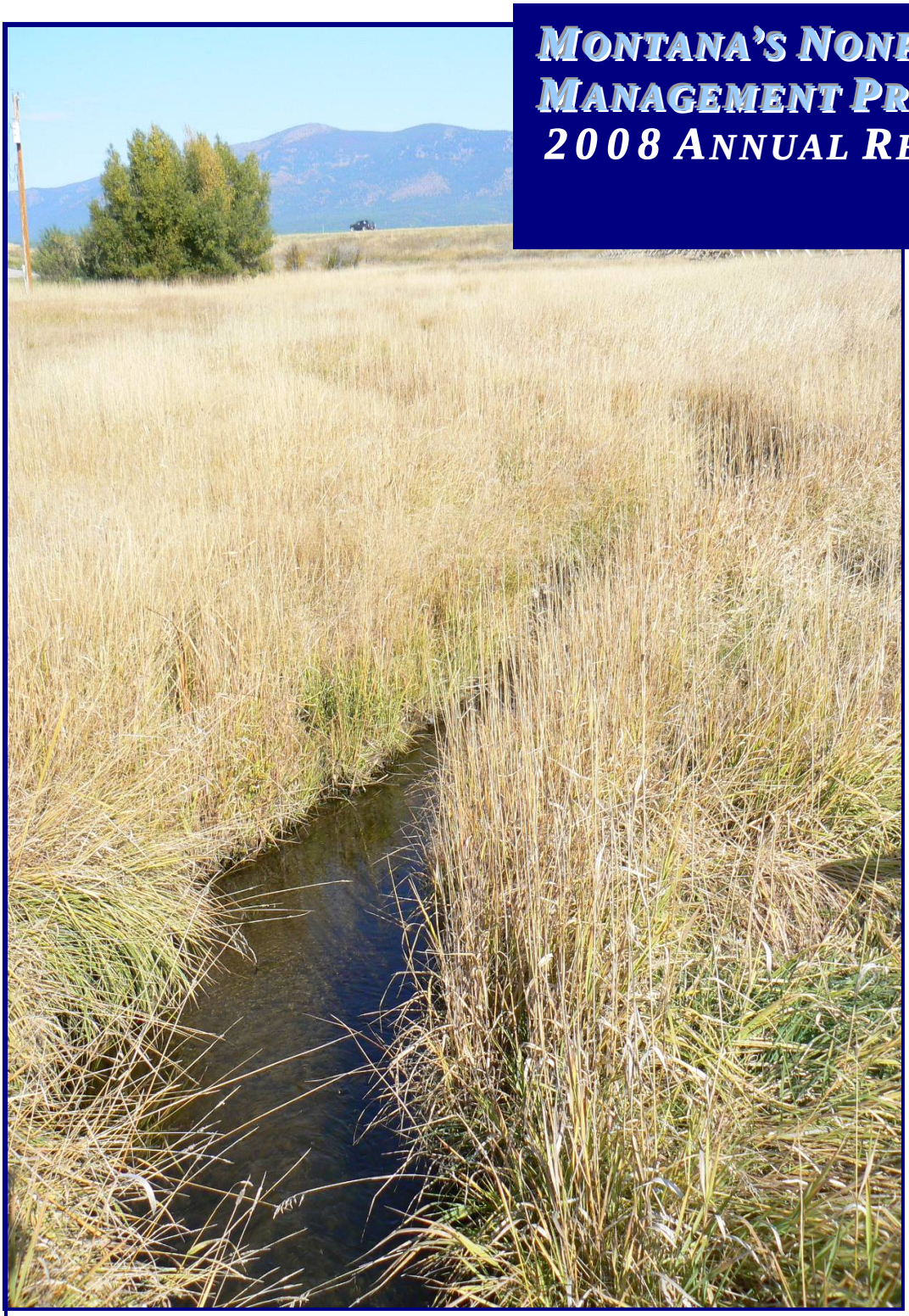
MONTANA'S NONPOINT SOURCE MANAGEMENT PROGRAM
2008 ANNUAL REPORT



Compiled and Submitted by:
Montana Department of Environmental Quality
Planning, Prevention, and Assistance Division
Water Quality Planning Bureau

Montana Vision Statement:

Water quality will be restored and protected through the implementation of voluntary best management practices identified in science based, community supported watershed plans.

Montana Department of Environmental Quality

2008 Nonpoint Source Management Program Annual Report

The Montana Nonpoint Source (NPS) Management program annual report intends to inform the public about the progress made annually toward fulfilling **NPS Management Plan*** goals, while also satisfying the requirements of Section 319(m)(1) of the federal Clean Water Act of 1987. Section 319 of the Clean Water Act requires States to (1) assess water bodies for nonpoint source (NPS) impacts, (2) develop nonpoint source management programs, (3) implement those programs, and (4) report on nonpoint source program implementation to the public and to the U.S. Environmental Protection Agency (EPA).

2008 Nonpoint Source Management Program Highlights

- The Water Quality Planning Bureau closed out the Fiscal Year 2003 319 projects grant. All open grants and related tasks are on schedule. Montana has a balance of ~22% remaining of unexpended 319 funds awarded, one of the lowest balances in the nation.
- DEQ provided $350,000 to local groups for TMDL planning assistance grants.
- DEQ awarded $850,000 in nonpoint source grants funding 11 watershed restoration, 2 groundwater, and 4 education and outreach projects. Non-federal in-kind match for these projects amounted to $805,016.
- The Watershed Management Section submitted six TMDL documents to the EPA for approval in 2008 addressing 120 pollutants.
- The QAQC Section collaborated in the development of five SAPs and two QAPPs focusing on monitoring 319 restoration activities for effectiveness and pollutant load reductions.
- The Water Quality Monitoring Section completely assessed 12 waterbodies in 2008 including approximately 843 miles of stream and 8,130 acres of lakes/reservoirs.
- The Water Quality Standards Section produced "Scientific and Technical Basis of the Numeric Nutrient Criteria for Montana's Wadeable Streams and Rivers," as part of the effort to develop numeric nutrient water quality standards and implementation procedures for surface waters.
- The Watershed Protection Section is collaborating with several groups who are developing statewide riparian education campaigns including MSU's Watercourse, the Governor's Task Force for Riparian Protection and a consortium of local water quality protection districts, conservation districts and counties.
- The Data Management Section provided TMDL modeling support for Bitterroot River nutrients and temperature, Big Hole temperature and nutrients, and the Upper Clark Fork nutrient and sediment impairments.

*NPS Management Plan available at http://deq.mt.gov/wqinfo/nonpoint/2007NONPOINTPLAN/Final/NPSPlan.pdf

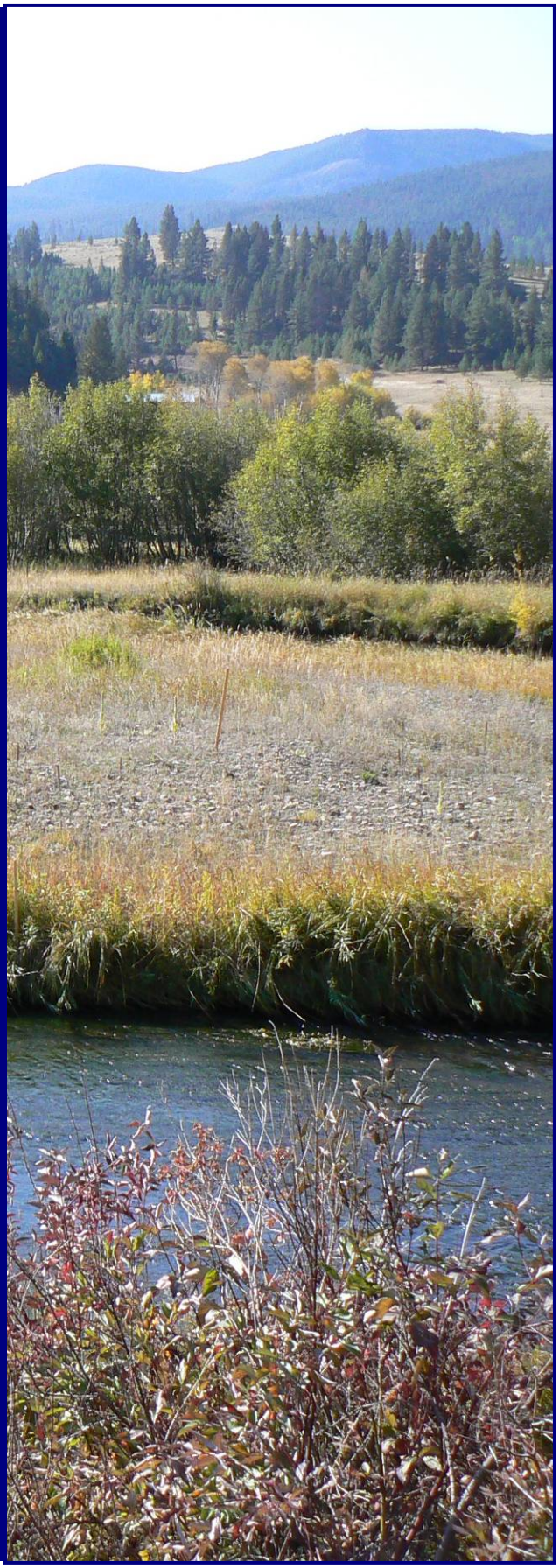
Implementation of the Montana NPS Management Plan

by the Water Quality Planning Bureau and Collaborating Partners

The watershed planning approach provides a coordination tool for all stakeholders interested in conserving water resources in Montana. The involvement of the DEQ, various interagency councils, watershed groups, conservation districts, agencies, tribes, academia, and NGOs in the watershed approach allows for a broad distribution of information with the intent to increase public understanding and participation in water quality and nonpoint source issues.

The DEQ Water Quality Planning Bureau (WQPB) has the responsibility of managing the Montana Nonpoint Source (NPS) Management Program. The WQPB operates under one common objective which is to attain and maintain water quality standards. This is accomplished through an integrated approach based on water quality standards development, monitoring and assessment, and development and implementation of water quality plans and TMDLs (Appendix A).

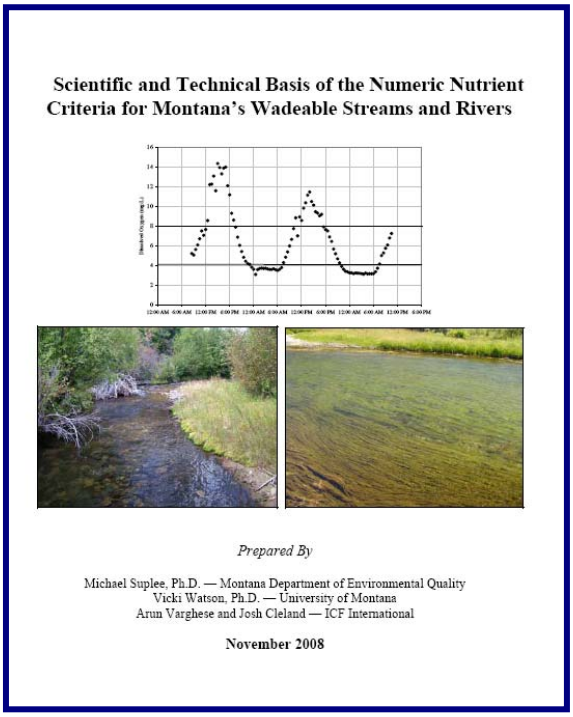
The information described in this document highlights some of the important or notable actions undertaken toward achieving the three specific NPS five year goals: resource, policy, and education and outreach (Appendix B). The highlights include actions carried out by the Water Quality Planning Bureau and interagency councils, watershed groups, and other organizations in 2008 to meet NPS five-year goals, promote collaboration, and foster water resource awareness and protection in Montana.



Water Quality Standards Section

The Water Quality Standards Section develops water quality criteria with the intent to assure a level of water quality that will protect the beneficial uses that are valuable characteristics of a stream or river resource that, directly or indirectly, contribute to human welfare. Examples of beneficial uses include drinking water, fish and aquatic life, and recreation. Beneficial uses are established in law and reflect the societal values embodied in those laws.

The Water Quality Standards Section is working with a stakeholder advisory group to design affordability criteria in the development of implementation procedures for numeric nutrient standards for wadeable streams by taking into account the economics of waste treatment.



As part of the effort to develop numeric nutrient water quality standards and implementation procedures for surface waters, Mike Suplee from the Water Quality Standards Section produced in conjunction with several authors, the peer reviewed white paper, "Scientific and Technical Basis of the Numeric Nutrient Criteria for Montana's Wadeable Streams and Rivers (left).

The Water Quality Standards Section updated the Statistical Analyses of Water Quality Data, Compliance Tools, and Changepoint Assessment for Montana Rivers and Streams. This report presents an updated statistical analysis of water quality data from Montana Rivers and Streams. The purpose of the statistical analyses is to support the development by the Montana Department of Environmental Quality (MT DEQ) of nutrient and nuisance-algae criteria for flowing waters.

The section produced a document (CIRCULAR DEQ-7) containing numeric water quality standards for Montana's surface and ground waters. Provisions of state and federal law require the adoption of standards that will protect the designated beneficial uses of state waters, such as the support of aquatic life, public water supplies, recreation, or agriculture. The numeric water quality standards in this Circular have been established for parameters (i.e., "pollutants") that are categorized as toxic, carcinogenic, bioconcentrating, radioactive, nutrient, or harmful. In order to address the adoption of numeric standards for all pesticides, the Circular contains ground water standards for pesticides developed in compliance with the Montana Agricultural Chemical Ground Water Protection Act (80-15-201, MCA). CIRCULAR DEQ-7 is regularly updated as additional information or guidance from EPA becomes available.

In 2008, DEQ Water Quality Standards Section initiated a study that explored how different macroinvertebrate sampling protocols affected the Montana macroinvertebrate indicators of

water quality. Ultimately, the staff intends to develop a way to "translate" results obtained from the different sampling methods so that historical data can be compared to current data. The staff will use the knowledge gained from this study when they develop the next iteration of biological indicators in 2009.

Water Quality Monitoring Section

The Water Quality Monitoring Section monitors water quality conditions and trends statewide, and assesses sources and severity of pollution problems. Bureau staff develop and convey pertinent and reliable information on the condition of Montana's environment to resource managers and the public. The Section has responsibility for operation of statewide water quality monitoring networks, conducts inventories of pollution sources, and identifies impaired streams, lakes and watersheds.

The Water Quality Monitoring Section completely assessed 12 waters in 2008, including approximately 843 miles of stream and 8,130 acres of lakes/reservoirs, which will be reflected in the 2008 Water Quality Integrated Report. The section staff sampled 16 sites 3 times this year as part of the Reference Site Project.

All water quality monitoring data from 10 streams, 16 reference sites, and 24 lakes collected in 2008 will support TMDL development directly or indirectly. The Monitoring Section also supported TMDL development providing technical expertise on temperature data loggers, aquarod, Tru-tracks, and chlorophyll methods. The section staff contributed technical expertise, providing input on monitoring design and methods, temperature data loggers and aquarods for various projects.

The Monitoring Section is currently working with the Standards and Modeling Sections in evaluating the data and results from 2007 to develop a nutrient model for large rivers.

Data Management Section

The Data Management Section provides technical support services for the Water Quality Planning Bureau of the Planning, Prevention, and Assistance Division in the areas of data systems development and management for water quality metric data, water quality assessments, contract management and administration, and reference library.

The Data Management Section administered the Clean Water Act Information Center which provides public access to Montana's Water Quality Integrated Report (305(b) and 303(d) Lists. The section is in an ongoing process of maintaining and enhancing the system.

The section also administered Montana's STORET water quality database system, including assistance to outside users with the web-based STORET Interface Module (WebSIM). Latest STORET upload of DEQ monitoring data occurred December, 2008. The staff continued project development for the water quality metric data management system to replace the STORET system.

The Data Management staff is currently in the process of updating the integrated report for 2008.

The section provided TMDL modeling support for Bitterroot River nutrients and temperature, Big Hole temperature and nutrients, and the Upper Clark Fork nutrient and sediment impairments.

Quality Assurance and Quality Control Section (QAQC)

The QAQC Section supports the Bureau and its assisting contractors by describing the management and technical procedures that will assure the quality of environmental information used to support decisions. This is referred to as a "quality system." It provides the Bureau with a practical framework for managing the quality of activities resulting in environmental determinations and controls.

The QAQC Section collaborated in the development of five sampling analysis plans (SAPs) and two quality assurance project plans (QAPPs) focusing on monitoring 319 restoration activities for effectiveness and pollutant load reductions including: Restoration Project Monitoring of St. Louis Creek (Nine Mile watershed); Treasure County Salt Cedar Investigation; Cottonwood Creek Culvert Replacement Restoration Monitoring (Blackfoot watershed); Sun River Watershed Group Big Coulee Implementation and Project Management; Big Muddy Creek Watershed Chemistry Monitoring; Crow Creek Restoration Project Monitoring Program (QAPP); and Haskill Creek Restoration Project (QAPP).

QAQC staff continues to work on a water quality monitoring strategy which will include monitoring of intermittent streams and development of processes. The strategy is planned for delivery to the EPA in 2009.

QAQC collaborated with the Greater Gallatin Watershed Council Volunteer Stream Monitoring Program in the production of a QAPP and in volunteer training.

Flathead Lake Watershed Monitoring

A comprehensive monitoring program was developed by MDEQ during 2007 and 2008 to support watershed and receiving water model development in the Flathead Lake watershed as part of the TMDL program. Efforts have been initiated cooperatively between the US Geological Survey, Whitefish Lake Institute, Flathead Lake Biological Station, PBS&J, Montana DNRC and the Flathead Basin Commission.

General activities completed under the program include: (1) monitoring of rivers and tributaries for watershed model calibration and validation purposes, (2) monitoring of lake and reservoir profiles for characterization of pollutant fate and transport, and (3) water quality assessment to support TMDL analysis in the basin. The data will be used to develop watershed models for support of pollutant reduction decisions and formulation of TMDL implementation plans in the watershed.

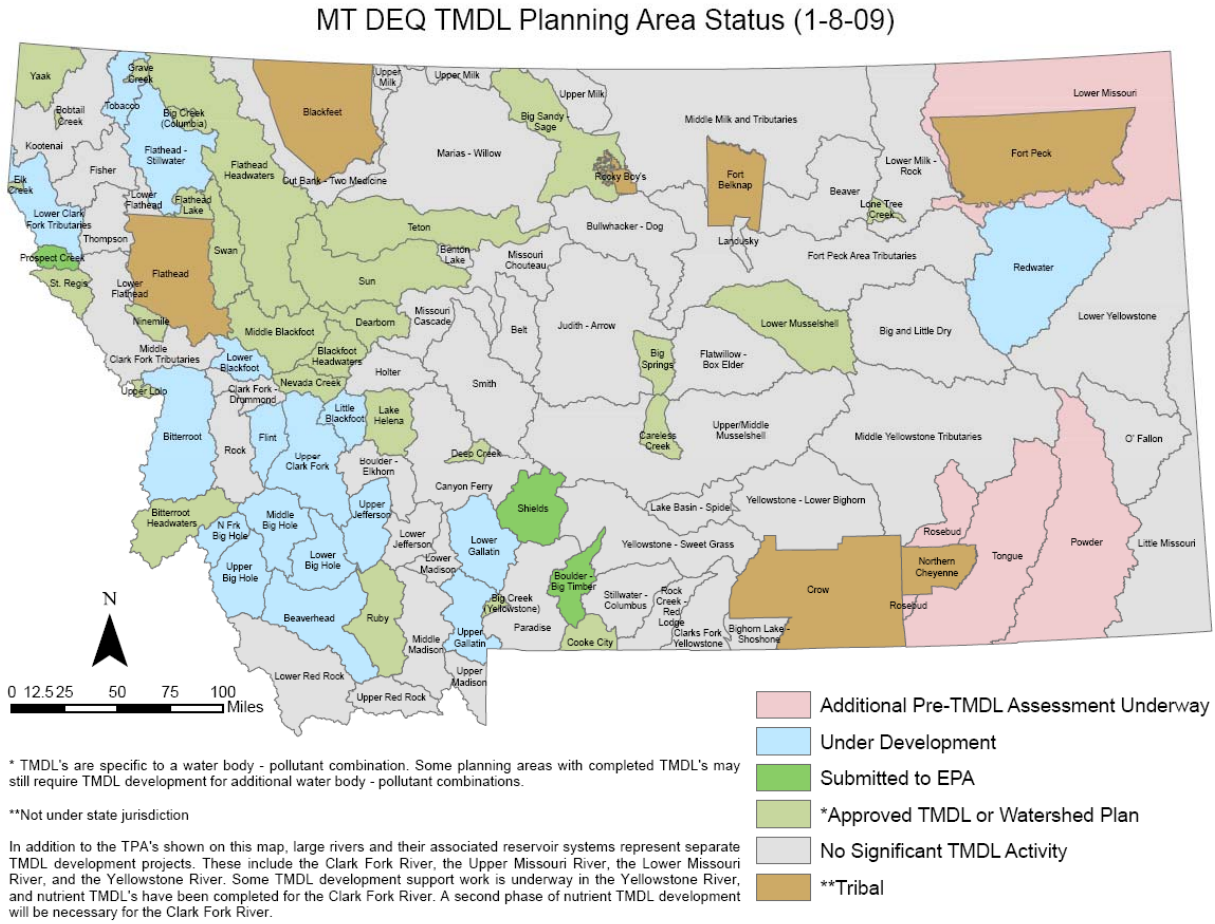
QAQC is working with Montana Watercourse to support the certification of volunteer monitors in watershed groups. The QAQC staff and Montana Watercourse coordinated, through several conference calls and emails, to complete a draft Volunteer Monitoring (VM) QAPP. This QAPP will be used in future certification trainings. The DEQ, Montana Watercourse, and the Sun River Watershed group organized a pilot VM certification training. Unfortunately, the pilot certification training was canceled due to lack of attendance. Watercourse is working with DEQ representatives to find alternative solutions to conducting a pilot training. They discussed and agreed on conducting the pilot trainings in the spring of 2009 with the Careless Creek watershed effort or other groups if the opportunity arises.

QAQC implemented collaborative monitoring processes with the Bureau of Land Management, US Forest Service, Tri-State Water Council, US Geological Survey, University of Montana, and a number of Conservation Districts, Watershed Groups, and Non-Profit Organizations. The Flathead Lake Watershed Monitoring project is a high-quality example of collaborative monitoring (left).

Watershed Management Section

The Watershed Management Section (WMS) is responsible for developing scientifically defensible Total Maximum Daily Loads (TMDLs) and associated water quality planning documents that will meet EPA approval requirements and help facilitate water quality protection and water quality improvements. The section develops TMDLs for all water bodies on the 303(d) list. A TMDL is the total amount of a pollutant that a water body may receive from all sources without exceeding water quality standards. A TMDL can also be defined as a reduction in pollutant loading that results in meeting water quality standards.

The Watershed Management Section continues to complete water quality plans and necessary TMDLS to address Montana's 2012 TMDL completion schedule. TMDL documents are useful to local stakeholders as they can be used as a framework for developing more comprehensive watershed restoration plans. Montana's TMDL planning area completion schedule was updated this year in accordance with the Settlement Agreement entered by the parties in Friends of the Wild Swan et al., v. EPA et al, CV97-35-M-DWM. The following figure (below) is the updated completion schedule map for TMDL Planning Areas (TPAs).



* TMDL's are specific to a water body - pollutant combination. Some planning areas with completed TMDL's may still require TMDL development for additional water body - pollutant combinations.

**Not under state jurisdiction

In addition to the TPA's shown on this map, large rivers and their associated reservoir systems represent separate TMDL development projects. These include the Clark Fork River, the Upper Missouri River, the Lower Missouri River, and the Yellowstone River. Some TMDL development support work is underway in the Yellowstone River, and nutrient TMDL's have been completed for the Clark Fork River. A second phase of nutrient TMDL development will be necessary for the Clark Fork River.

The Watershed Management Section completed TMDLs for three TPAs, approved by the EPA in 2008: St. Regis, Yaak, and Blackfoot/Nevada

The section submitted TMDLs for three additional TPAs to EPA for approval in 2008: Shields, Boulder (Big Timber), and Prospect (sediment)

Public review and comment periods were initiated at the end of 2008 for two TPAs: Upper and North Fork Big Hole and Lower Blackfoot

TMDL Planning Areas with TMDL planning documents approaching public comment: Middle and Lower Big Hole, Upper Jefferson tributaries (sediment)

In 2008 the Watershed Management Section completed additional data collection, assessment and reporting on 13 TMDL project areas including: Bitterroot mainstem; Upper Clark Fork tributaries; Lower Clark Fork tributaries; Flathead/Stillwater & Flathead Lake Phase 2; Flint Creek; Upper Gallatin; Lower Gallatin; Redwater, Tobacco, Little Blackfoot; Beaverhead, Upper Jefferson.

Watershed Protection Section

The Watershed Protection Section works to protect and restore water quality from the impacts of nonpoint sources of pollution in order to provide a clean and healthy environment. Nonpoint source (NPS) pollution is the state's single largest source of water quality impairment. NPS pollution is contaminated runoff from the land surface that can be generated by most land use activities, including agriculture, forestry, urban and suburban development, mining and others. Common NPS pollutants include sediment, nutrients, temperature fluxes, heavy metals, pesticides, pathogens, pharmaceuticals, oil and salt.

The WQPB closed out the Fiscal Year 2003 319 planning and project grant. All open grants and related tasks are on schedule. Montana has a balance of ~22% remaining of unexpended 319 funds awarded, one of the lowest balances in the nation. The DEQ awarded $850,000 in 319 nonpoint source grants, funding 11 watershed restoration, 2 groundwater, and 4 education and outreach projects in 2008 (Appendix C). Non-federal in-kind match for these projects amounted to $805,016.

DEQ's Watershed Protection Section has a limited amount of funding under the federal CWA Section 319 to assist local groups with education projects that are focused on water quality and nonpoint source pollution through the mini-grants program. These projects are funded at $1,500 per grant and are awarded on a twice per year cycle. In 2008 the DEQ closed out 20 mini-grant projects and awarded $1,500 to 13 new projects (Appendix D) with the second call for FY09 applications beginning in January 2009.

The section facilitates 319 funding projects that implement NPS and TMDL water quality restoration strategies. Notably, a portion of section 319 grant funds have been used by local watershed groups to support implementation of NPS best management practices. The Sun River Watershed currently has a 319 grant to complete two irrigation system efficiency projects and

three riparian revegetation projects within watershed. The Sun River serves as an excellent example a watershed that has been partially restored (see highlight box below).

Sun River Watershed – A success story

The Sun River, in north-central Montana, flows east out of the Rocky Mountains, and winds its way through forest, shrubland and prairie until it enters the mighty Missouri River. The upper, forested reaches of the Sun are generally undisturbed. However, once the River passes Gibson Dam, it begins to collect sediment, nutrients and selenium from significant anthropomorphic contributions. In 2004, TMDLS were developed to address these impacts. The Sun River Watershed Group, the Muddy Creek Task Force, and various other entities and individuals participated heavily in the development and implementation process of the TMDL.

One of the major triumphs in the development and implementation of the Sun River TMDLs has been the reduction of sediment inputs from a particular tributary, Muddy Creek. For decades, increased flows from irrigation water had caused severe down-cutting and erosion within Muddy Creek, resulting in the release of tens of thousands of tons of sediment into the lower Sun River each year (see photos below). Over the last 20+ years, restoration efforts have been lead by the Muddy Creek Task Force, the Sun River Watershed Group, and other local entities to help reduce flows in the Creek and increase bank stability. To date, over 500 rock barbs have been placed to slow bank erosion, 13 rock drop structures have been constructed to slow head-cutting, and numerous irrigation return flow reduction projects have been initiated to strike at the root of the problem. These and other locally lead efforts have resulted in drastic reductions in sediment loads entering the Sun River from Muddy Creek (estimated 94% reduction in mean suspended solids concentration in Muddy Creek; see Water Quality Restoration Plan and Total Maximum Daily Loads for the Sun River Planning Area, DEQ, December 2004, pg 143-145). Currently, plans are being made to create a small holding reservoir to arrest and meter out surges of irrigation return flow and further reduce the sediment loads in Muddy Creek.

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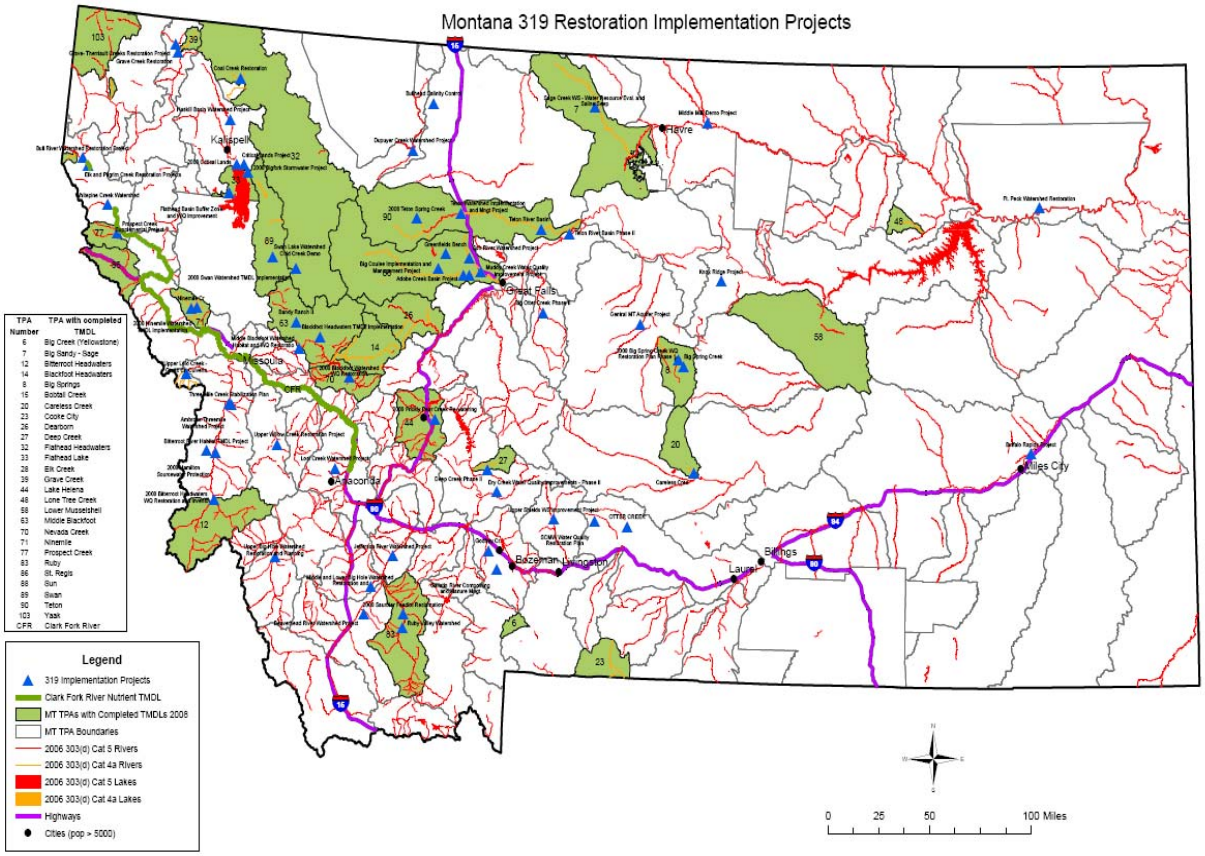
TMDL implementation projects are currently tracked by the Watershed Protection Section. The implementation spreadsheet indicates as of 2008 that approximately 57 restoration projects have completed implementation in Montana. The map below indicates the locations and names of several of those projects.



The section continued to work with watershed groups to develop watershed restoration plans (WRPs) in 2008. The Ruby Valley Watershed Group received a 319 grant to develop their restoration plan and held a meeting regarding the elements the group would like to include in their plan. The Blackfoot Challenge has a watershed plan for selecting priority watersheds for restoration. The Big Hole Watershed Committee is planning on completing a WRP as part of their proposed 319 grant. As part of a FY08 319 grant, Fergus County Conservation District has been developing a WRP for the Big Spring Creek watershed and is working with a contractor to design the WRP to meet the nine minimum elements required by EPA for a Watershed Plan. Various other watershed groups have work plans, watershed strategies, and other planning documents in place that contain at least some of the nine minimum elements established by EPA (Sun River Watershed Group, Teton River Watershed Group, Swan Ecosystem Center, and others).

The Watershed Protection Section has been working with multiple agencies BLM, NRCS, DNRC, DEQ, Forest Service, FWP, US Fish and Wildlife Service (MAIRS) to overlap priority areas using GIS for a coordinated watershed restoration planning process. The group aims to

focus on a specific geographic area where all agencies have interest in giving resources for integrated restoration activities. In 2007, a pilot area was established in Butte and in 2008 the group agreed on a geographic area of interest: Ovando to Lincoln. The group plans to identify restoration activities in 2009 and start to implement those activities in 2010.

The staff continued to provide review and comment on outside agency proposed projects as requested. The section has collaborated in a number of Forestry BMP audit reviews. The Forestry BMP reviews are coordinated by the Department of Natural Resource and Conservation's Forestry BMP Audit working group, who organizes a series of summer forestry operations, inspections, and ratings. The Streamside Management Zone (SMZ) requirements are one element of these inspections. There were approximately 20 field inspections during 2008 and the BMP Audit work group has prepared a written summary of these inspection findings.

The Watershed Protection staff developed an MOU with the US Forest service and was signed in February 2008. The goal of the MOU is to establish greater coordination and collaboration between the United States Department of Agriculture, Forest Service and the Montana Department of Environmental Quality and to foster efficient strategies to protect and restore water quality on public lands managed by the Forest Service in Montana. The MOU is intended to be a prototype for an upcoming MOU with the BLM.

The staff has been in contact with representatives of the DNRC's Trust Land Management Division and the BLM to gather information on existing grazing land audit and inspection procedures with the intent of developing a targeted list of BMPs for grazing (those that achieve water quality standards). The Forestry BMP audit review could be used as a model and adapted to create a similar BMP audit program on public grazing lands.

The Watershed Protection staff also participated in several meetings of the AFO/CAFO Working Group. The Group is made up of agency personnel from local, state and federal government, including MSU Extension as well as representatives from various trade organizations and industry groups. The purpose of the group is to coordinate the efforts of all those involved in promoting environmental stewardship in livestock operations throughout Montana. The group has provided a forum for disseminating regulatory information, sharing ideas on BMPs, and building collaboration between government and industry.

DEQ is currently working with the Montana State University Extension Service on a 319 grant contract, focusing on the development and implementation of education and outreach activities to address nonpoint source pollution from small livestock operations. During 2008, the 319 funds were used to print additional copies of a brochure promoting the appropriate use of manure as fertilizer. The funds were also used to prepare and give presentations to livestock producer audiences in Billings, Great Falls, Havre and Sidney. MSU Extension began designing a website that will serve as clearinghouse for information on environmental stewardship at animal feeding operations (www.AFOstewardship.org).

The Watershed Protection Section continues to participate in the ITEEM process. The Highway 69 rebuild project, south of Boulder Montana, is moving to an early and sustained agency and public consultation (ITEEM) approach. The collaborating agencies need the opportunity to meet regarding this project as the next steps are uncertain at this time.

The Watershed Protection Section is working with the WQPB administration staff to reformat and update the DEQ WQPB Website. The nonpoint source program page has undergone a major transformation in 2008 with a new main page and several new informative pages and links. The new format provides information regarding the NPS program in a more organized manner with the intention of making the page easier to navigate for the public.

The section staff in conjunction with several organizations is developing the first ever statewide storm water conference, "Clear Choices: Storm Water Solutions for Montana". The conference will include presentations on best management practices for storm water control and storm water pollution prevention. Civil engineers, city and county planners and local officials, legislators, developers, contractors and water resource managers should consider attending. Storm water control experts from throughout the region will present information to participants.

DEQ Collaborating Partners - Montana Watershed Coordination Council (MWCC)

The Montana Watershed Coordination Council is a statewide information and support network created to advance local watershed work. The coordination council serves as a forum for and link between local watershed groups that promote enhancing, conserving, and protecting natural resources and sustaining the high quality of life in Montana for present and future generations. It also serves as a statewide network coordinating Montana's natural resource agencies and private organizations in order to share resources, identify and capitalize on opportunities for collaboration, and avoid duplication of efforts.

Five Work Groups of MWCC are co-chaired by DEQ staff including the Water Activities Work Group, the Education & Outreach Work Group, the Monitoring Work Group, and the Groundwater Work Group, and the Training Work Group. These and the other MWCC work groups offer forums to agencies, academia, conservation district, watershed groups, and non-profit group personnel to discuss issues and offer solutions to water resource needs in Montana.. Please visit the MWCC website for a comprehensive list of participating agencies at: http://mwcc.montana.edu/.

In 2007, EPA awarded a grant to Trees, Water & People (TWP) for statewide efforts in Montana, Colorado, and Utah, and two reservations in Wyoming and South Dakota. As part of the grant, MWCC was awarded $50,000 for each of the next two years to offer training opportunities to Montana's watershed groups. The MWCC is using this funding to offer a suite of training opportunities around the state for watershed groups, conservation district groups, etc.

In September 2008 the MWCC held its ninth annual Fall Training for Watershed Coordinators using TWP funds, "Fundraising Strategies for Watershed and Conservation Groups." The two-day event was held in Ft. Peck, MT. Twenty three people attended the training which was facilitated by Bonnie Sachetello-Sawyer, Hopa Mountain and Wendy Wilson, River Network.

Ten watershed group coordinators, five Conservation District representatives, one water quality district representative, one University representative and six agency representatives attended the training (see photo below). Additionally, TWP funds were used to conduct two Certified Procurement Professional (CPP) trainings in September and October of 2008 by the Big Sky Public Procurement Association (BSPPA) with 36 total attendees. The MWCC E&O training committee is currently planning to utilize the remainder of the TWP grant to conduct a training focused on building and implementing watershed management plans, planned for the spring of 2009.

MWCC Fall Training at Fort Peck, Montana - 2008

DEQ Collaborating Partners - Riparian Collaboration/ Gov Riparian Task Force

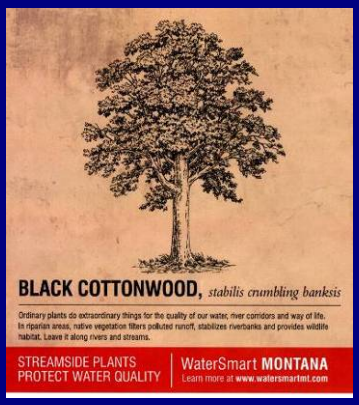
The DEQ Watershed Protection Section is collaborating with several groups who are developing statewide riparian education campaigns including the Governor's Riparian Task Force "Room to Roam Campaign," the Flathead CD and partners' "Riparian Buffer Education Campaign" (see highlight box on page 15), the Montana Watercourse's "NPS Riparian &Wetland Buffer Education Program, and other various organizations. The DEQ is working with the Montana Watershed Coordination Council E&O Work Group to coordinate the statewide riparian buffer message so that it is consistent and also followed up with on-the-ground education and implementation activities.

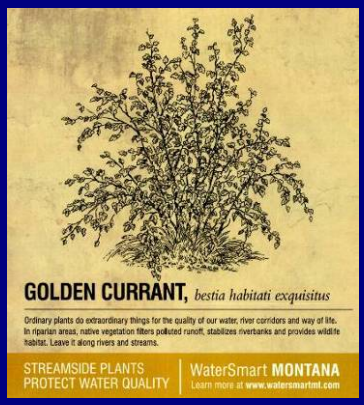
Riparian Buffer Education Media Campaign

Partners:
Flathead Conservation District (FCD), Missoula Valley Water Quality District (MVWQD), Gallatin Local Water Quality District (GLWQD), Lewis and Clark County Water Quality Protection District (LCCWQPD), Ravalli County Environmental Health (RCEH and Lake County Environmental Health (LCEH)

Goal of the Riparian Buffer Education Media Campaign:
Increase public awareness of the important functions of native riparian vegetation, and foster development of a social norm that encourages establishing, improving and maintaining healthy riparian areas.

Objective:
Develop Montana regional media campaign highlighting the importance of healthy native riparian vegetation in protecting water quality, fish and wildlife habitat, and in preventing bank erosion and flooding.





Project Description:
The Missoula Valley Water Quality District (MVWQD) launched a public education campaign during the summer of 2007 stressing the importance of maintaining and restoring riparian vegetation to water quality, fish and wildlife habitat, and the control of bank erosion and flooding. The campaign included newsprint, radio, posters (shown above) and a website http://www.watersmartmt.com/ with links to additional riparian information resources.

The Partners are expanding the geographic and strategic scope of the campaign to include more Montana communities, through CWA 319(h) FY08 grant funds. The Partners are working with a subcontractor to modify the original MVWQD radio and newsprint ads to include local references for each partner and to develop a television PSA/informational advertisement. These materials will be made available to others to accomplish a statewide media campaign capability.

DEQ Collaborating Partners - Montana Wetlands Council

The Montana Wetlands Council is an active network of diverse interests that works cooperatively to conserve and restore Montana's wetland and riparian ecosystems. Montana's overarching wetland goal is: "No overall net loss of the state's remaining wetland resource base (as of 1989) and an overall increase in the quality and quantity of wetlands in Montana." In 2008, the Council published a strategic wetland plan titled "Priceless Resources: A Strategic Framework for Wetland and Riparian Area Conservation and Restoration in Montana 2008-2021." The Strategic Framework addresses the two inherent aspects of EPA's water resource programs (outreach and education and watershed approach) and all six core elements critical to effective comprehensive wetland programs (regulation, monitoring and assessment, restoration, water quality standards, public-private partnerships, and coordination).

In 2008, DEQ assisted the Wetland Council towards fulfilling its objectives by highlighting various wetland and riparian area conservation and management needs.

Areas of assistance include:

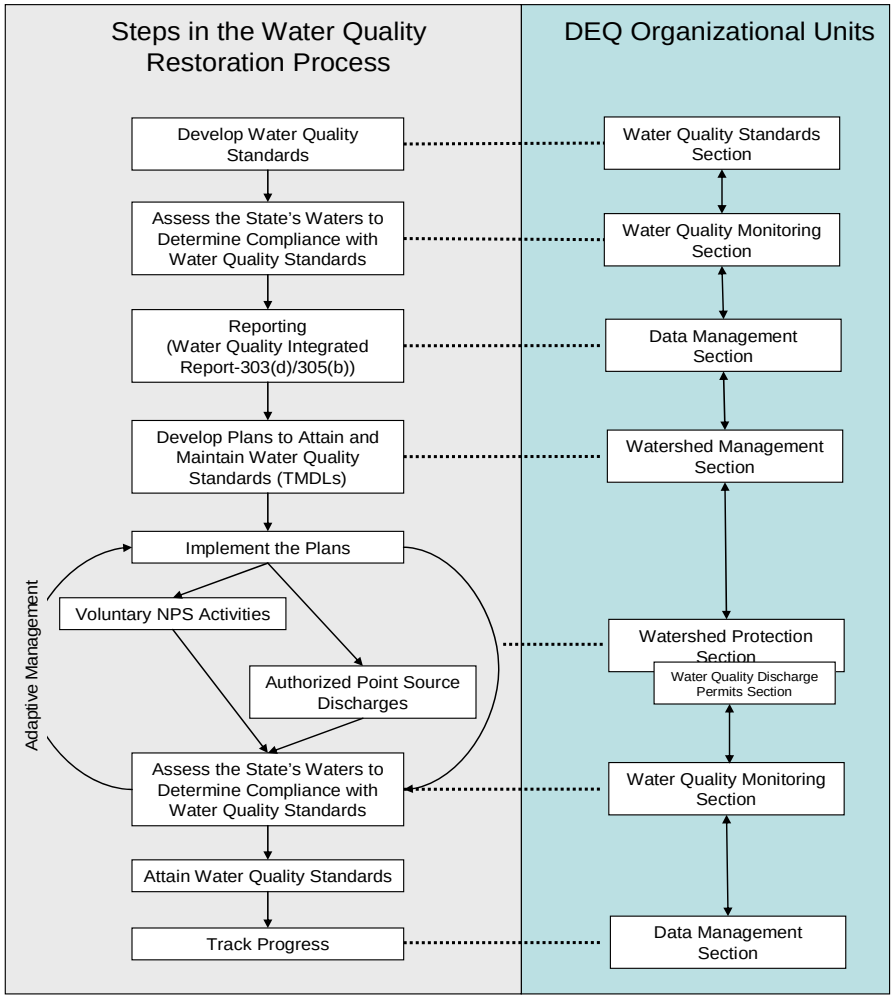
- DEQ is working with Montana Natural Heritage Program and EPA on developing the monitoring plans and protocols for REMAP for wetland resources in 2011.
- Montana Audubon recently completed a contract with the DEQ Wetlands Program developing 3 publications on riparian buffers that have been very well received by state and local governments: "The Need for Stream Vegetative Buffers: What Does the Science Say?" July 2008 http://mtaudubon.org/issues/wetlands/planning.html
- The DEQ is currently updating the Wetlands Clearinghouse and hopes to have it online by the middle of January, 2009. The updated version will include specific information on the activities of Strategic Framework Working Groups and the Montana Wetland Council, current grant and funding opportunities, policy and legislation related to wetlands and other pertinent information.

Appendices

Appendix A – WQPB Integrated Approach

To WQPB's integrated approach:

1. The Standards Section defines the goals for a waterbody by designating its uses, setting criteria to protect those uses, and establish provisions to protect waterbodies from pollutants
2. The Monitoring Section monitors water quality conditions and trends statewide, and assesses sources and severity of pollution problems
3. The Data Management Section reports the assessment findings
4. The Watershed Management Section develops TMDL plans for waters not meeting standards
5. The Watershed Protection Section supports implementation of the plans
6. Additionally, the water quality standards developed by the Standards Section are used throughout the Agency, such as in the Montana Pollutant Discharge Elimination System (MPDES) program, to ensure clean water protection by all permitted point-source dischargers.



Appendix B - ***Montana Nonpoint Source Management Program Five Year Goals and Action Plan***

The Montana Nonpoint Source (NPS) Management Program's goal is to protect and restore water quality from the impacts of nonpoint sources of pollution in order to provide a clean and healthy environment. The short-term (five-year) goal of Montana's NPS Management Program is to demonstrate significant progress in protecting and restoring the water quality of Montana from nonpoint sources of pollution as measured by achieving the actions outlined in the NPS management plan. These actions focus on three specific areas: resource specific goals, policy specific goals, and education and outreach specific goals.

Resource Specific Five-Year Goals for the State's Nonpoint Source Plan	
Five-Year Goal	**Measurable Outcome**
Complete Water Quality Plans and necessary TMDLs	The Watershed Management Section completed TMDLs for three TPAs, approved by the EPA in 2008: St. Regis, Yaak, and Blackfoot/Nevada. The section submitted TMDLs for three additional TPAs to EPA for approval in 2008: Shields, Boulder (Big Timber), and Prospect (sediment). Public review and comment periods were initiated at the end of 2008 for two TPAs: Upper and North Fork Big Hole and Lower Blackfoot. TMDL Planning Areas with TMDL planning documents approaching public comment: Middle and Lower Big Hole, Upper Jefferson tributaries (sediment)
Conduct water quality assessments state-wide	The Water Quality Monitoring Section (WQMS) completely assessed 12 waters in 2008, which will be reflected on the 2008 Water Quality Integrated Report.
Review/update Integrated Water Quality Report (305(b)/303(d))	The Data Management staff is currently in the process of updating the integrated report for 2008.
Reference site monitoring and assessment	The WQMS staff sampled 16 sites 3 times this year as part of the Reference Site Project.
Increase DEQ internal monitoring support for TMDL program	WQMS - All water quality monitoring data from 10 streams, 16 reference sites, and 16 lakes collected in 2008 will support TMDL development directly or indirectly.

Resource Specific Five-Year Goals for the State's Nonpoint Source Plan	
Five-Year Goal	**Measurable Outcome**
Work with watershed groups to develop watershed restoration plans	The Watershed Protection Section continued to work with watershed groups to develop watershed restoration plans in 2008. The Ruby Valley Watershed Group received a 319 grant to develop their restoration plan and held a meeting regarding the elements the group would like to include in their plan. The Blackfoot Challenge has a watershed plan for selecting priority watersheds for restoration. The Big Hole Watershed Committee is planning on completing a WRP as part of their proposed 319 grant. As part of a FY08 319 grant, Fergus County Conservation District has been developing a WRP for the Big Spring Creek watershed and is working with a contractor to design the WRP to meet the nine minimum elements required by EPA for a Watershed Plan. Various other watershed groups have work plans, watershed strategies, and other planning documents in place that contain at least some of the nine minimum elements established by EPA (Sun River Watershed Group, Teton River Watershed Group, Swan Ecosystem Center, and others).
Implement restoration projects identified in Water Quality Plans/TMDLs	TMDL implementation projects are currently tracked by the Watershed Protection Section. The implementation spreadsheet indicates as of 2008 that approximately 57 restoration projects have completed implementation in Montana.
Monitor 319 restoration activities for effectiveness and pollutant load reductions	The QAQC Section collaborated in the development of five SAPs and two QAPPs focusing on monitoring 319 restoration activities for effectiveness and pollutant load reductions including: Restoration Project Monitoring of St. Louis Creek (Nine Mile watershed), Treasure County Salt Cedar Investigation, Cottonwood Creek Culvert Replacement Restoration Monitoring (Blackfoot watershed), Sun River Watershed Group Big Coulee Implementation and Project Management, Big Muddy Creek Watershed Chemistry Monitoring, Crow Creek Restoration Project Monitoring Program (QAPP), Haskill Creek Restoration Project (QAPP)
Establish a statewide monitoring strategy for monitoring of 319 and other watershed restoration activities for practice effectiveness, load reductions, and in-stream water quality achievements.	QAQC staff continues to work on a water quality monitoring strategy which will include monitoring of intermittent streams and development of processes. The strategy is planned for delivery to the EPA in 2009.
Conduct 5-year reviews of completed and implemented TMDLs	N/A
Collaborate with federal, state, and local agencies to promote conservation tillage (no-till, direct seed),vegetated filter strips, and riparian buffers	N/A

Resource Specific Five-Year Goals for the State's Nonpoint Source Plan	
Five-Year Goal	**Measurable Outcome**
SMZ review for protection of water quality, 2 facets: 1)restored watershed monitoring 2)collaborative research projects (i.e. DNRC & Plum Creek)	The Watershed Protection Section has collaborated in a number of Forestry BMP audit reviews. The Forestry BMP reviews are coordinated by the Department of Natural Resource and Conservation's Forestry BMP Audit working group, who organizes a series of summer forestry operations, inspections, and ratings. The Streamside Management Zone (SMZ) requirements are one element of these inspections. There were approximately 20 field inspections during 2008 and the BMP Audit work group has prepared a written summary of these inspection findings.
Overlap priority areas with USFS/DNRC using GIS for coordinating watershed planning process (needs assessment versus existing budgets)	The Watershed Protection Section has been working with multiple agencies BLM, NRCS, DNRC, DEQ, Forest Service, FWP, US Fish and Wildlife Service (MAIRS) to overlap priority areas using GIS for a coordinated watershed restoration planning process. The group aims to focus on a specific geographic area where all agencies have interest in giving resources for integrated restoration activities. In 2008 the group agreed on a geographic area of interest: Ovando to Lincoln
Work with MSU Extension, DNRC, USFS R8, NRCS, and BLM to develop a targeted list of BMPs for grazing (those that achieve water quality standards)	The Watershed Protection staff has been in contact with representatives of the DNRC's Trust Land Management Division and the BLM to gather information on existing grazing land audit and inspection procedures with the intent of developing a targeted list of BMPs for grazing (those that achieve water quality standards). The Forestry BMP audit review could be used as a model and adapted to create a similar BMP audit program on public grazing lands.
Provide reviews and comment on outside agency proposed projects	The staff of the Watershed Protection Section continued to provide review and comment on outside agency proposed projects as requested.
Develop, maintain and enhance Clean Water Act Information Center public access to data system	The Data Management Section administered the Clean Water Act Information Center which provides public access to Montana's Water Quality Integrated Report (305(b) and 303(d) Lists. The section is an ongoing process of maintaining and enhancing the system.
Administer STORET water quality database system	The Data Management Section administered Montana's STORET water quality database system. Latest STORET upload of DEQ monitoring data December, 2008. The staff continued project development for the water quality data management system to replace the STORET system.
Administer web-based STORET Interface Module for non-DEQ STORET data submittals	The Data Management staff also assisted outside users with the web-based STORET Interface Module (WebSIM).

Resource Specific Five-Year Goals for the State's Nonpoint Source Plan	
Five-Year Goal	**Measurable Outcome**
Initiate monitoring project for "large rivers" (e.g. Missouri, Yellowstone)	The Monitoring Section is currently working with the Standards and Modeling Sections in evaluating the data and results from 2007 to develop a nutrient model for large rivers.

Policy Directed Five-Year Goals for the State's Nonpoint Source Plan	
Five-Year Goal	**Measurable Outcome**
Provide 319 funding to projects that implement NPS and TMDL water quality restoration strategies	The WQPB closed out the Fiscal Year 2003 319 planning and project grant. All open grants and related tasks are on schedule. Montana has a balance of ~22% remaining of unexpended 319 funds awarded, one of the lowest balances in the nation. Additionally, the DEQ awarded $850,000 in nonpoint source grants, funding 11 watershed restoration, 2 groundwater, and 4 education and outreach projects in 2008 (Appendix C). Non-federal in-kind match for these projects amounted to $805,016. DEQ's Watershed Protection Section has a limited amount of funding under the federal CWA Section 319 to assist local groups with education projects that are focused on water quality and nonpoint source pollution through the mini-grants program. These projects are funded at $1,500 per grant and are awarded on a twice per year cycle. In 2008 the DEQ closed out 20 mini-grant projects and awarded $1,500 to 13 new projects (Appendix D) with the second call for FY09 applications beginning in January 2009.
Develop and implement DEQ water quality improvement MOUs with agencies including USFS, BLM, DNRC, MDT, and MFWP	The Watershed Protection staff developed an MOU with the US Forest service and was signed in February 2008. The goal of the MOU is to establish greater coordination and collaboration between the United States Department of Agriculture, Forest Service and the Montana Department of Environmental Quality and to foster efficient strategies to protect and restore water quality on public lands managed by the Forest Service in Montana. The MOU is intended to be a prototype for an upcoming MOU with the BLM.
Assist in efforts to develop a cumulative impact assessment strategy for ground-water impacts in high density septic/development areas	N/A
Assist in the review of subdivision storm water rules.	N/A
Implement collaborative monitoring processes with federal, state, and local agencies on federal and state land projects, focusing on riparian zone management in achieving water quality standards	QAQC implemented collaborative monitoring processes with the Bureau of Land Management, US Forest Service, Tri-State Water Council, US Geological Survey, University of Montana, and a number of Conservation Districts, Watershed Groups, and Non-Profit Organizations.
Continue water quality participation in the ITEEM process by collaborating with the IRTWG group	The Watershed Protection Section continues to participate in the ITEEM process. The Highway 69 rebuild project, south of Boulder Montana, is moving to an early and sustained agency and public consultation (ITEEM) approach. The collaborating agencies need the opportunity to meet regarding this project as the next steps are uncertain at this time.

Develop numeric nutrient water quality standards and implementation procedures for surface waters	The Water Quality Standards Section is working with a stakeholder advisory group to design affordability criteria in the development of implementation procedures for numeric nutrient standards for wadeable streams by taking into account the economics of waste treatment. As part of the effort to develop numeric nutrient water quality standards and implementation procedures for surface waters, Mike Suplee from the Water Quality Standards Section produced in conjunction with several authors, the peer reviewed white paper, "Scientific and Technical Basis of the Numeric Nutrient Criteria for Montana's Wadeable Streams and Rivers. The Water Quality Standards Section updated the Statistical Analyses of Water Quality Data, Compliance Tools, and Changepoint Assessment for Montana Rivers and Streams. This report presents an updated statistical analysis of water quality data from Montana Rivers and Streams. The purpose of the statistical analyses is to support the development by the Montana Department of Environmental Quality (MT DEQ) of nutrient and nuisance-algae criteria for flowing waters.
Develop technical basis for a lake classification system based on nutrient status	N/A
Promulgate numeric standards for all pesticides identified in Montana ground and surface waters.	The Water Quality Standards Section produced a document (CIRCULAR DEQ-7) containing numeric water quality standards for Montana's surface and ground waters. Provisions of state and federal law require the adoption of standards that will protect the designated beneficial uses of state waters, such as the support of aquatic life, public water supplies, recreation, or agriculture. The numeric water quality standards in this Circular have been established for parameters (i.e., "pollutants") that are categorized as toxic, carcinogenic, bioconcentrating, radioactive, nutrient, or harmful. In order to address the adoption of numeric standards for all pesticides, the Circular contains ground water standards for pesticides developed in compliance with the Montana Agricultural Chemical Ground Water Protection Act (80-15-201, MCA). CIRCULAR DEQ-7 is regularly updated as additional information or guidance from EPA becomes available.
Develop biocriteria for wadeable streams	In 2008, DEQ Water Quality Standards Section initiated a study that explored how different macroinvertebrate sampling protocols affected the Montana macroinvertebrate indicators of water quality. Ultimately, the staff intends to develop a way to "translate" results obtained from the different sampling methods so that historical data can be compared to current data. The staff will use the knowledge gained from this study when they develop the next iteration of biological indicators in 2009.
Develop Standard Operation Procedures (SOP) for monitoring intermittent streams	N/A
Review and recommend revisions or updates to Montana's Ground-Water Plan	N/A
Form a MS4 task force to promote and coordinate storm water management activities	N/A

Education and Outreach Five-Year Goals for the State's Nonpoint Source Plan	
Five-Year Goal	**Measurable Outcome**
Provide support and promote the development and coordination of watershed groups through MWCC activities, training workshops, advertising campaigns, etc.	Five Work Groups of MWCC are co-chaired by DEQ staff including the Water Activities Work Group, the Education & Outreach Work Group, the Monitoring Work Group, and the Groundwater Work Group, and the Training Work Group. In 2007, EPA awarded a grant to Trees, Water & People (TWP) for statewide efforts in Montana, Colorado, and Utah, and two reservations in Wyoming and South Dakota. As part of the grant, MWCC was awarded $50,000 for each of the next two years to offer training opportunities to Montana's watershed groups. The MWCC is using this funding to offer a suite of training opportunities around the state for watershed groups, conservation district groups, etc. In September 2008 the MWCC held its ninth annual Fall Training for Watershed Coordinators using TWP funds, "Fundraising Strategies for Watershed and Conservation Groups." The two-day event was held in Ft. Peck, MT. Twenty three people attended the training. Additionally, TWP funds were used to conduct two Certified Procurement Professional (CPP) trainings in September and October of 2008 by the Big Sky Public Procurement Association (BSPPA) with 36 total attendees. The MWCC E&O training committee is currently planning to utilize the remainder of the TWP grant to conduct a training focused on building and implementing watershed management plans, planned for the spring of 2009.
Support the certification of volunteer monitors in watershed groups	QAQC collaborated with the Greater Gallatin Watershed Council Volunteer Stream Monitoring Program in the production of a QAPP and in volunteer training. QAQC is working with Montana Watercourse to support the certification of volunteer monitors in watershed groups. The QAQC staff and Montana Watercourse coordinated, through several conference calls and emails, to complete a draft Volunteer Monitoring (VM) QAPP. This QAPP will be used in future certification trainings. The DEQ, Montana Watercourse, and the Sun River Watershed group organized a pilot VM certification training. Unfortunately, the pilot certification training was canceled due to lack of attendance. Watercourse is working with DEQ representatives to find alternative solutions to conducting a pilot training. They discussed and agreed on conducting the pilot trainings in the spring of 2009 with the Careless Creek watershed effort or other groups if the opportunity arises.

Education and Outreach Five-Year Goals for the State's Nonpoint Source Plan	
Five-Year Goal	**Measurable Outcome**
Improve DEQ website for public access to information on NPS Program	The Watershed Protection Section is working with the WQPB administration staff to reformat and update the DEQ Website. The nonpoint source program page has undergone a major transformation in 2008 with a new main page and several new informative pages and links. The new format provides information regarding the NPS program in a more organized manner with the intention of making the page easier to navigate for the public.
Develop educational campaign: Urban growth and development issues (i.e. storm water runoff, septic system maintenance, transportation infrastructure, low impact development)	The Watershed Protection section staff in conjunction with several sponsors is developing the first ever statewide storm water conference, "Clear Choices: Storm Water Solutions for Montana". The conference will include presentations on best management practices for storm water control and storm water pollution prevention. Civil engineers, city and county planners and local officials, legislators, developers, contractors and water resource managers should consider attending. Storm water control experts from throughout the region will present information to participants.
Develop educational campaign: Riparian and wetland buffer protection	The Watershed Protection Section is collaborating with several groups who are developing statewide riparian education campaigns including MSU's Watercourse, the Governor's Task Force for Riparian Protection and a consortium of local water quality protection districts, conservation districts and counties.
Develop educational campaign: Small farm and ranch conservation. Work with NRCS, DNRC, MSU Extension, and Farm Bureau	DEQ is currently working with the Montana State University Extension Service on a 319 grant contract, focusing on the development and implementation of education and outreach activities to address nonpoint source pollution from small livestock operations. During 2008, the 319 funds were used to print additional copies of a brochure promoting the appropriate use of manure as fertilizer. The funds were also used to prepare and give presentations to livestock producer audiences in Billings, Great Falls, Havre and Sidney. MSU Extension began designing a website that will serve as clearinghouse for information on environmental stewardship at animal feeding operations (www.AFOstewardship.org).

Education and Outreach Five-Year Goals for the State's Nonpoint Source Plan	
Five-Year Goal	**Measurable Outcome**
Work with Statewide organizations (i.e. MEEA, Project WET) to establish and expand water curriculum in schools	The Watershed Protection Section manages the 319 funded NPS Education for Diverse Audiences grant administered by the MSU Montana Watercourse. In 2008, MT Watercourse worked with USDA Forest Service/Helena National Forest, MT FWP, MT Discovery Foundation, and Elkhorn Working Group, Project WET, Project Webfoot, MEA, MFT, and others to hold workshops and develop curriculum for the K-12 audience.
Develop and promote BMP training for road maintenance personnel using Local Technical Assistance Program (LTAP) and other venues	N/A

Appendix C – 319 FY08 Project Summaries

Project Name	Project Sponsor	DEQ Project Officer	*DEQ Contract #	Project Type	319 Awarded Funds	Non-Federal Match Funds (required)	Total Project Cost
		Watershed Restoration Projects					
Bitterroot Headwaters TMDL Implementation	Bitterroot Water Forum	Mark Kelley	208026	Restoration	$30,000.00	$23,000.00	$53,000.00
Blackfoot Watershed Water Quality Restoration	Blackfoot Challenge	Robert Ray	208027	Restoration	$50,000.00	$33,669.00	$83,669.00
Big Spring Watershed Restoration	Fergus County Conservation District	Mark Ockey	208028	Restoration	$70,000.00	$49,300.00	$119,300.00
Bigfork Storm Water Project	Flathead County	Robert Ray	208029	Restoration	$60,000.00	$40,000.00	$100,000.00
Mid Musselshell Watershed Restoration Project	Lower Musselshell Conservation District	Mark Ockey	208030	Restoration	$95,000.00	$218,277.15	$313,277.15
NPS At-Large Projects	Montana DEQ	Robert Ray		Restoration	$50,000.00	$0.00	$50,000.00
Prickly Pear Creek Re-Watering Project	Montana Water Trust	Robert Ray	208031	Restoration	$17,000.00	$11,534.00	$28,534.00
Saurbier Feedlot Reclamation Project	Ruby Valley Conservation District	Mark Kelley	208032	Restoration	$23,000.00	$25,120.00	$48,120.00
Swan Watershed TMDL Implementaion	Swan EcoSystem Center	Robert Ray	208033	Restoration	$40,000.00	$47,786.00	$87,786.00
Teton Spring Creek	Teton County Conservation District	Mark Ockey	208034	Restoration	$35,000.00	$23,650.00	$58,650.00
Ninemile Restoration Phase II	Trout Unlimited	Robert Ray	208035	Restoration	$25,000.00	$16,667.00	$41,667.00
				SUB-TOTALS	**$495,000.00**	**$489,003.15**	**$984,003.15**

		Groundwater Projects					
Groundwater Monitoring in Flathead Basin	Flathead Basin Commission	Robert Ray	208036	Groundwater	$25,000.00	$17,000.00	$42,000.00
Hamilton Source Water Protection Project	Ravalli County	Robert Ray	208037	Groundwater	$75,000.00	$127,829.00	$202,829.00
				SUB-TOTALS	**$100,000.00**	**$144,829.00**	**$244,829.00**
		Education and Outreach Projects					
Riparian Buffer Education Campaign	Flathead Conservation District	Kristy Zhinin	208038	E&O	$120,000.00	$80,000.00	$200,000.00
Critical Lands Outreach & Education Project	Flathead Lakers	Kristy Zhinin	208039	E&O	$35,000.00	$23,500.00	$58,500.00
NPS Education for Diverse Audiences	Montana State University - Montana Watercourse	Kristy Zhinin	208040	E&O	$80,000.00	$53,334.00	$133,334.00
Montana Livestock NPS Water Quality Initiative	Montana State University-Extension Service	Mark Ockey	208041	E&O	$20,000.00	$14,350.00	$34,350.00
				SUB-TOTALS	**$255,000.00**	**$171,184.00**	**$426,184.00**
		TMDL Planning Projects					
Flint Creek TMDL	Granite Conservation District	Darrin Kron	208044	TMDL Planning	$160,000.00	$106,000.00	$266,000.00
Upper Gallatin TMDL	Blue Water Task Force	Pete Schade	208042	TMDL Planning	$75,000.00	$50,000.00	$125,000.00
Lower Gallatin TMDL	Greater Gallatin Watershed Council	Pete Schade	208045	TMDL Planning	$75,000.00	$50,000.00	$125,000.00
Flathead/Stillwater TMDL	Flathead CD	Jim Bond	208043	TMDL Planning	$40,000.00	$6,000.00	$46,000.00
				SUB-TOTALS	**$350,000.00**	**$212,000.00**	**$562,000.00**
				GRAND TOTALS	**$1,200,000.00**	**$1,017,016.15**	**$2,217,016.15**

Appendix D – 2008 319 Mini-grant Project Summaries

319 Mini-Grants Awarded in 2008 (Fiscal Years 07 and 08)							
MINI GRANT # (Time)	***GRANTEE NAME***	***PROJECT NAME***	***GRANT AWARD DATE***	***GRANT END DATE***	***GRANT DOLLAR FIGURE***	***GRANT MATCH FIGURE***	***PROJECT TOTAL***
WQPB-MG08-08	Blue Water Task Force	Community Trail Sign Project	3/4/2008	2/28/2009	$1,500.00	$1,000.00	$2,500.00
WQPB-MG08-09	Flathead Audubon Society	Wetland & Riparian Area Educational Trunk	3/4/2008	2/28/2009	$1,500.00	$1,000.00	$2,500.00
WQPB-MG08-10	Lewis & Clark Conservation District	Flood Awareness Day Festival	3/4/2008	2/28/2009	$1,500.00	$1,000.00	$2,500.00
WQPB-MG08-11	Lolo Watershed Group	Lolo Watershed Group Website	3/4/2008	2/28/2009	$1,500.00	$1,000.00	$2,500.00
WQPB-MG08-12	Montana Outdoor Science School	10th Annual MOSS Watershed Festival	3/4/2008	2/28/2009	$1,500.00	$1,000.00	$2,500.00
WQPB-MG08-13	Montana Water Trust	Water Quality Monitoring Program	3/4/2008	2/28/2009	$1,500.00	$1,000.00	$2,500.00
WQPB-MG08-14	Toole County Conservation District	EnviroScape Model	3/4/2008	2/28/2009	$1,500.00	$1,000.00	$2,500.00
WQPB-MG09-1	Bitter Root Water Forum (BRWF)	Bitter Root Water Forum Web site Development & Maintenance	8/4/2008	6/30/2009	$1,500.00	$5,720.00	$7,220.00
WQPB-MG09-2	Linderman Elementary School	Water Quality and Aquatic life Education and Investigation	8/4/2008	6/30/2009	$1,500.00	$4,498.99	$5,998.99
WQPB-MG09-3	Richland County Health Department	Water Quality Education in Richland County	8/4/2008	6/30/2009	$1,500.00	$1,693.84	$3,193.84

WQPB-MG09-4	Clark Fork Watershed Education Program	Engaging High Schools in World Water Monitoring Day	8/4/2008	6/30/2009	$1,500.00	$1,174.55	$2,674.55
WQPB-MG09-5	Capital High School	Ecological Integrity	8/4/2008	6/30/2009	$1,500.00	$19,198.40	$20,698.40
WQPB-MG09-6	Flathead Lakers	Protecting Critical Water Resources Using GIS Data and Maps	8/4/2008	6/30/2009	$1,500.00	$1,200.00	$2,700.00
Totals					**$19,500.00**	**$40,485.78**	**$59,985.78**