APPENDIX E - ENTITIES ADDRESSING NONPOINT SOURCE POLLUTION IN MONTANA

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FEDERAL GOVERNMENT AGENCIES

ARMY CORPS OF ENGINEERS

The U.S. Army Corps of Engineers (ACE) administers permit programs for Section 10 of the Rivers and Harbors Act, and Section 404 of the Federal Clean Water Act. Section 10 permits are required for activities such as construction of certain structures (e.g. piers, wharfs, weirs), or other modifications to the navigable waters of the United States. Section 404 permits are required for activities involving the disposal of dredged or fill material into the waters of the United States. In addition, the Nationwide Permit #27 can be used to authorize stream restoration and wetland creation projects. Information can be obtained on the Montana U.S Army Corps of Engineers website, as well as information about the permitting program.

Finally, the Corps of Engineers offers planning assistance to states and tribes (through the section 22 Program) that assists entities with water resource related problems where technical planning assistance from the Corps of Engineers would be beneficial.

BUREAU OF LAND MANAGEMENT

The Department of the Interior's Bureau of Land Management (BLM) administers approximately eight million acres within Montana.

In 2010, the State Directors of the BLM and the Montana Department of Environmental Quality (DEQ) signed a Memorandum of Understanding (MOU) establishing the framework for managing and controlling nonpoint source pollution from BLM managed lands and authorizations. The overall objective is to maintain and/or improve watershed and riparian health in order to reduce nonpoint source pollution and improve water quality. A key component of the BLM's program is that the BLM focuses on addressing the causes and sources of water quality issues while also providing funding to DEQ to monitor instream water quality. This approach uses the strengths of both agencies to more efficiently and effectively manage water quality. The BLM provides DEQ a report every two years summarizing compliance with the MOU.

Opportunities for coordination and collaboration:

- Continue cooperating in the reclamation of abandoned mine lands
- Continue cooperating in the management of energy resources
- Continue coordinating data collection on public lands
- Continue participating on the Montana Watershed Coordination Council and the Montana Wetland Council
- Continue providing technical assistance on land management and its relationship to water quality
- Continue participating in the development of TMDLs and water quality restoration plans in watersheds where BLM is a significant resource manager
- Jointly evaluate BMP implementation and effectiveness

BUREAU OF RECLAMATION

The Bureau of Reclamation is a water management agency with numerous programs, initiatives, and activities that help the western states, Native American tribes, and others meet new water needs and balance the competing uses of water in the West. Reclamation's mission is to assist in meeting the increasing water demands of the West while protecting the environment and the public's investment in Reclamation constructed dams, power plants, and canals. Reclamation has many activities and programs that contribute to the stewardship of watersheds and water quality in Montana including water conservation field services and drought relief programs.

Coordination and collaboration opportunities include the following:

- Financial and technical assistance for watershed projects
- Financial and technical assistance for irrigation district issues and projects
- Participation in TMDL development and water quality restoration planning in watersheds where Reclamation activities have a significant impact

ENVIRONMENTAL PROTECTION AGENCY

EPA Region 8 is responsible for implementing water programs to protect the public and the environment in six states, including Montana. Most of EPA's water programs are delegated to the state water quality agency for implementation. Through this relationship, EPA promotes many activities and initiatives that help local watershed groups with water quality stewardship efforts in Montana. EPA programs supporting Montana's NPS program include:

- **Section 319 Funding**: Cooperative agreements are made between EPA and the state, enabling federal funds to be distributed. The state NPS program subsequently dispenses a portion of these funds to sponsors of local NPS projects. The state must match the federal contributions. DEQ applies for section 319 grant funding annually. Approximately $2 million will be available to Montana for 2017. One of Region 8's Watershed Team's primary goals is to "Assist states with integrated strategies for prioritizing and protecting /restoring waterbodies and watersheds." EPA staff provides input during DEQ NPS planning activities and participates in statewide watershed protection efforts, such as the Montana Watershed Coordination Council and the Water Activities Workgroup. EPA provides additional support to DEQ's NPS program by coordinating funding of additional grant programs, providing assistance on state-led projects, and providing information about new federal initiatives, watershed protection tools, and innovative approaches for watershed protection.
- **Water Quality Monitoring and TMDL Programs:** Significant collaboration occurs between DEQ and EPA in implementation of monitoring activities and development of total maximum daily loads (TMDLs). EPA and DEQ collaborate on development and implementation of annual water quality monitoring plans. These monitoring and assessment activities lead to the development of the biannual Integrated Report, which describes the overall water quality in Montana and provides a list of impaired waterbodies. DEQ develops the Integrated Report and EPA provides concurrence. EPA provides yearly grants to DEQ to support the monitoring and assessment work.
- **Wetland Protection Development Grants Program**: Wetlands are often important components of mitigating the potential effects of nonpoint source pollution. Recognizing this, DEQ collaborates with EPA Region 8 and Headquarters to help develop its wetland program using

EPA technical assistance and grant resources. EPA continues to provide Wetlands Protection Development Grants to DEQ to help develop its wetland program.

Coordination and collaboration opportunities include the following:

- Provide financial assistance for watershed and water quality projects
- Provide technical assistance with water quality monitoring and modeling, source water and drinking water protection, and wetland management and protection activities

FARM SERVICE AGENCY

The Farm Service Agency (FSA) of the U.S. Department of Agriculture enhances the environment by the development and implementation of programs to ensure adequate protection of natural, cultural, and historic resources. FSA programs and activities that contribute to the stewardship of watershed health and water quality include the following:

- **Conservation Reserve Program** (CRP): CRP is a voluntary program that offers annual rental payments, incentive payments for certain activities, and cost share assistance to remove environmentally sensitive land from agricultural production and plant species that will improve environmental health and quality. The program encourages the re-establishment of valuable land cover to help improve water quality, prevent soil erosion, and reduce loss of wildlife habitat. CRP is administered through local county Farm Service Agency Offices.
- **Emergency Conservation Program** (ECP): ECP provides emergency funding for farmers and ranchers to rehabilitate farmland damaged by wind erosion, floods, or other natural disasters, and for carrying out emergency water conservation measures during periods of severe drought. Emergency practices to rehabilitate farmland damaged by disasters, including drought, include providing water for livestock, fence restoration, grading and shaping of farmland, restoring conservation structures and water conservation measures.

Opportunities for the FSA to coordinate and collaborate with other agencies, organizations, and individuals include the following:

- Providing financial assistance to farmers for conservation measures
- Providing technical assistance (e.g. a landowner guide) for selecting and implementing appropriate conservation techniques and practices

FISH AND WILDLIFE SERVICE

The U.S. Fish and Wildlife Service (USFWS) is part of the Department of the Interior and is responsible for carrying out federal laws and programs that conserve, protect, and enhance fish, wildlife, plants and their habitats. Montana has seven staffed National Wildlife Refuges (NWRs) and five Wetland Management Districts (WMDs).

The USFWS has many activities and programs that contribute to the stewardship of watersheds and water quality in Montana including the following:

- **Partners for Fish and Wildlife Program**: Provides funding and technical assistance to private landowners interested in fish and wildlife habitat projects on their land. Montana focus areas include the Blackfoot Valley, Rocky Mountain Front, Northeastern Montana, Beaver Creek, Mission Valley, and Centennial Valley.

- **Emergency Wetlands Resources Act**: Promotes the conservation of migratory waterfowl and to offset or prevent loss of wetlands by acquisition of wetlands and other essential habitat.
- **Fish and Wildlife Coordination Act**: Provides evaluations of the impacts of water resources development projects (such as dam construction or reclamation projects) on fish and wildlife and Clean Water Act Sections 402 and 404 permits.
- **National Wetland Inventory**: Responsible for identifying, classifying, mapping, and reporting on the status of wetlands of the United States.

NATURAL RESOURCES CONSERVATION SERVICE

The Natural Resources Conservation Service (NRCS) is a part of the U.S. Department of Agriculture and provides products and services that enable America's private land owners to be good stewards of the nation's soil, water, and related natural resources. The role of NRCS is to provide technical and financial assistance on a voluntary basis to help land managers take a comprehensive approach to the use and protection of natural resources.

The NRCS has many programs and initiatives that contribute to the stewardship of watersheds and water quality in Montana:

Farm Bill Programs

- **Agricultural Conservation Easement Program – Wetland Reserve Easements (ACEP-WRE):** The ACEP-WRE program is a voluntary program to restore and protect wetlands on private property. ACEP-WRE provides landowners with financial incentives to restore wetlands. Landowners and the NRCS develop a plan for the restoration and maintenance of the wetland.
- **Conservation Stewardship Program (CSP):** The Conservation Stewardship Program is a voluntary program that offers payments to producers who maintain a high level of conservation on their land and agree to adopt higher levels of stewardship. The program provides access to all producers, regardless of operation size, crops produced, or geographic location
- **Environmental Quality Incentives Program (EQIP):** Provides technical and financial assistance to farmers and ranchers who volunteer to address natural resource concerns on their agricultural lands. Special initiatives such as the National Water Quality Initiative (NWQI) allow NRCS to target water quality impairments through on-farm conservation. Key to NRCS efforts is the locally-led process of engaging producers, stakeholders and partners.
- **EQIP Conservation Innovation Grants (CIG)**: To promote new and innovative technologies. The goal is that these new and innovative technologies can be incorporated into the EQIP as future cost share or incentive activities.
- **National Water Quality Initiative (NWQI):** Established as a joint initiative with state water quality agencies and the EPA in 2012 to address agricultural sources of water pollution, including nutrients, sediment and pathogens, in priority watersheds throughout the country. The goal of NWQI is to implement conservation practices in a sufficient quantity in a concentrated area so that agriculture no longer contributes to the impairment of waterbodies within these priority watersheds. In Montana NRCS and DEQ have a Memorandum of Understanding (2012) that provides for the Montana Watershed Coordination Council's Water Activities Work Group to function as the State Technical Committee's Water Resources Committee. This provides a collaborative process for considering and selecting watersheds for the NAWQI. EQIP funds this assistance and attempts to leverage funding with state and local partners.

- **Regional Conservation Partnership Program (RCPP):** The RCPP is a partner-driven, locally-led approach to conservation. It offers new opportunities for USDA's Natural Resources Conservation Service (NRCS) to harness innovation, welcome new partners to the conservation mission, and demonstrate the value and efficacy of voluntary, private lands conservation. RCPP allows NRCS to match local partner funds and implement locally-driven conservation efforts.

Other NRCS Programs and Activities include

- **Emergency Watershed Protection Program** (EWP): Provides financial and technical assistance for emergency measures to address hazards to life and property created by a natural disaster.
- **Swampbuster/Wetland Conservation Provisions**: Discourages the conversion of wetlands on agricultural land by denying federal farm benefits to farmers who drain wetlands.
- **Conservation Technical Assistance**: Provides range conservationists, soil conservationists, engineers, biologists, agronomists, and soil scientists to conserve natural resources on private lands. With NRCS technical assistance, landowners plan and apply practices that reduce soil erosion; improve water quality; and enhance forest land, wetlands, grazing land, and wildlife habitat.

Coordination and collaboration opportunities include the following:

- Identification of priority NWQI watersheds
- Funding for projects conducted by landowners, conservation districts, and watershed groups
- Technical assistance for projects conducted by landowners, conservation districts, and watershed groups

FOREST SERVICE

The US Forest Service is a part of the U.S. Department of Agriculture. Watershed management and protection remains one of the primary objectives of today's National Forest System. Montana has nine National Forests covering almost 17 million acres in Montana. MT DEQ and the Forest Service collaborate and coordinate extensively on programs addressing nonpoint source pollution including:

- **Watershed Restoration Planning and Implementation**: The Forest Service is responsible for prioritizing watersheds for restoration and other management activities, development of watershed restoration plans and implementation of those plans.
- **Abandoned Mine Reclamation**: In coordination with the DEQ Abandoned Mines Program, the Forest Service prepares joint engineering and cost analyses, conducts primary responsible party searches, plans and implements site remediation activities.
- **Road Management**: The Forest Service has undertaken a program of road inventory, problem identification, and maintenance. The 2005 Travel Management Rule directs Forests and Grasslands to do travel analysis. This process will identify the minimum road system needed to meet overall management objectives. It will determine the roads and trails available for motorized and unamortized use and those that will be eliminated.
- **BMP Manual and Effectiveness Monitoring:** The Forest Service published the "National Best Management Practices for Water Quality Management on National Forest Lands" in April 2012 to improve agency performance and accountability consistent with the Clean Water Act. Following up on this technical guide, individual Forests are required to document the effectiveness of BMP practices installed on a subset of their projects.

- **Watershed Condition Framework:** The 2012 Forest Planning Rule requires all National Forests to identify select watersheds that are a priority for restoration or maintenance as part of the Forest Plan. Based on each Forest's priorities, the Forests are required to develop and implement action plans (Watershed Restoration Action Plans) that will improve watershed conditions.

Opportunities to coordinate and collaborate with the Forest Service include the following:

- Participating in TMDL development and water quality restoration planning and protection efforts
- Cooperatively provide information needed for watershed assessment and encourage cooperative efforts to assess conditions across jurisdictional boundaries
- Providing technical and financial assistance with water quality and habitat protection and restoration projects
- Share data collected in support of land and resource management plans such as hydrology and soils surveys and wetlands inventories
- Incorporating best management practice (BMP) measures into timber harvest plans that minimize impacts to water quality
- The Forest Service will continue participation in and support of the state Forestry BMP audit program

GEOLOGICAL SURVEY

The USGS was established by Congress in 1879 to provide the Nation with reliable and impartial information in order to understand the Nation's natural resources. Today, the USGS is a scientific organization concerned with providing credible, relevant, impartial, and timely information.

USGS water activities are divided into different programs including the:

- **Groundwater and Streamflow Information Program:** provides for monitoring of groundwater and surface-water resources at the local/regional/national in near real-time and over much longer temporal scales (decades to centuries).
- **National Water Quality Program:** provides an understanding of water-quality conditions; whether conditions are getting better or worse over time; and how natural features and human activities affect those conditions.
- **Water Availability and Use Science Program:** has the goal of providing an accurate assessment of the status of the water resources of the U.S., assisting in the determination of the quantity and quality of water that is available for beneficial uses, identifying long-term trends in water availability, and developing the basis for an improved ability to forecast the availability of water for economic, energy production, and environmental uses.

TRIBES

TRIBAL WATER QUALITY PROGRAMS

The State of Montana contains seven Tribal Nations within its boundaries. These Tribes are sovereign nations and are governed as such. The Tribes manage approximately 4 million acres of land in

Montana. These Tribal governments participate in EPA's water quality grant programs including water quality monitoring, nonpoint source pollution control, and wetlands program development. The EPA Montana Office works with the Tribal programs to develop and maintain water quality protection programs. In Montana, three Tribal governments have water quality standards that have been approved by the EPA. A fourth has been granted authority to administer a water quality standards program and is proceeding with seeking EPA approval of their Tribal water quality standards. All of the Tribes located in Montana have NPS programs with assessments and management plans that have been approved by EPA. Continued collaboration is encouraged between DEQ and Tribal Nations in Montana to enhance water quality programs by understanding each agency/government's concerns and needs. For additional information about EPA's Tribal water quality grant programs in Montana, please call (406) 457-5000.

Confederated Salish and Kootenai Tribes of the Flathead Reservation* Natural Resources Department Environmental Protection Division http://nrd.csktribes.org
Fort Peck Assiniboine and Sioux Tribes* Office of Environmental Protection www.fortpecoep.org
Northern Cheyenne Tribe* Department of Environmental Protection and Natural Resources www.cheyennenation-depnr.com
Fort Belknap Indian Community Environmental Department www.ftbelknap.org/environmental.html
Crow Nation Natural Resources Department www.crow-nsn.gov
Chippewa Cree Indians Tribe of the Rocky Boy's Reservation Water Resources Department
Blackfeet Nation** Blackfeet Environmental Office www.blackfeetenvironmental.com

* These Tribes have EPA approved Water Quality Standards under Section 303(c) of the Clean Water Act.
** This Tribe has received authority to administer a Water Quality Standards program under Section 518 of the Clean Water Act.

STATE GOVERNMENT AGENCIES

DEPARTMENT OF AGRICULTURE

The mission of the Montana Department of Agriculture is to protect producers and consumers, and to enhance and develop agriculture and allied industries. While serving Montana's agriculture, the Department is mandated to protect the health of the environment and the state's citizens from agriculture related impacts. The Department has many activities and programs that contribute to water quality protection in Montana including:

- **Pesticide Management Program**: The proper use of pesticides is regulated by registering pesticide products, certifying and training pesticide applicators and dealers, and enforcing pesticide laws and regulations.
- **Groundwater Protection Program**: The Groundwater Protection Program provides for the management of agricultural chemicals to prevent, minimize, and mitigate agricultural chemicals in groundwater. The Groundwater Protection Program maintains a permanent network of groundwater wells across the state, and conducts special regionally-focused projects annually. The samples collected during annual monitoring and regional projects are tested for approximately 100 pesticides, pesticide metabolites, nitrate, and nitrite concentrations.

Opportunities for collaboration and coordination with the Department of Agriculture include the following:

- Working with agencies on cooperative water resource projects that include pesticide/fertilizer related sampling and monitoring including NRCS, MSU, EPA, USGS, tribes, DEQ, MBMG, communities and local units of government.
- Sampling and monitoring of water resources and providing technical assistance in standard operating procedures, quality assurance program plans, sampling/monitoring design, well-selection criteria, analyte selection and laboratory analyses interpretation.

DEPARTMENT OF FISH, WILDLIFE, AND PARKS

Montana Fish, Wildlife, & Parks (FWP) manages the state's wildlife resources for recreational uses such as fishing and hunting and also for protection of open space, wilderness, and habitat for nongame species. The Fisheries Division provides technical assistance for managing endangered and threatened aquatic species, protecting and restoring aquatic habitat, protecting and restoring native fish populations, and controlling pollution. Staff of the Fisheries Division:

- Monitors and researches fish populations and habitat condition
- Participates in land use decisions with local, state, and federal agencies
- Assists private landowners, agencies, and organizations with habitat protection and restoration efforts through the Future Fisheries grant program and technical assistance
- Manages water flows in streams and water levels in lakes and reservoirs
- Administers the Stream Protection Act (124 Permits) and, with the Conservation Districts, implements the Natural Streambed and Land Preservation Act (310 Permits)
- Maintains the Montana Fish Consumption Advisory, which lists meal advice for people eating wild-caught fish that are contaminated with mercury or other metals or harmful organic compounds

FWP has a pollution control biologist to facilitate interagency coordination regarding activities with implications to fisheries resources. Examples of opportunities for the FWP to collaborate and coordinate with other agencies, organizations, and individuals include the following:

- Collaborating with local watershed groups to accommodate watershed restoration goals that benefit water quality and fisheries resources
- In partnership with DEQ, coordinate water pollution activities including investigation of fish kills and other activities that have implications to fisheries resources and water quality

DEPARTMENT OF JUSTICE

The Natural Resource Damage Program (NRDP) within the Department of Justice is responsible for preparing natural resource damage assessments and lawsuits pursuant to the federal and state superfund and oil pollution act laws in order to recover damages for injuries to natural resources caused by releases of hazardous substances and for developing and implementing natural resource restoration plans that guide the expenditures of the recovered damages in compliance with these laws.

The NRDP is responsible for determining natural resource injury and preparing and implementing restoration plans that guide the State's expenditure of settlement proceeds on restoration projects. In general, funds can be used on projects located within the area of the injury or nearby that will restore, rehabilitate, replace, or acquire the equivalent of the injured natural resources. Natural resources and services they provide include:

- water, fish and wildlife resources
- public drinking water supplies
- natural resource based recreational opportunities such as hunting, fishing, hiking and wildlife watching

DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

The mission of the Montana Department of Natural Resources and Conservation (DNRC) is to help ensure that Montana's land and water resources provide benefits for present and future generations.

The Conservation and Resource Development Division assists individuals and local governments with natural resource management concerns and finances conservation, resource management, and reclamation activities. It also provides financial and technical assistance for watershed management and pollution prevention projects conducted by Montana's 58 conservation districts. This division is a strong supporter of conservation activities, water quality and upland and streamside management and protection. A strong partnership has developed between this division, conservation districts, USDA, NRCS, and watershed groups. The division has a variety of grant and loan programs available to carry out activities that address conservation, watershed management, soil health, saline seep reclamation, education, and restoration and reclamation activities. Many of these grant programs are used to fund nonpoint source pollution management activities and are used as match for 319 grants.

The division also assists conservation districts in their administration of the natural streambed and land preservation act and writes the state's minimum standards for the act. One of the review criteria for this permitting program is minimization of sedimentation and erosion.

The Forestry Division is responsible for planning and implementing forestry programs through a network of field offices. The Service Forestry Bureau provides services to various client groups to help them comply with State forestry laws and achieve their own forestry related objectives. Education is a key role of the Service Forestry Bureau to make people aware of forestry Best Management Practices (BMPs), which are voluntary in Montana, and of the Streamside Management Zone Law which is regulatory and applies to all streams during commercial timber harvest. The forestry BMPs and the SMZ Law focus on protecting water quality.

DNRC administers a Rangeland Resource Program with four major areas of emphasis:

- Work with county range committees, conservation districts, and producer groups to foster sound rangeland management
- Encourage coordination and cooperation between private, state, and federal entities involved in range management
- Administer the Rangeland Improvement Loan Program
- Co-sponsor the Governor's Range Tour, Winter Grazing Seminar, and Montana Youth Range Camp

The Water Resources Division includes the Water Management, Water Rights, and Water Operations Bureaus. The division provides expertise for surface water and groundwater hydrology, floodplain management, water allocation, dam safety, assists with watershed planning, drought planning and resiliency and collects water flow data. This Division has responsibility for development of the state water plan.

Opportunities exist for DNRC to coordinate and collaborate with local groups and organizations and other agencies within the watershed framework. These opportunities include:

- Watershed planning
- Water management, water allocation and drought resiliency
- Floodplain delineation management and mitigation
- Forest practices
- Forestry BMPs and operations within Streamside Management Zones
- Educational programs on land management, grazing, streamside management forestry, and water use
- Collection of water quality, water resource and land use data from state-owned school trust lands
- Cooperative watershed assessment, planning and restoration activities in watersheds containing school trust lands intermixed with other agencies and landowners groups
- Coordinate and improve stream permitting among agencies and the public

DEPARTMENT OF TRANSPORTATION

The Montana Department of Transportation (MDT) serves the public by providing a transportation system that emphasizes quality, safety, cost effectiveness, and sensitivity to the environment. MDT contributes to the stewardship of watersheds and water quality in Montana through:

- Preparing and submitting Storm Water Pollution Prevention Plans (SWPPP)
- Implementing Best Management Practices during construction and maintenance activities
- Constructing and maintaining temporary and permanent sediment and erosion control features
- Implementing Best Management Practices (BMPs) during all construction and maintenance activities
- Implementing additional stormwater pollution prevention requirements included in Section 404 Permits, Section 401 Certification, and Stream Protection Act 124 Authorizations
- Evaluating projects for practicability of including practices that infiltrate, evapotranspire, or capture for reuse the runoff generated from the first 0.5 inches of rainfall from a 24-hour storm preceded by 48 hours of no measureable precipitation

- Planning for measures to minimize and avoid impacts to aquatic resources such as wetlands, streams and rivers along transportation project corridors
- Mitigation of transportation project wetland and stream bank impacts: more than 54 wetland and stream mitigation sites have been restored or created, resulting in approximately 1,300 acres of wetlands and 46,000 linear feet of streambank to replace aquatic resources impacted by transportation projects across the state.
- Assisting DEQ during the preparation and implementation of TMDL Restoration Plans for impaired waterways
- Installing permanent erosion and sediment control (PESC) features such as check dams and sediment traps in environmentally sensitive areas
- Increasing the salt content in the traction sand, which reduces the amount of sanding material utilized during the winter months
- Conducting annual maintenance such as sweeping roadways, repairing check dams, and removing sediment from sediment traps

STATEWIDE ORGANIZATIONS AND UNIVERSITIES

MONTANA AQUATIC RESOURCE SERVICES

Montana Aquatic Resources Services (MARS) restores, enhances and preserves Montana's Aquatic Resources. MARS has a statewide In-Lieu fee program which provides compensatory mitigation for unavoidable impacts to Montana's wetlands, streams riparian areas and other aquatic habitat. MARS also offers a channel migration easement program along the Yellowstone River

MONTANA ASSOCIATION OF CONSERVATION DISTRICTS AND

SOIL AND WATER CONSERVATION DISTRICTS OF MONTANA

Conservation districts are units of local government designed to help citizens conserve their soil, water, and other renewable natural resources. Montana's 58 conservation districts cover all counties and include more than 70 municipalities included within district boundaries. The purpose of MACD (a 501(c)4 nonprofit) is to equip districts with the authorities, powers, and funding necessary to complete their responsibilities. MACD facilitates communication among districts, with federal and state agencies, and with other organizations. MACD works with the state legislature and Congress to affect natural resource policy, acts as an information clearinghouse for districts, and generally promotes awareness of districts and their conservation activities.

The purpose of SWCDM (a 501(c)3 nonprofit) is to serve and support Montana's conservation districts through programs, technical assistance, information sharing, and other resources. SWCDM works with agency and non-government organizations in delivering programs that best serve districts and Montanans through local, commonsense conservation. Current SWCDM programs include those focused on soil health, water resources, range to name a few.

MONTANA BUREAU OF MINES AND GEOLOGY

The Montana Bureau of Mines and Geology (MBMG) has a mission of providing applied research that promotes Montana's orderly development of its mineral, rock, and water resources. Several specific water programs include:

- MBMG's extensive monitoring of Super Fund cleanup activity in the Clark Fork Basin and its understanding of statewide mine impact issues at small to large scales is directly applicable to mining related NPS questions. Additionally, MBMG maintains statewide databases for abandoned and inactive mines on federal properties in Montana, and for historical mining activity.
- MBMG has decades of water level and water quality monitoring data related to historic coal mining in southeast Montana and gathered new data during current coalbed methane development.
- MBMG projects address specific groundwater resource issues including those of potable water supplies and water quality at scales from local to drainage basin wide. These evaluations provide the hydrogeologic background to help solve groundwater issues within a study area.
- The Ground Water Assessment program (GWAP) provides regular water level measurements and collects samples to provide long term water quality data at about 950 sites state-wide. The Ground Water Information Center (http://mbmggwic.mtech.edu) delivers groundwater data for more than 236,000 sites.
- The Ground Water Investigations Program (GWIP) has recently been added to the MBMG to conduct focused groundwater research on specific issues across the state. Each project produces a detailed report describing the hydrogeologic system and a comprehensive set of data for each study area.

MONTANA RURAL WATER SYSTEMS

Located in Great Falls, Montana Rural Water Systems is a non-profit association of water and wastewater systems that provides training and technical assistance to rural water and wastewater system operators in Montana.

MONTANA SALINITY CONTROL ASSOCIATION

Montana Salinity Control Association (MSCA) is a satellite program of 34 conservation districts, addressing saline soil and water reclamation. MSCA provides groundwater assessments and site specific reclamation plans for individual landowners and groups in small and large scale watersheds.

MSCA receives funding that is administered by DNRC and competes for federal grants to address nonpoint source pollution on a watershed basis. Since 1989, Montana has received over $53 million from USDA to implement saline reclamation measures using NRCS-Environmental Quality Incentive Program (EQIP) and FSA-Continuous Conservation Reserve Program (CCRP). Since the MSCA program began, over 1225 saline sites have received site specific recommendations. There are over 100 projects in progress or waiting for technical and financial assistance with salinity control.

MSCA is also involved in eighteen watershed level saline projects. The size of projects ranges from about 5,000 acres to over 600,000 acres. EPA has provided $995,000 for technical assistance to watershed level saline projects.

MONTANA STATE UNIVERSITY, EXTENSION WATER QUALITY PROGRAM

The Montana State University Extension Water Quality Program (MSUEWQ) is a team of scientists and educators who focus efforts in research and extension education addressing soil and water resources throughout Montana. The goal of MSUEWQ is to address the broad spectrum of water quality education and information needs of a diverse audience by:

- Providing resources needed to address technical water quality questions and issues
- Providing enhanced water quality educational resources
- Providing internet accessible water quality resources for statewide and national audiences

In addition to the water quality program under MSU Extension, the MSU Department of Animal and Range Sciences offers programs to assist in NPS pollution prevention. These include MSU Extension programs in range land management and riparian management. Details can be found in MSU Department of Animal and Range Sciences at http://animalrange.montana.edu/.

MSUEWQ programming follows the research and extension education areas within the mission of the Cooperative Extension Service through collaborative partnerships with multiple federal and state agencies, local conservation and irrigation districts, and watershed groups throughout the state.

Opportunities for partnerships and collaboration include:

- Monitoring projects to quantify potential water quality impacts on impaired streams
- Water budgeting projects to quantify water use and promote BMPs for water conservation
- Monitoring and BMP projects that source and mitigate nutrient and bacteria loading on streams associated with livestock access
- Promotion and automation of the Well Educated program to ensure longevity of service for private well owners empowered to monitor and maintain personal domestic water supply
- Development of audience specific, online curriculum addressing current water resource issues throughout the region
- Development of curriculum and training for tribal entities on private well and local stream monitoring to enhance community health and wellness

MONTANA WATER CENTER AND MONTANA WATERCOURSE

The Montana Water Center at MSU is one of the federally funded water research institutes in the United States that collectively form the National Institutes for Water Resources. The Montana Water Center's mission is to provide Montana's public universities resources to resolve state water resource issues. It does this by sponsoring water related research, providing training and education for working water professionals, educating future water professionals, and conducting education and outreach to Montana citizens on water issues.

The Center provides specialized trainings and workshops for water professionals, sponsors the Annual Montana American Water Resources Association (AWRA) meeting each year as well as the week-long Montana Water School at Montana State University that draws several hundred wastewater operators from around the nation.

Montana Watercourse is the education and outreach arm of the Montana Water Center. The Montana Watercourse is a statewide water education program that supports water resource decision-making and stewardship by providing information, resources, tools and education to all water users. Montana Watercourse provides information and educational forums on a variety of water resource topics, including water management and conservation, watersheds, water quality, water rights, wetlands and riparian areas, groundwater/surface water interaction, stormwater and aquatic life.

MONTANA WETLAND COUNCIL

The Montana Wetland Council is an active networking forum of professional wetland scientists of diverse interests who work cooperatively to conserve and restore Montana's wetland and riparian ecosystems. The Council is currently operating under "A Strategic Framework for Wetland and Riparian Area Conservation and Restoration in Montana 2013 – 2018".

UNIVERSITY OF MONTANA

Since 1983, the University of Montana Watershed Health Clinic has collaborated with the Montana Department of Environmental Quality on applied studies to guide the conservation & restoration of Montana's water resources.

In 2006, UM Watershed Health Clinic students and professors conducted a survey of river users & Montana registered voters for the DEQ. The survey asked participants to indicate which levels of river algae (as shown in pictures) would interfere with their use of the river. Analysis of the survey allowed DEQ to establish levels that represent an aesthetic nuisance to significant numbers of users.
In 2011, Clinic director Vicki Watson worked with Michael Suplee of DEQ to analyze the response of the Clark Fork River to over a decade of nutrient reduction efforts in that river basin. The results were published in a peer reviewed journal.

MONTANA WATERSHED COORDINATION COUNCIL

The Montana Watershed Coordination Council (MWCC) serves as a statewide forum and communication hub connecting locally led watershed groups, conservation districts, agencies, interested stakeholders, and private or public organizations across the Montana landscape. MWCC works to build and unite the watershed communities by providing education, professional development, outreach and networking opportunities for watershed professionals. MWCC also promotes the watershed groups and the watershed approach at the state level and provides a unified voice to advocate for local solutions to natural resource challenges. By supporting, training and promoting watershed organizations, their coordinators and members, MWCC is able to streamline communication and help sustain watershed organizations in Montana. These locally-led organizations and partnerships often provide the critical first line of defense in water quality improvement and protection in meeting NPS goals. For more information visit www.mtwatersheds.org.

REGIONAL AND NON-GOVERNMENTAL ORGANIZATIONS

CLARK FORK AND KOOTENAI BASIN COUNCIL

The Clark Fork Task Force was created in 2001 by the Montana legislature to create a water management plan for the entire Clark Fork basin. The Task Force created a plan for the basin in 2004 and updated that plan in 2014 with development of a statewide water plan. After the statewide plan was adopted, members of the Clark Fork Task Force, along with many other stakeholders came together in 2016 to re vision the Task Force as a Basin Council with expanded role and membership. A major focus of this basin council is promoting and monitoring the implementation of the basin plan.

FLATHEAD BASIN COMMISSION

The Flathead Basin Commission (FBC) was created by the Montana Legislature in 1983 to monitor and protect water quality in the Flathead basin. The FBC is a uniquely structured, non-regulatory organization that works to accomplish its important mandate in a consensus building manner, stressing education, cooperation, broadly based community involvement, partnerships with agencies and nonprofit groups, and the voluntary participation of basin residents.

The FBC currently focuses on transboundary resource protection efforts and aquatic invasive species prevention, and sponsors surface and groundwater research and monitoring projects, including a Volunteer Lake Monitoring Program.

Opportunities for FBC to coordinate and collaborate with other agencies and organizations include the following:

- Voluntary nutrient reduction strategy
- Water quality projects
- Public outreach and education
- Control of aquatic invasive species

MISSOURI RIVER CONSERVATION DISTRICT COUNCIL, YELLOWSTONE RIVER CONSERVATION DISTRICT COUNCIL

These two Conservation District Councils were formed to present a unified voice for the use and conservation of the Missouri and Yellowstone rivers and to promote information sharing between districts in these river basins in eastern Montana. Coordination of conservation efforts is a key focus of both groups.

LOCAL GOVERNMENT ORGANIZATIONS

CONSERVATION DISTRICTS

Conservation districts are units of local government designed to help citizens conserve their soil, water, and other renewable natural resources. Montana's 58 conservation districts cover all counties and include more than 70 municipalities included within district boundaries. Conservation districts are responsible for implementing Montana's Natural Streambed and Land Preservation law. Opportunities for DEQ to coordinate and collaborate with conservation districts include the following:

- TMDL planning and implementation
- Project prioritization
- Support and funding for nonpoint source pollution reduction
- Volunteer monitoring
- Technical assistance

GALLATIN LOCAL WATER QUALITY DISTRICT, LEWIS & CLARK COUNTY WATER QUALITY PROTECTION DISTRICT, AND MISSOULA VALLEY WATER QUALITY DISTRICT

Local Water Quality Districts focus on water resources education and water quality monitoring for increased awareness of water-related issues and public health. Programs and activities of the Districts are based on a watershed perspective and can include activities in the following areas:

- **Education and Outreach:** Improve public awareness and understanding of local water quality, and water resources
- **Monitoring and Research:** Collect and analyze water data and implement monitoring projects that evaluate, protect, and improve long-term water quality
- **Information Collection and Dissemination:** Compile, store, and disseminate water quality data and information
- **Facilitate planning:** For the prudent use of local water resources
- **Develop and implement:** Water quality improvement and protection projects

Opportunities for collaboration and coordination with the Districts include the following:

- Working with other agencies on cooperative water resource projects that include monitoring and sampling activities related (but not limited to) watershed restoration plans, pesticides/fertilizers, pharmaceutical and personal care products, stormwater impacts, groundwater characterization and level trends, wetland inventories
- Serving as a clearinghouse for watershed and water quality information in the watershed.
- Cooperating with local, state and federal agencies and organizations to provide environmental education on watershed resources in the watershed
- Coordinating with state agencies and groups for data collection (GWIC, DEQ's Clean Water Act Information Center and the Public Water Supply database)
- Assisting numerous entities with water quality and quantity technical assistance

WATERSHED GROUPS AND CONSERVATION ORGANIZATIONS

In Montana there are over 60 local organizations that consider themselves to be a "watershed group" (self-identified), based on the Montana Watershed Coordination Council's watershed directory. These groups can be associated with a conservation district or local water quality district, may have IRS 501(c)(3) non-profit status, and may have, or be working towards having a state-accepted watershed-based plan. These organizations are dedicated to improving water resources on-the-ground through a variety of actions, including public engagement, planning, fundraising, project development and implementation, and monitoring.

PRIVATE COMPANIES

AVISTA UTILITIES, NORTHWESTERN ENERGY, STIMPSON LUMBER, WEYERHAEUSER

As part of Federal Energy Regulatory Commission licensing, or as a result of critical habitat requirements for endangered species, private companies develop agreements and habitat conservation plans with state and federal agencies that are intended and designed to mitigate negative impacts to the aquatic environment and endangered species. These agreements and plans can take the form of annual funding opportunities, technical assistance and implementation of reasonable land, soil and water conservation practices. Opportunities for collaboration and coordination with private companies include:

- TMDL planning and implementation
- Funding
- Monitoring
- Technical assistance

INTERNAL (DEPARTMENT OF ENVIRONMENTAL QUALITY)

WATER QUALITY DIVISION

The Water Quality Division integrates water resource planning and protection to protect Montana's water quality resources. The division is responsible for administering Montana's water quality laws and is delegated responsibility for Section 319 of the Federal Clean Water Act.

Water Quality Planning Bureau

The Water Quality Planning Bureau consists of three Sections: Water Quality Standards and Modeling, Water Quality Monitoring and Assessment, and Information Management and Technical Services. Together these sections work towards the common goal of attaining and maintaining state water quality standards. Activities include:

- Water quality standards and standards guidance development
- Assessment and monitoring of all State waters
- 305(b) and 303(d) reporting
- Coordination of State-wide agency water quality monitoring
- Operation of statewide water quality monitoring networks and monitoring databases
- Maintenance of all MPDES permit information

- Water quality modeling and watershed analysis
- Dissemination of monitoring data
- Coordination of citizen volunteer water quality monitoring

Engineering Bureau

The Engineering Bureau houses the Water Pollution Control State Revolving Fund and the Drinking Water State Revolving Fund Programs (SRF). Financial assistance is provided through grants and loans for water and wastewater facilities and eligible non-point source projects to protect health and improve water quality. Both SRF programs are built to maintain a permanent, self-sustaining revolving fund program that serves as a cost effective source of financing for water and wastewater projects in Montana.

The bureau also includes the Public Water and Wastewater Engineering Sections and the Subdivisions Review Section. The Public Water and Wastewater sections review plans and specifications for water and wastewater to ensure compliance with design standards. The Bureau's Subdivisions Section Program reviews design plans for proposed subdivisions. In general, this includes reviewing the adequacy of water supply, wastewater treatment and disposal, solid waste disposal, and stormwater controls for parcels of land smaller than 20 acres, and for condominiums and recreational vehicle and mobile home parks, regardless of size.

Water Protection Bureau

The Water Protection Bureau includes the Watershed Protection Section, the Groundwater and 318/401 Section, MPDES Permitting Section and Compliance, Training and Technical Support Services Section. The permitting and compliance sections prevent surface and groundwater pollution by reviewing potential sources of pollution and issuing a variety of surface and groundwater permits.
The Source Water Protection Program:

- Delineates sources of water that supply public water supply wells and intakes and assesses potential risks to these source waters
- Assists communities and public water suppliers to develop plans that protect source water
- Assists local governments to establish local water quality districts

Public Water Supply Bureau

This bureau regulates public drinking water facilities in Montana. The bureau's Public Water Supply Program assures that public health is protected and maintained through a safe and adequate supply of drinking water. These functions are achieved by water quality sampling and compliance monitoring, sanitary surveys (inspections) and through training and technical assistance. The Bureau also certifies operators of certain public drinking water systems and public wastewater treatment facilities.

AIR, ENERGY AND MINING DIVISION

Air Quality Bureau

Permitted sources are required to submit a Best Available Control Technology (BACT) Analysis for their air emitting sources. The decreased levels of pollutants from the use of emission controls generally leads to less pollution that may be deposited on waterbodies. Compliance with the air quality permit essentially sets a "backstop" for the concentration of air pollutants that can be emitted in the air and potentially end up depositing on a waterbody.

Energy Bureau

The Energy Bureau is responsible for energy efficiency and renewable energy programs, and small business assistance. This bureau works to improve efficiency for consumers, small businesses and state and local governments. Examples of work done that will protect water include:

- Training and technical assistance for small business owners about complying with environmental regulations and going beyond compliance to environmental management systems
- Training to contractors about stormwater regulations and best practices, asbestos regulations and other areas of interest
- Financing water conservation projects in state government facilities

Waste Management and Remediation Division

The Remediation Division is responsible for overseeing investigation and cleanup activities at state and federal Superfund sites; reclaiming abandoned mine lands; implementing corrective actions at sites with leaking underground storage tanks (LUSTs); and overseeing groundwater remediation at sites where agricultural and industrial chemical spills have caused groundwater contamination.