permitting, 401 certification, TMDL, watershed planning, waterbody assessments, enforcement)
- Make recommendations

Identify Gaps in Wetland Protection

- RFP to identify gaps in wetland protection
 - Survey
- Review current federal, state, and local government efforts to protect aquatic resources, including wetlands and riparian areas
 - Permits, laws, certifications, licenses, zoning, local ordinances, provisions, orders, policies and watershed planning.
 - How can water quality standards improve wetland protection in Montana?

Investigate Approaches for Modifying Montana's WQS to Protect Wetlands



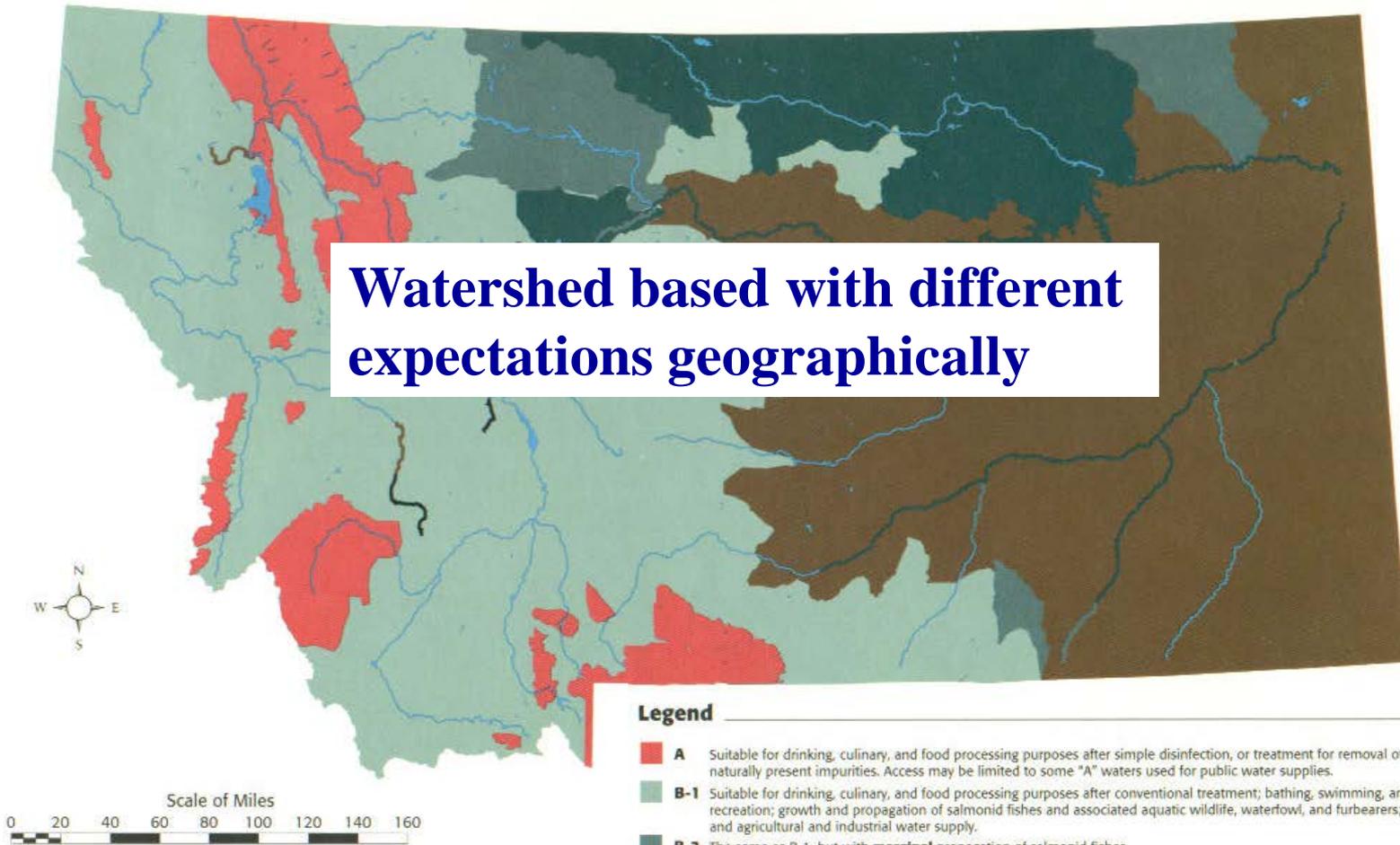
Designated Beneficial Uses

- **Designated Beneficial Uses:** those uses specified in the water quality standards regulations for each waterbody, whether or not they are being attained.
 - **“goals” for a waterbody**
 - Fish, associated aquatic life and wildlife
 - Public drinking supply
 - Recreation
 - Agriculture
 - Industry



Montana Surface Water Quality Classifications*

Watershed based with different expectations geographically



Legend

- **A** Suitable for drinking, culinary, and food processing purposes after simple disinfection, or treatment for removal of naturally present impurities. Access may be limited to some "A" waters used for public water supplies.
- **B-1** Suitable for drinking, culinary, and food processing purposes after conventional treatment; bathing, swimming, and recreation; growth and propagation of salmonid fishes and associated aquatic wildlife, waterfowl, and furbearers; and agricultural and industrial water supply.
- **B-2** The same as B-1, but with **marginal** propagation of salmonid fishes.
- **B-3** The same as B-1, but with growth and propagation of **non-salmonid** fishes.
- **C** Suitable for bathing, swimming, and recreation; growth and propagation of salmonid or non-salmonid fishes and associated aquatic wildlife, waterfowl, and furbearers; and agricultural and industrial water supply.
- **I** Greatly impacted streams not currently supporting the uses listed above. They include reaches of Prickly Pear, Silver Bow, and Mirdlu Creeks.

**Exceptions to these use classifications exist. Complete identification of a waterbody's use classification can be found in Montana A.R.M. 16.20.604 through 16.20.612.*

Map composed by the Natural Resource Information System, State Library, with data provided by the Montana Department of Environmental Quality.

All State Waters are classified and have designated uses and numeric and narrative standard to protect those uses.

Water Use Classification



- **Issue:**
 - Some of the existing designated uses are not appropriate for wetlands
 - maintaining wetland functions is not currently identified as a goal (designated beneficial use)
- Explore the need and feasibility of developing a wetland water-use classification and designating wetland functions as beneficial uses
 - Pollutant attenuation
 - Flood Water Retention
 - Hydrologic Cycle Maintenance
 - Shoreline and Stream bank stabilization
 - Biological Diversity and Production
 - Groundwater Recharge

Numeric and Narrative Standards

- **Numeric Standards**
 - DEQ – 7 , e.g., toxics
 - Quasi numeric (Temperature, pH, Turbidity, departure from natural)
- **Narrative Standards**
 - ARM 17.30.637(1): State surface waters must be free from substances attributable to discharges that will (e) create conditions which provide undesirable aquatic life.

Wetland Narrative Standards



- **Issue:**
 - existing chemical numeric standards are often not appropriate for wetlands.
 - Maintaining the physical integrity of wetlands is not currently addressed by Montana's WQS
- Explore the need and feasibility of addressing wetland natural conditions that exceed numeric chemical standards.
- Explore the need and feasibility of developing narrative standards to regulate physical and hydrologic modifications that impact wetland functions, aquatic life, and wildlife.

Montana Anti-degradation Policy



- State waters Must protect existing uses and the level of water quality necessary to protect those uses.
 - Explore the need and feasibility of using Montana’s anti-degradation policy to protect aquatic life, wildlife, and wetland functions (existing uses) from regulated activities.
- High Quality Waters A public determination must be made that it is necessary to lower existing water quality to accommodate important economic and social development.
- Outstanding Natural Resource Waters: No degradation in State designated waters of exceptional significance.

Consider Adopting a Riparian Policy

C. Riparian Policy

The State of Vermont recognizes the importance of conserving riparian vegetation adjacent to surface waters to provide benefits that include but are not limited to: a) shading of surface water to maintain cooler summer temperatures; b) reducing soil loss, streambank and shoreline erosion, and sedimentation of aquatic habitat; c) filtering sediment, nutrients, and pollutants in runoff; and d) providing cover habitat for aquatic biota.

Vermont Water Quality Standards: <http://www.nrb.state.vt.us/wrp/publications/wqs.pdf>

The Policy of the State of Oregon is to promote land use policies and land management practices that sustain streamside and wetland riparian functions that support desirable water quality, native fish populations, and wildlife across the landscape.

Oregon Statewide Riparian Management Policy <http://cms.oregon.gov/opsw/pages/archives/riparian/ripar.aspx>

Potential Benefits of Wetland Water Quality Standards

- Prevent wetland degradation from hydrologic alterations (i.e., protect and maintain physical integrity).
- Facilitate protection of wetland wildlife, aquatic, and vegetation communities (i.e., protect and maintain biological integrity).
- Protect wetland and riparian functions that maintain water quality within adjacent surface waters and groundwater (i.e., prevent water quality degradation)
- Aid DEQ in the review of permits and licenses pursuant to CWA § 401 water quality certification program.
- Serve as a benchmark for waterbody assessments for the 305(b)/303(d) integrated report.
- Promote integration of wetland protection and restoration with broader watershed planning efforts such as TMDLs and water quality improvement plans.

Questions?

