

Idaho Nonpoint Source Management Plan



**State of Idaho
Department of Environmental Quality**

2014



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Idaho Nonpoint Source Management Plan

2014



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Acknowledgments

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- Idaho Department of Fish and Game
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- Idaho Health Districts
- US Army Corps of Engineers
- Bureau of Land Management
- Bureau of Reclamation
- Environmental Protection Agency
- US Forest Service (Regions 1 and 4)
- Natural Resources Conservation Service
- US Geological Survey

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List of Abbreviations and Acronyms

| | |
|-----------------|---|
| ARS | USDA Agricultural Research Service |
| AU | assessment unit |
| BAG | basin advisory group |
| BLM | Bureau of Land Management |
| BMP | best management practice |
| BOR | Bureau of Reclamation |
| BURP | Beneficial Use Reconnaissance Program |
| CAFO | confined animal feeding operation |
| CAP | Continuing Authority Program |
| CPP | continuing planning process |
| DEQ | Idaho Department of Environmental Quality |
| DOI | US Department of Interior |
| EPA | US Environmental Protection Agency |
| HUC | hydrologic unit code |
| IASCD | Idaho Association of Soil Conservation Districts |
| IDAPA | refers to citations of Idaho administrative rules |
| IDFG | Idaho Department of Fish and Game |
| IDL | Idaho Department of Lands |
| IDWR | Idaho Department of Water Resources |
| ISDA | Idaho State Department of Agriculture |
| ISWCC | Idaho Soil and Water Conservation Commission |
| ITD | Idaho Transportation Department |
| mg/L | milligrams per liter |
| MOU | memorandum of understanding |
| NFWF | National Fish and Wildlife Foundation |
| NMFS | National Marine Fisheries Service |
| NO ₃ | nitrate |
| NPA | nitrate priority area |
| NPS | nonpoint source |
| NRCS | Natural Resources Conservation Service |
| PMP | pesticide management plan |
| SWCDs | soil and water conservation districts |
| TAG | technical advisory group |
| TMDL | total maximum daily load |
| USACE | US Army Corps of Engineers |
| USDA | US Department of Agriculture |

| | |
|-------|--------------------------------|
| USFS | US Forest Service |
| USFWS | US Fish and Wildlife Service |
| USGS | US Geological Survey |
| WAG | watershed advisory group |
| WBAG | Water Body Assessment Guidance |
| WBID | waterbody ID |

1 Introduction

This document describes the State of Idaho's strategy for addressing nonpoint source (NPS) pollution collaboratively with local, state, and federal partners. The NPS management plan also provides guidance on evaluating and measuring success in meeting water quality goals for the state.

1.1 DEQ Mission

The Idaho Department of Environmental Quality's (DEQ's) mission is to protect human health and preserve the quality of Idaho's air, land, and water for use and enjoyment today and in the future. DEQ envisions a future for Idaho citizens where the quality of life is enhanced by the quality of the environment. In partnership with communities and businesses, DEQ assesses, sustains, preserves, and enhances the quality of the environment while recognizing the need for maintaining the economic vitality of the state.

1.2 Purpose and Scope

This document is the 5-year NPS management plan for Idaho. It updates the state's last NPS management plan published in 1999 under §319 of the Clean Water Act. This document was developed by DEQ as part of its 2012–2014 grant work plans with the US Environmental Protection Agency (EPA). According to EPA guidance, states should periodically review and evaluate their program, assess goals and objectives, and revise the program as appropriate.

The plan primarily serves two purposes:

- EPA requires states to develop approved NPS management plans that address the key components defined in EPA's §319 program guidance (November 2012). An approved plan is required for states to be eligible for federal Clean Water Act §319 funding.
- The plan outlines DEQ's vision, goals, and objectives to protect and restore beneficial uses of Idaho waters.

This plan describes the NPS Management Program, including the role of the §319 grant program, and provides some background information about Idaho and its water resources. The bulk of the document is dedicated to discussing categories of NPS pollution and the roles and responsibilities of partner agencies in reducing NPS pollution. The document also explains more about NPS pollution prevention in the framework of DEQ water quality management activities and how impaired waters are addressed.

The NPS plan is not limited to DEQ's NPS Management Program, but rather reflects the collective efforts and intentions of many partners who work together to reach a common goal. The effort to address the impact nonpoint sources have on water quality relies on public involvement, the coordination and cooperation of multiple agencies and programs within DEQ, and scientifically based efforts to identify and mitigate pollutant sources.

The desired outcome of the NPS plan is clean surface and ground water. This outcome involves reducing pollutants and protecting high-quality waters to meet the goals of fishable and swimmable waters and safe drinking water supplies. Accomplishing the goals established in this

plan with limited resources will require effective planning and the commitment of all partners with a vested interest in the outcome.

1.3 Legal Authority

Authority for controlling NPS pollution on a national level is provided in the federal Clean Water Act, administered under the authority of EPA. Idaho Code §§39-120 through 127 designates DEQ as the primary state agency to coordinate and administer ground water quality protection programs. Rules have been approved under this statute to ensure DEQ maintains and protects the existing high quality of the state's ground water and the existing and projected future beneficial uses of ground water and interconnected surface water. Idaho Administrative Code establishes Idaho "Water Quality Standards," which include the "Rules for Governing Nonpoint Source Activities" (IDAPA 58.01.02.350). DEQ's water quality protection and improvement efforts are conducted jointly with local, state, and federal partners.

1.4 Water Quality Goals

In its *Strategic Plan for Fiscal Years 2015–2018* (DEQ 2014c), DEQ defines a water quality goal of maintaining and improving surface and ground water quality. Objectives under this goal include the following:

- Monitor and assess water quality conditions to determine compliance with standards and support of beneficial uses.
- Complete reviews, guidance, and plans for improving and maintaining water quality.
- Implement pollution reduction actions needed to meet water quality standards and support beneficial uses.
- Develop the Idaho Pollutant Discharge Elimination System program.

1.5 Key Components of the NPS Management Plan

In September 2012, EPA updated its §319 guidance to states, including the key components that characterize an effective state NPS program. EPA expects all states to review and, as appropriate, revise their NPS management plan at least every 5 years. An updated program allows EPA and states to ensure that resources are efficiently and effectively directed in a manner that will support state efforts to address water quality issues.

DEQ's NPS Management Program refers to the following key components (EPA 2012) during periods of internal evaluation and for making changes, when necessary:

1. The state program contains explicit short- and long-term goals, objectives, and strategies to restore and protect surface water and ground water, as appropriate.
2. The state strengthens its working partnerships and linkages to appropriate state, interstate, tribal, regional, and local entities (including conservation districts); private sector groups; citizen groups; and federal agencies.
3. The state uses a combination of statewide programs and on-the-ground projects to achieve water quality benefits; efforts are well-integrated with other relevant state and federal programs.
4. The state program describes how resources will be allocated between (a) abating known water quality impairments from NPS pollution and (b) protecting threatened

- and high-quality waters from significant threats caused by present and future NPS impacts.
5. The state program identifies waters and watersheds impaired by NPS pollution as well as priority unimpaired waters for protection. The state establishes a process to assign priority and to progressively address identified watersheds by conducting more detailed watershed assessments, developing watershed-based plans, and implementing the plans.
 6. The state implements all program components required by §319(b) of the Clean Water Act and establishes strategic approaches and adaptive management to achieve and maintain water quality standards as expeditiously as practicable. The state reviews and upgrades program components as appropriate. The state program includes a mix of regulatory, nonregulatory, financial, and technical assistance, as needed.
 7. The state manages and implements its NPS management program efficiently and effectively, including necessary financial management.
 8. The state reviews and evaluates its NPS management program using environmental and functional measures of success and revises its NPS management program at least every 5 years.

2 Idaho's Nonpoint Source Management Program

DEQ developed Idaho's initial NPS Management Program in 1989 through the coordinated efforts of numerous organizations with an interest in how NPS water pollution could be effectively managed in the state. Since that time, Idaho has dedicated personnel and funding to advance NPS water pollution control activities.

Idaho's NPS Management Program centers around DEQ's §319 grant program. The program provides funding assistance to entities for on-the-ground projects. DEQ's Surface Water and Ground Water Programs conduct data collection and analysis to determine impaired waters and primary NPS pollutants.

Partnering state and federal agencies play a large role in addressing NPS water pollution within their respective jurisdictions. Some agencies are more aggressive in implementing NPS reduction projects, in large part due to funding availability and collaborative opportunities. Other agencies have limited budgets and staff and therefore do very little. Below is an outline of the §319 grant program.

2.1 §319 Project Subgrants

Section 319 of the Clean Water Act established a grant program under which states, territories, and tribes may receive funds to support a wide variety of NPS pollution management activities. A successful grant must focus on improving the water quality of lakes, streams, rivers, and aquifers. Funds may be used to address a variety of NPS management and prevention activities in the areas of agriculture, urban stormwater runoff, transportation, silviculture/forestry, mining, ground water activities, and hydrologic and habitat modification and related activities.

The NPS Management Program solicits project proposals through an online application and uses an established process to evaluate and rank which projects should be funded. Recommended projects are forwarded to EPA for review and approval. Once approved, DEQ staff develop agreements with project sponsors for disbursement of grant funds. NPS Management Program staff oversee project implementation and evaluate accomplishments.

DEQ passes most of its §319 funds through to the local level for on-the-ground total maximum daily load (TMDL) implementation projects. Remaining funding is then used to support administration and implementation of the NPS Management Program in the DEQ state and regional offices.

2.2 Project Application and Review

A set of evaluation criteria and schedule of key dates apply to all new project proposals. These criteria are regularly reviewed and can be updated should priorities within the NPS Management Program and DEQ change. The criteria and schedule are provided early in the process to each party seeking funding, to educate and inform applicants on the process and state water quality priorities.

Prior to submitting an application, the applicant is expected to contact all potentially responsible natural resource agencies, organizations, and others, thereby giving them the opportunity for review and comment on the proposal. This up-front approach may help to identify opportunities for partnerships and collaboration that could lead to even greater environmental improvements.

Interested parties are encouraged to submit a project pre-application to DEQ for a preliminary project review. The pre-application provides DEQ with early notification of the type of project being considered and allows DEQ to provide feedback on the proposal that may benefit the applicant when preparing to submit a final application. Submitting a project pre-application is not required but is strongly encouraged.

Several steps are involved in the application review process:

1. DEQ staff complete a technical evaluation of each project application. During this phase, DEQ ensures that all state and federal programmatic criteria have been met.
2. Each application is then reviewed to ensure the project is viable and the resources being dedicated to complete the effort are sufficient and sound. The applicant has an ongoing responsibility to maintain the project following the expiration of the subgrant in an effort to demonstrate that the project can yield long-lasting water quality improvement in the watershed.
3. Technically sound projects will be routed for initial review and ranking by the responsible regional basin advisory group (BAG). The BAGs will make their decisions based partly on how well the proposed project aligns with the overall DEQ water quality priorities established for the basin.
4. Once all projects have been reviewed and ranked by the BAGs, DEQ convenes a meeting of the respective BAG chairman and DEQ staff to discuss all the ranked projects and determine which projects have merit and are of the highest priority to recommend for funding in the coming year.

2.3 Water Quality and BMP Effectiveness Monitoring

DEQ is the state agency responsible for collecting instream water quality monitoring data related to NPS projects. DEQ is also responsible for ensuring proper testing and field studies are performed to document best management practice (BMP) effectiveness prior to and following project implementation. DEQ requires project managers of all funded projects to submit a plan that includes the appropriate amount of ground water or surface water monitoring, including any additional monitoring that may be called for based on the project design and location.

Project monitoring plans should be developed by the applicant. The monitoring plans are subject to review and approval by DEQ §319 staff and/or surface water staff. For ground water sampling or implementation, a DEQ hydrogeologist should review the ground water plan within the time frame included in the project subgrant. Section 319 projects must be monitored to establish percent effectiveness at achieving the desired results. For example, a project manager may choose to use photographic monitoring to demonstrate improvements to a riparian habitat and vegetation growth over time or to show the amount of sediment removed from a sediment basin during scheduled maintenance. This type of monitoring has proven to be a reasonable and a cost-efficient method for determining BMP effectiveness when compared to more costly monitoring alternatives.

In some cases, photo monitoring would be insufficient to demonstrate the effectiveness of certain BMPs. Under these circumstances, DEQ may call for an alternative monitoring approach. The details of an alternative monitoring plan must be worked out with DEQ staff during the project design stage to ensure the data will provide the best indication of BMP effectiveness.

In general, §319 subgrants are not subject to mandatory water quality monitoring. It is a voluntary effort and therefore difficult to determine actual water quality improvements to streams where §319 funding has been provided. It is common for DEQ regional office surface water staff to conduct at least one §319 subgrant monitoring project on a yearly basis, dependent on available funds and resources within each of the regions.

Additional funding and staff resources are needed for the §319 program to conduct monitoring efforts to determine if water quality improvements have resulted from grant projects. Additional funding should be sought out where possible. There are opportunities for DEQ to work collaboratively with organizations such as the Student Conservation Association, where college students conduct data collection. The Student Conservation Association is known for working with mostly federal agencies such as the US Forest Service and the National Park Service on water quality sampling and data collection.

2.4 Project Evaluations and Reporting

Project evaluation is an important component of the §319 grant program and helps to ensure resources are being used effectively. Projects are subject to a task and financial review at any time over the life of the project. The NPS Management Program schedules a site visit to 50% of the active projects each year to ensure that work is being completed according to the project work plan and the project is operating within its budget.

Each project must meet minimum reporting requirements. Project managers are required to submit progress reports with each invoice submitted. A final report summarizing the entire

project and costs must be submitted to DEQ no later than 90 days after the subgrant has expired. Once the final report has been reviewed and approved by program staff, the project is closed out.

2.5 Program Reporting and Financial Management

As a condition of its §319 grant and base funding requirement, DEQ must use the federal Grants Reporting and Tracking System to input required elements into EPA's database. In addition, DEQ is required to provide an annual performance and progress report highlighting the program's accomplishments over the previous year.

DEQ has a process in place that ensures proper management and oversight of subgrantee disbursements. All subgrantees are required to submit online invoices, which track a project's §319 expenses and the match expenses. Effective in state fiscal year 2015, all subgrantees must provide copies of receipts, timesheets, and any other documentation to verify costs identified in the invoice. The invoices are reviewed internally to make sure they correspond with the activities and associated costs identified in the subgrantee work plan. The program staff regularly track the agency's overall §319 grant funds.

3 Idaho Background

According to 2010 US Census Bureau data, Idaho is the 40th most populated state in the country but experienced the 4th largest percent population growth between 2000 and 2010. Idaho is one of the nation's least densely populated states, ranking 46th (IDL 2014). Approximately 1.6 million people live within Idaho's 82,643 square miles (US Census Bureau 2013).

Idaho's landscape is rugged, with some of the largest natural areas in the country, abundant natural resources, and numerous scenic areas. The state has snow-capped mountain ranges, world-class rapids, vast lakes, and steep canyons. Land use in Idaho can be broadly categorized into urban/suburban, agricultural, and undeveloped uses. Highly concentrated and expanding urban and industrial centers along with shrinking agricultural and undeveloped areas characterize Idaho's current land use trends. Because of the increasing population and variable land uses, the state's streams, lakes, and ground water are affected to varying degrees by point and nonpoint sources of pollution (DEQ 2014b).

Idaho's climate is diverse and influenced by Pacific weather patterns, which help moderate temperature extremes. Generally, the northern part of the state has greater precipitation than the south. The southern part of the state is drier and warmer. Idaho's growing season varies from approximately 200 days near the city of Lewiston to very brief at high altitudes. Winds may accompany cold fronts and thunderstorms, but hail damage is relatively rare (State of Idaho 2013).

Five Indian reservations exist in Idaho: the Coeur d'Alene Indian Reservation (Coeur d'Alene Tribe), Duck Valley Indian Reservation (Shoshone-Paiute Tribes), Fort Hall Indian Reservation (Shoshone-Bannock Tribes), Nez Perce Indian Reservation (Nez Perce Tribe), and the Kootenai Indian Reservation (Kootenai Tribe of Idaho). Other Native American tribes with ties to Idaho include the Northwestern Band, Shoshone in Utah; the Burns-Paiute General Council of Burns, Oregon; the Kalispel Tribe in Washington; and the Confederated Salish and Kootenai Tribe, based in Montana.

Major industries in Idaho include manufacturing, healthcare, tourism, agriculture, food processing, timber, and mining (State of Idaho 2013).

3.1 Water Resources

Ground water is a key resource supporting many aspects of Idaho's way of life. It replenishes our streams and rivers and provides fresh water for irrigation, industry, and communities. In addition, ground water supplies 95% of the state's drinking water. As Idaho's population grows, so does the need for clean, usable ground water.

The Idaho Department of Water Resources (IDWR) has identified 70 major aquifer types in Idaho. The state has three sole source aquifers: the Spokane/Rathdrum Prairie aquifer in northern Idaho; the Lewiston Basin aquifer in north-central Idaho; and the Eastern Snake River Plain aquifer in southeastern and south-central Idaho. Major rivers in Idaho include the Snake, Clark Fork/Pend Oreille, Clearwater, Salmon, Coeur d'Alene, Boise, Payette, and Bear Rivers.

With over 95,000 miles of streams and rivers and 460,000 acres of lakes and reservoirs, water is one of Idaho's most important resources. These streams and lakes, along with their associated wetlands, not only provide great natural beauty, they supply the water necessary for drinking, recreation, industry, agriculture, and aquatic life. A summary of the state's water resources is presented in Table 1 (DEQ 2014b).

Table 1. Summary of Idaho water resources.

| Resource | Value |
|--|---------------------|
| Total number of river and stream miles | 95,119 ^a |
| • Number of perennial stream miles | 49,497 |
| • Number of intermittent stream miles | 42,754 |
| • Number of other stream miles | 9,113 |
| Acres of lakes and reservoirs | 469,045 |
| Acres of freshwater wetlands | 712,270 |
| Miles of river wholly or partially on tribal land | 3,416 |
| Acres of lake wholly or partially on tribal land | 106,808 |
| Percentage of state's total water supply represented by ground water | 22% |

^a The number of perennial, intermittent, and other miles exceed the total miles because artificial paths and connectors that network or connect the hydrograph between rivers, lakes, swamps, and marshes create additional miles, as do portions of the artificial paths that were originally mapped as polygons in the National Hydrography Dataset.

3.2 Landownership

Table 2 provides a breakdown of landownership in the state of Idaho. Approximately 63.1% of all lands in Idaho are federally owned and managed.

Table 2. Idaho landownership.

| Ownership | Size (acres) | Percent of Total^a |
|--------------------------------------|---------------------|-------------------------------------|
| Federal | 33,412,277 | 63.1 |
| Bureau of Land Management | 11,836,481 | 22.3 |
| US Forest Service | 20,458,276 | 38.6 |
| Other | 1,117,520 | 2.1 |
| State | 2,693,260 | 5.1 |
| Endowments | 2,458,405 | 4.6 |
| Fish and Game | 187,769 | 0.4 |
| Parks and Recreation | 38,407 | 0.1 |
| University of Idaho Board of Regents | 8,679 | <0.1 |
| Private | 16,271,679 | 30.7 |
| Tribal | 464,077 | 0.9 |
| County | 96,311 | 0.2 |
| Municipal | 22,972 | <0.1 |
| Total | 52,960,576 | 100.0 |

Source: Idaho Legislative Services Office 2013

^a Percentages may not total due to rounding.

4 Nonpoint Source Pollution and Roles of Partner Agencies

Unlike pollution that is discharged directly from a pipe into surface waters, NPS pollution comes from many diffuse sources and generally does not have a single point of origin. NPS pollution can be natural, such as sediment, or human-made, such as chemicals and toxics. It is generally created in or on the land and carried off by stormwater runoff when it rains or the snowpack melts. The runoff picks up and carries away the pollutants, finally depositing them into nearby surface waters, including streams, rivers, and lakes. NPS pollutants may eventually leach into ground water, particularly if an industry is concentrated in one area. Ground water contamination is especially concerning because more than 95% of Idahoan's rely on ground water for their drinking water.

A few examples of nonpoint sources and the pollution they can create include the following:

- Agricultural fields and urban areas (e.g., parks and golf courses) and the sediment, fertilizer, and pesticides that can be discharged due to improper irrigation practices or major stormwater events
- Residential landscapes and cattle feedlots and the nutrient-laden waste generated by pets and livestock
- Septic systems and the nitrogen and phosphorus waste they can release if they are poorly maintained or failing

- Roads, parking lots, and sidewalks and the sediment, salts, and oils that can run off and be released from these impervious surfaces

4.1 Categories of Nonpoint Source Pollution

This section identifies the categories of NPS pollution and agency roles and responsibilities in NPS management activities for each identified category. Since NPS pollutants are generally transported through overland flow, widespread land use practices have the greatest potential for contributing pollutants. In addition, this section provides a list of funding sources available to address NPS pollution. Table 3 provides an overview of these agencies and categories. Appendix A details on-going efforts and goals identified for each category of pollution and for the program in general (Table A1).

Table 3. Nonpoint source pollution categories and involved agencies.

| Agency/ Program | Agriculture | Natural Resource Extraction | Timber/ Silviculture Management | Urban/ Suburban Development | Transportation |
|--------------------|-------------|-----------------------------------|---------------------------------------|-----------------------------------|----------------|
| DEQ | X | X | X | X | X |
| ISDA | X | | | X | |
| ISWCC | X | | | | |
| SWCDs | X | | | | |
| ARS | X | | | | |
| NRCS | X | | | | |
| EPA | X | | X | X | |
| Health districts | | | | X | |
| IDFG | X | X | X | | X |
| IDWR | X | X | X | X | |
| USGS | X | | | | |
| IDL | | X | X | | X |
| ITD | | | | X | X |
| BOR | X | | | | |
| USACE | X | X | X | X | X |
| USFS | | X | X | | X |
| BLM | | X | X | | X |

The following federal agencies have general NPS pollution prevention roles and responsibilities applicable for multiple categories of pollution:

- **US Bureau of Land Management (BLM)**—The BLM is responsible for the administration, management, and protection of nearly 12 million acres of public lands in Idaho. The BLM regulates, licenses, and enforces land use activities that may result in NPS pollution. The agency also maintains or improves surface and ground water quality consistent with state and federal water quality standards, minimizes harmful

consequences of activities that could result in NPS pollution, and inventories, monitors, and evaluates water quality data necessary for the proper management of public lands.

- **US Army Corps of Engineers (USACE)**—Although §404 of the Clean Water Act deals with point source discharges, the agency attempts to include permit conditions with on-site and construction BMPs that will reduce NPS pollution (e.g., vehicle fueling outside jurisdiction areas, sediment and erosion measures, and concrete washout away from jurisdictional areas).
- **US Forest Service (USFS)**—The USFS is the responsible management agency for NPS pollution controls on all National Forest System Lands. The USFS manages approximately 20 million acres in Idaho, including many headwater areas. The agency is responsible for meeting Idaho water quality standards and implementing NPS pollution controls for land use activities such as silviculture, grazing, mining, and road construction.

Agencies with roles and responsibilities specific to each of the resource areas are discussed below for each category of NPS pollution.

4.1.1 Agricultural Practices

NPS pollution from agricultural activities alters water quality in some of Idaho's waters. These activities can increase nutrient, sediment, pesticide, and pathogen loads in waterways as a result of crop and livestock production, including land application of livestock manure as crop fertilizer. Water infiltrating into the soil can carry nutrients, metals, and hydrocarbons that can contaminate ground water resources.

Agriculture is a key economic contributor to the state's economy. In 2011, Idaho had 24,700 farms with an average size of 462 acres. Income from crops in 2011 was estimated at \$3.3 billion, and livestock income was reported at \$398 million. In 2012, the Idaho Legislative Services Office reported that 4,404,000 acres were planted and 4,260,000 were harvested (Idaho Legislative Services Office 2013).

In addition to DEQ, the following agencies are responsible for addressing NPS impacts as they relate to agricultural sources: Idaho State Department of Agriculture (ISDA), the Idaho Soil and Water Conservation Commission (ISWCC), Idaho's 50 local soil and water conservation districts (SWCDs), the US Department of Agriculture (USDA) Agricultural Research Service (ARS), the USDA Natural Resources Conservation Service (NRCS), EPA, the Idaho Department of Fish and Game (IDFG), IDWR, US Geological Survey (USGS), USACE, and the US Bureau of Reclamation (BOR). The roles of these agencies are discussed below. Appendix A, Table A2, identifies agricultural goals related to NPS management.

Idaho Department of Environmental Quality (DEQ)

DEQ's role in NPS management as it relates to agriculture includes the following:

- Conducts statistically designed ground water quality monitoring and nutrient-pathogen evaluations
- Participates in a multi-agency confined animal feeding operation (CAFO) site advisory team

- Approves ground water quality monitoring programs for managed recharge by land application
- Participates in the agricultural education committee
- Implements a formal policy for addressing and prioritizing areas with degraded ground water quality and coordinates management or improvement strategies for implementation in areas with degraded ground water quality
- Reviews monitoring results and evaluates impacts from agriculture and animal waste
- Prepares guidance documents that provide for rule interpretation and chairs the Ground Water Monitoring Technical Committee
- Focuses on monitoring and TMDL development
- Provides funding to address agriculture NPS issues

Idaho State Department of Agriculture (ISDA)

ISDA's role in NPS management as it relates to agriculture includes the following:

- Regulates pesticide application and fertilizer registration and establishes safe application requirements for both pesticides and fertilizers
- Assists in developing agricultural BMPs in support of the *Idaho Agricultural Pollution Abatement Plan (Ag Plan)* (RPU 2003)
- Implements an Idaho pesticide management plan (PMP) for ground water protection and the "Rules Governing Pesticide Management Plans for Ground Water Protection" (IDAPA 02.03.01)
- Implements the Surface Water Pesticide Monitoring and Protection Program, which includes monitoring, education, and the promotion of BMPs
- Participates in the Ground Water Monitoring Technical Committee, which is charged with reviewing monitoring results to identify and address agricultural water quality impacts and making recommendations to agencies or watershed advisory groups (WAGs) for needed protections or remediation, as appropriate
- Works with ISWCC to carry out project-specific implementation monitoring and BMP effectiveness monitoring
- Implements the dairy and beef CAFO programs (in conjunction with DEQ and EPA)—monitors ground water associated with dairy operations and ensures dairy waste systems and practices are in accordance with the provisions outlined in the *Idaho Waste Management Guidelines for Confined Feeding Operations* (Palmer 1993)
- Works in partnership with DEQ, ISWCC, and the Idaho Association of Soil Conservation Districts (IASCD) to integrate the [Idaho Farm and Home*A*Syst](#) initiative into program and project work

Idaho Soil and Water Conservation Commission (ISWCC)

ISWCC's roles in NPS management include the following:

- Implements the Ag Plan (RPU 2003) for private and state agricultural lands
- Coordinates periodic review and update of the Ag Plan (including all new BMPs) in consultation with the advisory committees and chairs the Ag Plan BMP technical committee

- Provides technical assistance to owners and operators of private lands with planning, implementing, and evaluating BMPs
- Administers incentive programs to encourage adoption of voluntary conservation practices such as the Resource Conservation and Rangeland Development Program, which provides low-interest conservation loans
- Works in cooperation with local SWCDs and the NRCS to develop and implement agricultural portions of TMDL implementation plans
- Assists and supports the 50 SWCDs in carrying out their powers and programs, including working toward achieving the TMDL-defined load reductions necessary to meet water quality standards
- Promotes and supports water quality projects to maintain and enhance ground water quality
- Assists conservation districts in planning and implementation efforts in nitrate priority areas (NPAs) to reduce nitrate contamination
- Makes improvements to the *Idaho OnePlan*

Soil and Water Conservation Districts (SWCDs)

Idaho's fifty SWCDs assist private landowners and land users in conserving, managing, and enhancing Idaho's natural resources. NPS planning and implementation efforts for agriculture are carried out at the local level through a partnership of the SWCDs, ISWCC, and NRCS and include the following:

- Assist landowners and land users with implementing the Ag Plan (RPU 2003) and BMPs
- Coordinate education and outreach activities
- Provide input to BAGs and WAGs and represent agricultural interests in drafting TMDLs and agricultural implementation plans that comply with Idaho water quality laws
- Assist WAGs by functioning as liaisons to private landowners—SWCDs have been instrumental in developing WAGs and also play a major role in the local administration of state and federal cost-sharing projects
- Through the IASCD and National Association of Conservation Districts, oversee and participate in state and national agricultural initiatives
- Develop 5-year resource conservation plans to establish and recognize agricultural NPS water quality priorities
- Review local needs, developing and/or modifying and adopting component practices to be used to develop BMPs to meet state water quality standards and to protect beneficial uses
- Implement water quality projects across the state to maintain and enhance ground water quality efforts in NPAs to reduce nitrate contamination

USDA Agricultural Research Service (ARS)

ARS's role in NPS management as it relates to agriculture includes the following:

- Researches the cause-and-effect relationship between agricultural management practices and soil and water conservation to help evaluate existing management practices and develop new practices for improving and protecting surface and ground water quality

USDA Natural Resources Conservation Service (NRCS)

NRCS's role in NPS management as it relates to agriculture includes the following:

- Works with DEQ, ISWCC, IASCD, and ISDA to create certified nutrient management plans in Idaho
- Offers the software (*Idaho OnePlan*) and training for individuals to become certified nutrient management planners in Idaho
- Chairs the Idaho state technical advisory committee, through which priorities and processes are incorporated into planning and implementation activities
- Administers, with the Farm Service Agency, agricultural programs outlined in the 2014 US Farm Bill to assist private landowners with implementing conservation practices to address resource concerns

US Environmental Protection Agency (EPA)

EPA's role in NPS management as it relates to agriculture includes the following:

- Works with USDA agencies and the ISDA on nutrient management plan issues relating to CAFOs
- Provides funding to DEQ for NPS watershed projects

Idaho Department of Fish and Game (IDFG)

IDFG's role in NPS management as it relates to agriculture includes the following:

- Provides BAGs with information regarding the presence or absence of aquatic species listed as "threatened," "endangered," or "candidate" pursuant to the federal Endangered Species Act
- Works with local, state, federal, and private (e.g., Trout Unlimited) partners to ensure consistency in habitat and fish restoration activities statewide—involved in most implementation efforts dealing with riparian or habitat restoration and protection and provides technical assistance and funding, as necessary
- Partners with the ISWCC and the NRCS to help ensure water on all agricultural lands meets state water quality standards and beneficial uses

Idaho Department of Water Resources (IDWR)

IDWR's role in NPS management as it relates to agriculture includes the following:

- Administers appropriation and allotment of surface and ground water resources of the state, including geothermal resources, and protects these resources against waste and contamination
- Conducts statewide river basin studies to help with long-term planning related to ground water and surface water interactions and use
- Maintains the Statewide Ambient Ground Water Monitoring Program and data management system

US Geological Survey (USGS)

The USGS water resources division's role in NPS management as it relates to agriculture includes the following:

- Collects, analyzes, and reports general hydrologic and water quality data throughout the state
- Conducts special studies upon request from various state and federal agencies on water supply and quality in areas of changing land and water use patterns

USGS is one of the major participants, along with DEQ and IDWR, in efforts pertaining to ambient ground and surface water monitoring and providing information used in the TMDL process.

US Bureau of Reclamation (BOR)

BOR is responsible for planning, constructing, operating, and maintaining federal irrigation projects as defined in applicable sections of reclamation law and through delegations provided under the Clean Water Act. Activities relating to these responsibilities and NPS agricultural pollution include the following:

- Provides technical assistance during irrigation BMP evaluations
- Performs water quality monitoring related to federal irrigation projects
- Implements structural and nonstructural water management programs and projects
- Scopes irrigation-related aspects of the NPS management plan

BOR remains an important partner in many projects related to enhancing fish passage, habitat, water quality monitoring, agricultural drain relocations, and other studies; participates on the state technical committees; and is active in other coordinated watershed management and implementation activities.

4.1.2 Natural Resource Extraction

Natural resource extraction carried out during mining activities (i.e., mineral extraction, gas production, and nonmineral extraction) can be a source of sediment, heavy metals, sulfates, hydrocarbon, brine, and acid pollution. Water can carry these types of pollutants to both surface and ground water resources.

As of July 2014, approximately 216 of the total mining projects on federal land are considered potential nonpoint sources. The number of mining projects located on state-owned land is 185.

In addition to DEQ, the following agencies are involved in addressing NPS management as it relates to natural resource extraction on public and/or private land: IDWR, Idaho Department of Lands (IDL), IDFG, BLM, USACE, and USFS. Appendix A, Table A3, lists goals related to natural resource extraction and NPS management.

Idaho Department of Environmental Quality (DEQ)

DEQ's role in NPS management as it relates to natural resource extraction includes the following:

- Assists mining operations to characterize hydrogeologic conditions and background ground water quality prior to initiating mining activities
- Works with IDL to ensure oil and gas development is conducted in accordance with the Idaho "Ground Water Quality Rule" (IDAPA 58.01.11)
- Conducts monitoring and TMDL development
- Conducts site investigations and inspections as necessary
- Focuses on cleanup and remediation activities in areas where mining activities have contaminated soils and surface waters
- Provides technical assistance to responsible state and federal agencies and private organizations/owners as requested

Idaho Department of Water Resources (IDWR)

IDWR's role in NPS management as it relates to natural resource extraction includes the following:

- Regulates stream channel alterations under the Stream Channel Protection Act, in conjunction with the USACE, and evaluates the safety of most impoundment structures, including irrigation and stock-pond facilities and mine tailings impoundments under the Dam Safety Program

Idaho Department of Lands (IDL)

IDL's role in NPS management as it relates to natural resource extraction includes the following:

- Regulates dredge and placer mining operations under the Idaho Dredge and Placer Mining Protection Act and surface mining under the Idaho Surface Mining Act (Both of these regulatory programs are coordinated with other state and federal agencies)
- Reclaims abandoned mine lands under the Idaho Abandoned Mine Reclamation Act
- Regulates docks, rip-rap, and other encroachments on navigable lakes under the Idaho Lake Protection Act

Idaho Department of Fish and Game (IDFG)

IDFG's role in NPS management as it relates to natural resource extraction includes the following:

- Works with local, state, federal, and private (e.g., Trout Unlimited) partners to ensure consistency in habitat and fish restoration activities statewide—involved in most implementation efforts dealing with riparian or habitat restoration and protection and provides technical assistance and funding, as necessary

4.1.3 Timber/Silviculture Management

Erosion of land from timber harvesting techniques, access roads, and loss of vegetative cover can cause excess sediment. Idaho has 12 million acres of BLM land and over 20 million acres of USFS-managed land.

The number of impaired stream assessment units (AUs) that intersect USFS land is 1,004, and the number of impaired lakes is 9. These AUs are captured in the Integrated Report in either Category 4a (EPA-approved TMDL), Category 5 (needing a TMDL), or both. (See section 5.4 for additional information on impaired streams.)¹

In addition to DEQ, the following agencies are responsible for addressing NPS impacts as they relate to timber/silviculture on public and/or private land: IDWR, IDL, IDFG, BLM, USACE, USFS, and EPA. Appendix A, Table A4, lists goals related to timber/silviculture management and NPS pollution.

Idaho Department of Environmental Quality (DEQ)

DEQ's role in NPS management as it relates to timber/silviculture includes the following:

- Coordinates and implements a statewide forest practices/water quality audit every 4 years that includes IDL, private forestland owners, USFS, and BLM on the audit team. The audit serves as formal monitoring of silviculture BMP compliance on forest practices implemented on state, private, and federal forestlands throughout Idaho.
- Based on findings from the quadrennial audit, DEQ submits to IDL recommendations for corresponding Forest Practices Act administrative rule changes
- Focuses on monitoring and TMDL development
- Coordinates water quality management and implementation efforts with IDL, USFS, and BLM on state, private, and federal forestlands

Idaho Department of Lands (IDL)

IDL's role in NPS management as it relates to timber/silviculture includes the following:

- Ensures compliance with Forest Practices Act administrative rules (silviculture NPS BMPs) on all state and private forestlands in the state
- On state forestlands, applies BMPs that will protect beneficial uses of water
- On state and private lands, administers the Idaho Forest Practices Act (IDAPA 20.02.01) and takes enforcement action when needed
- Coordinates with DEQ in conducting the quadrennial forest practices/water quality audits, which help achieve state–federal consistency for NPS activities on forestlands
- Works with the Idaho Forest Practices Act Advisory Committee to promulgate new and revised Forest Practices Act administrative rules (silviculture NPS BMPs). The committee has nine voting members across the state representing family forest owners, industrial forest owners, fisheries biologists, citizens at large, and logging operators.

Idaho Department of Water Resources (IDWR)

IDWR's role in NPS management as it relates to timber/silviculture includes the following:

- Regulates stream channel alterations under the Stream Channel Protection Act, in conjunction with the USACE.

¹ Waters of the state are categorized using assessment units (AUs). An AU is a group of similar stream segments that have similar land-use practices, ownership, or land management.

US Environmental Protection Agency (EPA)

EPA's role in NPS management as it relates to timber/silviculture includes the following:

- Works with state and federal agencies and tribes to address NPS issues associated with silviculture operations on private, state, federal, and tribal lands
- Reviews and comments on silviculture activities and practices within National Environmental Policy Act documents
- Reviews, provides comment, and provides technical support to IDL and DEQ in forest practices rule development and monitoring of forest practice rule implementation
- Provides technical support to DEQ in evaluating forestry impacts to impaired waters in TMDLs and in the water body assessment process
- Provides financial and technical support to develop forestry analysis tools (e.g., USFS GRAIP model)

4.1.4 Urban and Suburban Development

Urban and suburban development contributes to NPS pollution, specifically through domestic, municipal, industrial, and commercial land development activities and uses. On-site sewage disposal, or septic systems, can be a source of nutrients, pathogens, salts, and pharmaceuticals and personal care product pollution in both surface water and ground water. Urban runoff and drainage systems provide direct access for hydrocarbons, pesticides, nutrients, pathogens, salts, heavy metals, and thermal pollution to enter waterways and ground water.

Population density and intensity of land use in urban and suburban areas influence the concentrations of pollutants in waters draining from these areas. Examples of these sources include residential septic tanks and (drainfields), solid waste disposed in landfills, hazardous chemicals and materials, and alteration of urban and suburban riparian and wetland areas.

Along with DEQ, the following agencies are responsible for NPS management activities related to urban and/or suburban development: Idaho health districts, IDWR, ISDA, Idaho Transportation Department (ITD), USACE, and EPA. Appendix A, Table A5, lists goals related to urban/suburban development and NPS pollution.

Idaho Department of Environmental Quality (DEQ)

DEQ's role in NPS management as it relates to urban/suburban development includes the following:

- Conducts statistically designed ground water quality monitoring and nutrient-pathogen evaluations
- Implements a formal policy for addressing and prioritizing areas with degraded ground water quality and coordinates management or improvement strategies for implementation in areas with degraded ground water quality
- Reviews monitoring results and evaluates impacts from septic systems
- Works to prevent contaminants from entering public water system supplies and provides assessments of all recognized public water sources
- Ensures that solid wastes generated in or entering Idaho are managed and disposed in a manner protective of human health and the environment

- Investigates possible NPS pollution from abandoned and inactive industrial facilities (e.g., landfills, airfields). With voluntary agreement from the landowner, DEQ performs desktop research to identify possible contaminants of concern and a field site inspection to collect samples. The results and recommendations for follow-up actions are summarized in a final report.
- Focuses on the proper management and disposal of wastewater to protect public health and Idaho's surface and ground water resources
- Assesses the impact to ground water from large soil absorption systems, which are drainfields that receive 2,500 gallons per day or more, and assesses the potential impact to adjacent surface water bodies due to a large soil absorption system or a subdivision containing multiple single family residences equipped with drainfields
- Provides technical assistance and support for controlling stormwater in Idaho. The *Catalog of Stormwater Best Management Practices for Idaho Cities and Counties* (DEQ 2005) contains pertinent technical information, and DEQ provides review for facilities that control, treat, or dispose of stormwater if requested by the developer or design engineer.
- Focuses on water quality protection by setting water quality standards and antidegradation policy/implementation for high-quality waters
- Where water quality falls below water quality standards, develops TMDLs to bring those waters back to meeting standards
- Provides technical assistance to private organizations/owners as requested
- Conducts site investigations and inspections as necessary

Health Districts

The health districts' role in NPS management as it relates to urban/suburban development includes the following:

- Ensure that individual and subsurface sewage disposal systems are properly planned, permitted, installed, and operated
- Work closely with DEQ to maintain the *Technical Guidance Manual: Individual and Subsurface Sewage Disposal Systems* (DEQ 2014d) as a means of supporting consistent standards for these systems statewide

Idaho Department of Water Resources (IDWR)

IDWR's role in NPS management as it relates to urban/suburban development includes the following:

- Regulates stream channel alterations under the Stream Channel Protection Act, in conjunction with the USACE, and the safety of most impoundment structures, including irrigation and stock-pond facilities and mine tailings impoundments under the Dam Safety Program
- Maintains the Statewide Ambient Ground Water Monitoring Program and data management system
- Regulates wastewater disposal by injection wells through the Underground Injection Control Program

Idaho State Department of Agriculture (ISDA)

ISDA's role in NPS management as it relates to urban/suburban development includes the following:

- Regulates pesticide application and fertilizer registration, establishes safe application requirements for both pesticides and fertilizers, and develops an Idaho PMP
- Works in partnership with DEQ, ISWCC, and IASCD to integrate the [Idaho Farm and Home*A*Syst](#) initiative into program and project work

Idaho Transportation Department (ITD)

ITD's role in NPS management as it relates to urban/suburban development includes the following:

- Maintains the *Best Management Practices Manual* (ITD 2014), which includes temporary and construction site BMPs and permanent and post construction BMPs
- Maintains the *Environmental Process Manual* (ITD 2011) to provide guidance for complying with federal, state, and local environmental laws and regulations while planning, designing, constructing, and maintaining transportation facilities in Idaho
- Completes roadway and right-of-way maintenance in compliance with state and federal regulations pertaining to water quality, air quality, the Idaho PMP, and the Idaho "Ground Water Quality Rule"

4.1.5 Transportation

Transportation routes (e.g., roads, highways, and railroads) can be significant sources of NPS pollution. Specifically, runoff from transportation facilities and infrastructure can carry pollutants including hydrocarbons, salts, and sediment. Water infiltrating into the soils can carry with it nutrients, metals, and hydrocarbons that can contaminate ground water resources.

In addition to DEQ, the following agencies are responsible for NPS management activities as they relate to transportation: IDFG, IDL, ITD, BLM, USFS, and USACE. Appendix A, Table A6, lists goals related to transportation and NPS pollution.

Idaho Department of Environmental Quality (DEQ)

DEQ's role in NPS management as it relates to transportation-related projects includes the following:

- Reviews proposed projects and issues Clean Water Act §401 water quality certifications
- Conducts site investigations and inspections as necessary

Idaho Department of Fish and Game (IDFG)

IDFG is involved in most implementation efforts that deal with riparian or habitat restoration and protection and provides technical assistance and funding, as necessary. IDFG's role in NPS management as it relates to transportation-related projects includes the following:

- Works with local, state, federal, and private (e.g., Trout Unlimited) partners to ensure consistency in habitat and fish restoration activities statewide.

Idaho Department of Lands (IDL)

IDL's role in NPS management as it relates to transportation-related projects includes the following:

- Works closely with DEQ in conducting the quadrennial Forest Practices Act/water quality audits, which help achieve state-federal consistency for NPS activities on forestlands

Idaho Transportation Department (ITD)

ITD's role in NPS management as it relates to transportation-related projects includes the following:

- Maintains the *Best Management Practices Manual* (ITD 2014), which includes temporary and construction site BMPs and permanent and post construction BMPs
- Maintains the *Environmental Process Manual* (ITD 2011) to provide guidance for complying with federal, state, and local environmental laws and regulations while planning, designing, constructing, and maintaining transportation facilities in Idaho
- Completes roadway and right-of-way maintenance in compliance with state and federal regulations pertaining to water quality, air quality, the Idaho PMP, and the Idaho "Ground Water Quality Rule"

4.2 Agency Coordination to Reduce NPS Pollution

Idaho's ongoing NPS program, well into its third decade, relies on the coordinated efforts of numerous agencies and organizations having an interest in the management of NPS water pollution. Since numerous agencies are involved with NPS pollution management, coordination among agencies is vital to reducing NPS pollution. Coordination can occur in a number of different ways, including the following:

- Where some activities clearly fall under the jurisdiction of federal partners, state agencies and other entities can assist with the oversight of projects on federal lands to make certain they are properly managed to reduce soil erosion. In these cases, a number of interagency agreements are in place to ensure compliance with state requirements. See section 4.2.1 for more information.
- Where some activities are state responsibilities, partners may assist with developing policies to protect water quality. Idaho has a comprehensive series of statutes, rules, information, and guidance to direct NPS pollution management.

The list below identifies the state and federal agencies as well as private partners that DEQ works with to abate and prevent NPS pollution.

State Partners

- Idaho Department of Fish and Game (IDFG)
- Idaho Department of Lands (IDL)
- Idaho Department of Water Resources (IDWR)
- Idaho State Department of Agriculture (ISDA)
- Idaho Soil and Water Conservation Commission (ISWCC)
- Idaho Transportation Department (ITD)

- Idaho soil conservation districts (SCDs)
- Idaho health districts
- Office of Species Conservation

Federal Partners

- US Environmental Protection Agency (EPA)
- USDA–Agricultural Research Service (ARS)
- US Bureau of Land Management (BLM)
- US Bureau of Reclamation (BOR)
- USDA Natural Resources Conservation Service (NRCS)
- US Forest Service (USFS)
- US Geological Survey (USGS)
- US Fish and Wildlife Service (USFWS)
- US Army Corps of Engineers (USACE)

Public Partners

- Bonneville Power Administration
- Trout Unlimited
- Ducks Unlimited
- Rocky Mountain Elk Foundation

4.2.1 Agreements with Partner Agencies

DEQ’s working relationship with other agencies operating within Idaho on issues related to water quality and NPS pollution is largely defined and memorialized in two memoranda of understanding (MOU) and a cooperative agreement:

- The 2013 “Memorandum of Understanding between the Idaho Department of Environmental Quality, Idaho Department of Lands, US Department of Interior Bureau of Land Management, and the USDA Forest Service Northern and Intermountain Regions” defines the roles and responsibilities necessary for DEQ, IDL, USFS, and BLM to work cooperatively on silvicultural NPS issues within their respective jurisdictions. The MOU is available at www.deq.idaho.gov/media/1041346-nps_program_implementation_mou_2013.pdf.
- The 2008 “Idaho Ground Water Protection Interagency Cooperative Agreement” defines roles and sets requirements for ground water–related plans and programs that are fundamental to completing a comprehensive, statewide NPS management program. The agreement is available at www.deq.idaho.gov/media/565903-interagency_gw_cooperative_agreement_2008.pdf.
- The “Memorandum of Understanding Implementing the Nonpoint Source Water Quality Program in the State of Idaho” and associated appendices outline the roles and responsibilities of the various agencies and organizations in implementing the NPS water quality provisions of the federal Clean Water Act for the State of Idaho. The MOU is available at www.deq.idaho.gov/media/1118043/mou-implementing-nonpoint-source-wq-program-appendices.pdf.

While the MOUs listed above are specific to DEQ and partner agencies, other MOUs among the various agencies, independent of DEQ's involvement, should also be noted, particularly the "Memorandum of Understanding between the Idaho Department of Water Resources and the USDA, Forest Service Intermountain and Northern Regions" (Appendix B). The purpose of the MOU is to document cooperation between the parties to implement the Idaho Stream Channel Protection Act within Idaho on lands administered by the USFS.

4.2.2 Coordination with Federal Partners

With the vast holding of federal and tribal lands in Idaho, coordinating monitoring and remediation activities for NPS pollution control can be a formidable task. Through the Beneficial Use Reconnaissance Program (BURP), use of the water body assessment protocol, and by operating under Idaho's watershed approach to managing its resources, the state can ensure that federal and tribal land use and water quality issues will be taken into account under existing BAG and WAG processes. This practice provides the state the opportunity to review federal land management actions and identify those lands not being managed in a manner consistent with state programs.

Federal agencies are expected to notify DEQ regional offices of planned actions and provide environmental assessments, management plans, and environmental impact statements to solicit state input on a wide range of environmental effects, including water quality. Once a nonpoint source of pollution is identified, the appropriate state agencies will work with the corresponding federal agency to develop and implement a plan to mitigate the problem in a manner that will protect or restore beneficial uses.

4.2.3 EPA Liaison

To ensure consistency in practices, the state may request EPA assistance to conduct educational and liaison activities and to provide technical assistance for itself and other partners. If requested, EPA may also serve to facilitate state-federal negotiations, and assist with mediation and conflict resolution. EPA and DEQ may partner to support pollution abatement and environmental protection efforts and to ensure all federal efforts are compatible with the state's water quality standards and NPS water quality program goals.

4.3 Funding Implementation Activities

By funding projects that will implement BMPs or support BMP implementation on impaired waters and by continuing to evaluate all project proposals based on their ability to produce measureable improvements in water quality, the NPS Management Program seeks to achieve and document water quality improvement. As TMDLs are developed and implemented, on-the-ground water quality implementation plans need to be developed with the support of local WAGs and BAGs (see section 5.4).

Funding for implementing BMPs is somewhat dependent on landownership. Projects implemented on federal lands are often funded by the agency having jurisdiction for managing those lands. Projects planned for private or state lands may be funded through other sources. Programs that are currently unfunded are listed in Appendix C. Table 4 lists possible NPS project funding sources.

Table 4. Possible nonpoint source project funding sources.

| Entity | Programs |
|--|---|
| Idaho Department of Lands | <ul style="list-style-type: none"> • Abandoned Mine Lands Program |
| National Fish and Wildlife Foundation (NFWF) | <ul style="list-style-type: none"> • Bring Back the Natives Grant Program • Environmental Solutions for Communities (Wells Fargo and the NFWF) |
| US Army Corps of Engineers | <ul style="list-style-type: none"> • Project Modification for Improvement of the Environment (Continuing Authority Program [CAP] Section 1135) • Beneficial Uses of Dredged Material (CAP Section 204) • Aquatic Ecosystem Restoration (CAP Section 206) |
| US Department of Agriculture | <ul style="list-style-type: none"> • Agricultural Conservation Easement Program (NRCS) • Conservation Reserve Program (NRCS–Farm Service Agency) • Agricultural Management Assistance (NRCS–Risk Management Agency) • Conservation Stewardship Program (NRCS) • Healthy Forest Reserve Program (NRCS) • Sustainable Agriculture Research and Education (National Institute of Food and Agriculture) • Watershed Rehabilitation Program (Resource Conservation and Development Program) • Forest Legacy Roads Program (USFS) • National Urban and Community Forestry Challenge Cost-Share Program (administered through IDL) • Environmental Quality Incentives Program (NRCS) |
| US Department of Interior (DOI) | <ul style="list-style-type: none"> • Not-for-Profit Acid Mine Drainage Reclamation (DOI–Reclamation Program) • Water Resources on Indian Lands (Bureau of Indian Affairs) • Partners for Fish and Wildlife Program (USFWS) • State Wildlife Grant Program (nontribal and noncompetitive, USFWS) • Cooperative Endangered Species Conservation Fund (USFWS) • North American Wetlands Conservation Act Grants Program (USFWS) |
| US Environmental Protection Agency | <ul style="list-style-type: none"> • Clean Water State Revolving Fund (administered through DEQ) • Wetlands Program Development Grants • Nonpoint Source Implementation Grants (administered through DEQ) • Source Water Protection Grants (administered through DEQ) • Urban Waters Small Grant • Preliminary Assessment Program (for private and state lands only, administered through DEQ) |
| US Geological Survey | <ul style="list-style-type: none"> • Water Resources Research National Competitive Grant Program |
| US Department of Energy | <ul style="list-style-type: none"> • Bonneville Power Administration |
| Private Funding Entities | <ul style="list-style-type: none"> • Ducks Unlimited • Rocky Mountain Elk Foundation • Trout Unlimited |

5 Nonpoint Source Pollution Framework at DEQ

NPS pollution prevention involves DEQ's Ground Water, Source Water, and Surface Water Programs and public involvement through various advisory groups. All water quality management issues are tied together by DEQ's continuing planning process, which involves all DEQ water programs, the public, and laws and rules.

5.1 Ground Water Program

DEQ is responsible for protecting the quality of ground water in Idaho and relies on a combination of programs to protect ground water from pollution, clean up degraded ground water, and monitor and assess ground water quality. DEQ's ground water policy is to maintain and protect the existing high quality of Idaho's ground water and restore degraded ground water where feasible to support ground water beneficial uses. DEQ partners with the ISDA, IDWR, and many other state, local, and private agencies, organizations, businesses, and individuals to achieve this goal.

5.1.1 Beneficial Uses

Idaho Code §§39-120 through 127 designates DEQ as the primary state agency to coordinate and administer ground water quality protection programs. Rules have been promulgated under this statute to ensure DEQ maintains and protects the existing high quality of the state's ground water and the existing and projected future beneficial uses of ground water and interconnected surface water. Within Idaho, all ground water is protected for meeting drinking water beneficial uses. Ground water provides drinking water to 95% of Idahoans.

5.1.2 Ground Water Protection Process

Protecting Idaho's ground water resource is a continual process. Nitrate is the primary NPS contaminant addressed by DEQ's Ground Water Program. The NPA process was developed in conjunction with the Idaho Ground Water Monitoring Technical Committee in 1999 and formalized in DEQ Policy Memorandum PM00-04 (DEQ 2000). The policy directs DEQ to delineate, prioritize, and develop improvement strategies with local input; evaluate effectiveness of the strategies; pursue aquifer re-categorization if necessary; and remove degraded areas from the priority list, if appropriate. The policy was developed to be applicable to a variety of contaminants. However, it has not been implemented for any constituent beyond nitrate.

Since the policy was developed, DEQ has worked with the Ground Water Monitoring Technical Committee to define the criteria for delineating and prioritizing degraded areas. The criterion for an NPA is 25% of the sites sampled are equal to or greater than one-half of the Idaho ground water quality standard. Thus, in an NPA, 25% of the sampled sites have nitrate concentrations greater than or equal to 5 milligrams per liter (mg/L), which is one-half the standard of 10 mg/L. NPAs were delineated in 2002, 2008, and 2014.

Collect and Compile Data (Step 1)

Every 5 years, ground water quality data collected by DEQ, USGS, IDWR, ISDA, and public water systems are compiled by DEQ. The compiled data are then combined with monitoring results dating back to 1990. The data are located spatially. If a site has been sampled multiple times, the most recent result is used in delineating the NPA.

Assess Data (Step 2)

Once each sample site is spatially located and the most recent nitrate value is assigned, the NPAs are delineated using a combination of factors including land use, geology, aquifer boundaries, political boundaries, and professional judgment. The 2002 NPAs were delineated based on geology, aquifer boundaries, land use, and professional judgment. For the 2008 ranking, to decrease the reliance on the potential subjectivity of professional judgment, two geostatistical methods—indicator kriging and ordinary kriging—were incorporated in the process. Geostatistical software packages for indicator kriging and ordinary kriging, available for ESRI ArcMap, were applied to the data for both 2008 and 2014.

Indicator and ordinary kriging are applied to the data to determine the probability of exceeding a specific concentration and interpolate values between locations. The result is then analyzed with professional judgment and local knowledge to define and delineate the NPAs. The 2014 NPAs are shown in Figure 1 (DEQ 2014a).

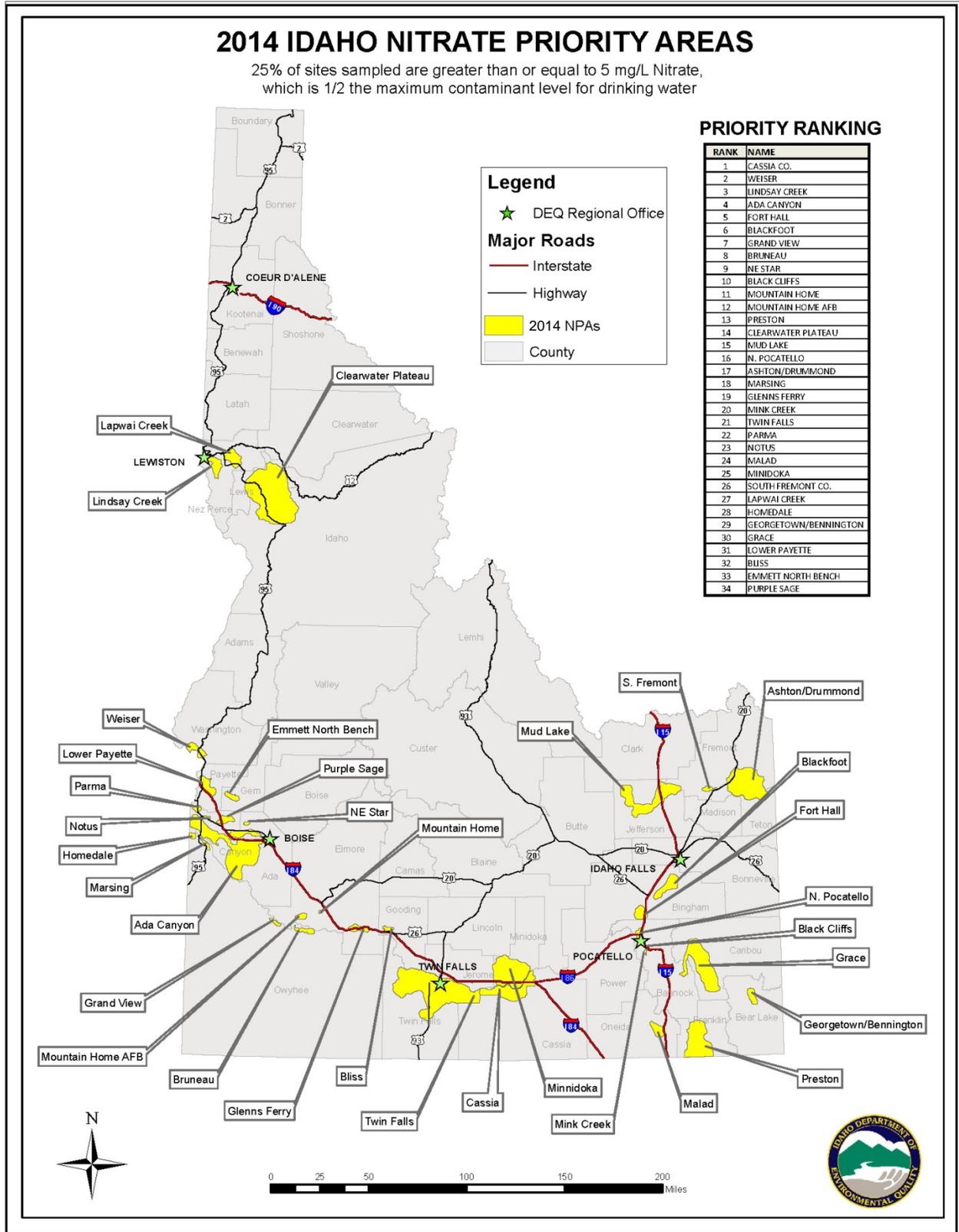


Figure 1. 2014 Idaho nitrate priority areas.

Following delineation, the areas are then prioritized or ranked in order of nitrate contamination severity. The ranking process considers three weighted principal criteria: population, existing water quality, and water quality trends. A secondary criterion, impacts to beneficial uses other than potable water supply, is considered to a lesser extent. The nitrate ground water quality trends were analyzed by the USGS in 2002 and the IDWR in 2008 and 2014. Reports documenting the trend analysis methods were created by each agency and are accessible via the DEQ Ground Water nitrate webpage (<http://www.deq.idaho.gov/water-quality/ground-water/nitrate.aspx>).

Write and Submit Required Reports (Step 3)

A report summarizing the NPA delineations and ranking is created for each update. Changes in NPA rankings have been observed and can be attributed to several different factors. In some areas, median nitrate values have increased, resulting in an increasing trend and a higher ranking. Conversely, the median nitrate concentration has decreased in other NPAs, resulting in a lower ranking. Through time, the number of NPAs with increasing trends has been reduced, while the number of NPAs with decreasing trends has risen (Table 5). Ideally, this represents an improvement in ground water quality.

Table 5. Nitrate priority area (NPA) trends.

| Year | NPAs with Increasing Trend | NPAs with Decreasing Trend |
|-------------|-----------------------------------|-----------------------------------|
| 2002 | 9 | 1 |
| 2008 | 4 | 1 |
| 2014 | 3 | 4 |

However, some of the changes in trend may be attributable to changes in the size of the NPA due to changes in water quality in parts of the NPA. Originally, some DEQ regions felt that large areas with similar hydrogeology were appropriate for county-wide planning. The kriging process together with additional monitoring has improved defining areas where degradation is more severe, which has reduced the size of some NPAs. The reduction in size may have removed a dilution factor that mixed areas with low nitrate concentrations. For example, in 2008 the Cassia County NPA was 302 square miles, but it was reduced to 154 square miles in 2014. The average nitrate concentration was 6.34 mg/L in 2008 and 7.16 mg/L in 2014. The area was calculated with no trend in 2008, yet had an increasing trend in 2014. As illustrated in Table 6, in comparison with trends in 2008, three NPAs had increasing trends, and four had decreasing trends. The ranking has also changed significantly in some areas, which could be reflected by change in NPA size and/or changes in ground water quality.

Table 6. 2002–2014 nitrate priority area trends.

| Year | Nitrate Priority Area | Square Miles | Total Sites | Avg. NO ₃ | No. ≥ 10.00 mg/L | Trend | Rank |
|------|-----------------------|--------------|-------------|----------------------|------------------|----------|------|
| 2002 | Burley/Marsh Creek | 265 | 234 | 6.36 | 40 | Increase | 3 |
| 2008 | Cassia | 302 | 384 | 6.34 | 65 | No trend | 9 |
| 2014 | Cassia | 154 | 402 | 7.16 | 91 | Increase | 1 |
| 2002 | Lindsay Creek | N/A | N/A | N/A | N/A | N/A | N/A |
| 2008 | Lindsay Creek | 44 | 45 | 4.74 | 9 | No trend | 22 |
| 2014 | Lindsay Creek | 44 | 67 | 5.64 | 17 | Increase | 3 |
| 2002 | Blackfoot | N/A | N/A | N/A | N/A | N/A | N/A |
| 2008 | Blackfoot | 24 | 15 | 6.98 | 3 | No trend | 20 |
| 2014 | Blackfoot | 65 | 30 | 4.68 | 2 | Increase | 6 |
| 2002 | Rupert | 182 | 236 | 5.60 | 18 | No trend | 9 |
| 2008 | Minidoka | 230 | 319 | 5.35 | 27 | No trend | 12 |
| 2014 | Minidoka | 230 | 337 | 5.45 | 30 | Decrease | 25 |
| 2002 | Payette | 48 | 74 | 6.50 | 15 | No trend | 10 |
| 2008 | Lower Payette | 42 | 119 | 6.05 | 22 | No trend | 11 |
| 2014 | Lower Payette | 45 | 246 | 5.91 | 38 | Decrease | 31 |
| 2002 | Purple Sage | N/A | N/A | N/A | N/A | N/A | N/A |
| 2008 | Purple Sage | 22 | 87 | 5.26 | 9 | No trend | 20 |
| 2014 | Purple Sage | 26 | 120 | 5.28 | 11 | Decrease | 34 |
| 2002 | Twin Falls | 382 | 303 | 5.30 | 17 | Increase | 2 |
| 2008 | Twin Falls | 593 | 605 | 5.20 | 34 | Increase | 1 |
| 2014 | Twin Falls | 561 | 618 | 5.18 | 35 | Decrease | 21 |

Notes: Nitrate (NO₃), milligrams per liter (mg/L). "N/A" means the area was not an NPA during that period.

Develop an Implementation Plan (Step 4)

DEQ has worked with local stakeholders in a number of NPAs to develop and implement ground water quality improvement plans. The plans are developed by local voluntary citizen advisory committees with DEQ assistance. Because the plans are voluntary, implementation depends on the cooperation of local organizations.

Continue to Monitor and Analyze Ground Water (Step 5)

Typically, no formal monitoring is conducted to monitor effectiveness of site-specific ground water quality improvement plan implementation activities. However, state agencies such as DEQ, IDWR, and ISDA continue to conduct ground water sampling in NPAs for future trend analysis studies to evaluate BMP effectiveness on a large scale.

5.2 Source Water Assessment and Protection Program

The Source Water Assessment and Protection Program is two-fold in that all recognized public water sources in Idaho are required to develop a source water assessment. The second

component to the program is a voluntary effort whereby communities can implement a source water protection plan to help prevent contamination of the source water that supplies its public water system.

5.3 Surface Water Program

The Surface Water Program is responsible for ensuring Idaho's streams, rivers, lakes, reservoirs, and wetlands meet Idaho water quality standards and support their beneficial uses.

Water quality standards are the benchmarks DEQ uses to gauge protection of Idaho's surface waters. The Idaho Water Quality Standards Program is a joint effort between DEQ and EPA. DEQ is responsible for developing and enforcing water quality standards that protect beneficial uses such as drinking water, cold water aquatic life, industrial water supply, recreation, and agricultural water supply. EPA develops regulations, policies, and guidance to help Idaho implement the program and to ensure that Idaho's adopted standards are consistent with the requirements of the Clean Water Act and relevant regulations. EPA has the authority to review and approve or disapprove state water quality standards and, where necessary, to promulgate federal water quality rules.

The federal Clean Water Act establishes a process for states in developing information on the quality of their surface waters. Section 305(b) of the statute requires biennial (every 2 years) reporting on the state's water quality. To fulfill this requirement, DEQ conducted the Idaho Wadeable Stream Survey from 2005 to 2010. This survey was probability based and designed to provide statistically valid estimates of the condition of all wadeable, sampleable streams in Idaho and did not apply to larger flowing water bodies defined by DEQ as rivers. This survey was conducted in conjunction with the development of the Integrated Report (see step 3 below). The results of this probability based survey can be found in *Idaho's 2012 Integrated Report* (DEQ 2014b).

5.3.1 Beneficial Uses

A water quality standard defines the water quality goals for a water body or portion thereof, in part by designating the use or uses to be made of the water. Both narrative and numeric standards can be established to protect beneficial uses.

The beneficial use of a water body must consider its actual use, the ability of the water to support in the future a use that is not currently supported, and the basic goal of the Clean Water Act that all waters support aquatic life and recreation where attainable. Idaho must designate its uses accordingly.

A *designated use* is a beneficial use assigned to a specific water body in Idaho water quality rules. The Clean Water Act requires Idaho to recognize *existing uses*, which are uses that are (or were) actually attained in a water body on or after November 28, 1975, whether or not they are designated. Idaho presumes most undesignated waters will support cold water aquatic life and either primary or secondary contact recreation. These are termed *presumed uses*. Designated, existing, and presumed uses must all be protected.

In designating uses, Idaho considers the use and value of the water body for public water supply; protection of fish, shellfish, and wildlife; and recreational, agricultural, industrial, and

navigational purposes. While competing beneficial uses may exist in a river or stream, federal law requires DEQ to protect the most sensitive of the beneficial uses.

Idaho evaluates the suitability of a water body for the uses based on the following:

- Physical, chemical, and biological characteristics
- Geographical setting and scenic qualities
- Economic and public values

Idaho's water quality standards describe several beneficial uses for which a given water body may be designated (IDAPA 58.01.02.100). Some are compatible (e.g., a water body can support both cold water aquatic life and salmonid spawning). Others are mutually exclusive (e.g., either cold water or warm water aquatic life). In general, most water bodies will support multiple uses (e.g., a recreational use and an aquatic life use). When designated in the water quality standards (IDAPA 58.01.02.110–160), these are statements of the uses a water body is expected to support.

Aquatic Life—The standards associated with this use are designed to protect animal and plant species that live in the water. Some pollutants or conditions that affect aquatic life are water temperature, dissolved oxygen levels, and concentrations of toxic substances such as ammonia, metals, and pesticides. Therefore, Idaho's water quality standards set criteria for these pollutants or conditions to protect against adverse effects due to human activities.

Recreation—Recreational uses are divided into primary contact and secondary contact recreation. Both of these classifications have the same bacteria criterion (IDAPA 58.01.02.251), which protects people from gastrointestinal illness due to incidental ingestion of the water they are recreating in (primary contact) or on (secondary contact). Different monitoring thresholds associated with the two subcategories of contact recreation trigger more involved monitoring; however, the actual criterion is the same. The monitoring thresholds are different due to the different likelihood of unintentionally ingesting water.

Water Supply—Standards associated with this use indicate whether water from a lake or river is suitable for use as a source for a water supply system. Public drinking water is treated before it is delivered to the tap; a separate set of standards governs treated drinking water. Indicators used to measure the safety or usability of surface water bodies as sources for drinking water include turbidity, which may interfere with treatment, and the presence or absence of toxic substances such as metals or pesticides.

Wildlife Habitats—The standards associated with this use are designed to protect water quality appropriate for wildlife habitat. This use applies to all surface waters of the state.

Aesthetics—This use applies to all surface waters of the state.

5.3.2 Surface Water Protection Process

Protecting Idaho's surface waters is a continual process. This process involves monitoring or assessing water quality and using the results to report on the status of Idaho's waters and to assist with writing implementation plans for impaired waters. Success under those plans will eventually be determined by conducting further monitoring and assessment. The primary steps in this process are described below.

Collect Data (Step 1)

The *Surface Water Ambient Monitoring Plan* (DEQ 2012) outlines DEQ's approach to collecting and integrating ambient water quality monitoring data from a variety of monitoring programs, including BURP, National Aquatic Resource Surveys, Trend Monitoring Network, and special studies.

DEQ's BURP deploys crews into the field to collect water temperature data biological samples (e.g., fish, bacteria); chemical measures (e.g., specific conductivity); and habitat data from selected sites. The data are used to help DEQ determine whether beneficial uses are being supported in Idaho's streams and lakes. DEQ also collects data through the USGS Trend Monitoring Network. This program, operated in cooperation with DEQ, monitors trends in water quality at 56 sites around Idaho.

In addition to its own data collection efforts, DEQ solicits and considers data submitted from other agencies, institutions, commercial interests, interest groups, or individuals during every integrated reporting cycle. These data may relate to the existence, support status, or associated criteria for the beneficial uses in a water body. These external data sources are ranked for quality according to three tiers (Table 7). DEQ pursues several avenues for notifying the public of its intent to seek water quality-related data and information from external partners, including disseminating a news release to media statewide, posting announcements to DEQ's website, and direct mailing notices to interested individuals and organizations such as the USFS, IDFG, and BLM. All data collected and analyzed must be accompanied with a monitoring plan with quality assurance and controls reported.

Table 7. Data tier comparison.

| Tier | Scientific Rigor | Relevance | Example | How Used |
|------|---|---|--|---|
| I | <ul style="list-style-type: none"> Quantitative. Parameters measured. Established monitoring plan with QA and defined protocols. >30 hours of supervised training. Samples processed in EPA-certified lab following standard methods or by professional taxonomist. Organisms identified by a professional taxonomist. | <ul style="list-style-type: none"> Data relates to either water quality standard(s), especially numeric, or a beneficial use. ≤5 years old. Data relates to a named water body (GIS, latitude and longitude or map location provided). | <ul style="list-style-type: none"> Ph.D. or masters thesis. Published or printed studies or reports. Published predictive models. EPA EMAP. BURP data. Use attainability analyses. Rapid Bioassessment Protocols (RBP). | <ul style="list-style-type: none"> 303(d) listing or de-listing. 305(b) reports subbasin assessments. TMDLs. Planning for future monitoring. |
| II | <ul style="list-style-type: none"> Qualitative or semi-quantitative in nature. May have a monitoring plan. No QA/QC provided for within plan. Protocols may or may not be defined. Parameters rated. Field staff may not be trained: Lab may not be certified. Taxonomist may not be a professional. | <ul style="list-style-type: none"> Data may relate to a watershed. Not water body specific. Data >5 years old. Data may relate to other agency guidelines or objectives. | <ul style="list-style-type: none"> Environmental assessments. Proper Functioning Condition. Cumulative Watershed Effects. Most citizen monitoring. Models with documentation. Agency planning documents. | <ul style="list-style-type: none"> 305(b) reports. Subbasin assessments or TMDLs when data adds to overall assessment quality. Planning for future monitoring. |
| III | <ul style="list-style-type: none"> May be qualitative in nature. Parameters evaluated. Field staff have little to no training. No documented monitoring plan. No QA/QC. Anecdotal in nature. | <ul style="list-style-type: none"> Not specific to water quality standards or beneficial uses. Location not specific. Data ≥10 years old. | <ul style="list-style-type: none"> Non-specific reports or studies. Newspaper articles. Simple models without any documentation. | <ul style="list-style-type: none"> Planning for future monitoring. Hold for further investigations. |

Assess Data and Determine Beneficial Use Support (Step 2)

DEQ relies on several key technical and policy statements in making water quality determinations, and these come together in the *Water Body Assessment Guidance (WBAG)* (Grafe et al. 2002). This document, which focuses on biology as a measure of aquatic life and water quality status, is the foundation of DEQ’s ambient monitoring and assessment program. The WBAG describes the methods used to consistently evaluate data and determine beneficial use support of Idaho waters. The methodology addresses many reporting requirements and state and federal rules, regulations, and polices.

The following technical documents support the WBAG:

- *Idaho River Ecological Assessment Framework* (DEQ 2002a)
- *Idaho Small Stream Ecological Assessment Framework* (DEQ 2002b)

Using these documents, DEQ has a consistent and relevant decision-making process for water-quality assessment.

Submit Integrated Report (Step 3)

Every 2 years, DEQ is required by the federal Clean Water Act to conduct a comprehensive analysis of Idaho's water bodies to determine whether they meet state water quality standards and support beneficial uses or if additional pollution controls are needed. This analysis is summarized in an Integrated Report that serves several functions:

- It satisfies the reporting requirements of sections 303(d), 305(b), and 314 of the Clean Water Act, including the §305(b) reporting requirement for §106 grant funds.
- It informs the public about the status of state waters, enabling interested parties to comment on the status of all Idaho waters and provide any relevant data.
- It provides a unique opportunity for the public to understand the overall status of Idaho's water quality and gain a better understanding of how DEQ is maintaining, improving, and protecting Idaho's waters.
- It compiles a wealth of data and information from all sections of DEQ's Surface Water Program as well as from other agencies, organizations, and individuals. These data give water quality managers the ability to take a comprehensive look at the relative quality of Idaho's water bodies to help them set priorities and allocate resources accordingly.

Idaho's most recent approved version is its 2012 Integrated Report (approved by EPA on July 11, 2014). Based on existing and readily available water quality data and information assessed for the 2012 Integrated Report, 30% of streams and 6% of lakes are fully supporting state water quality standards, 36% of streams and 56% of lakes are not fully supporting state water quality standards, and 34% of streams and 38% of lakes have not been assessed (DEQ 2014b). Water bodies are considered to be fully supporting their beneficial uses if they are in Categories 1 or 2. Unassessed water bodies are those in Category 3, and water bodies not supporting their beneficial uses are those in Categories 4 and 5 (Figure 2).

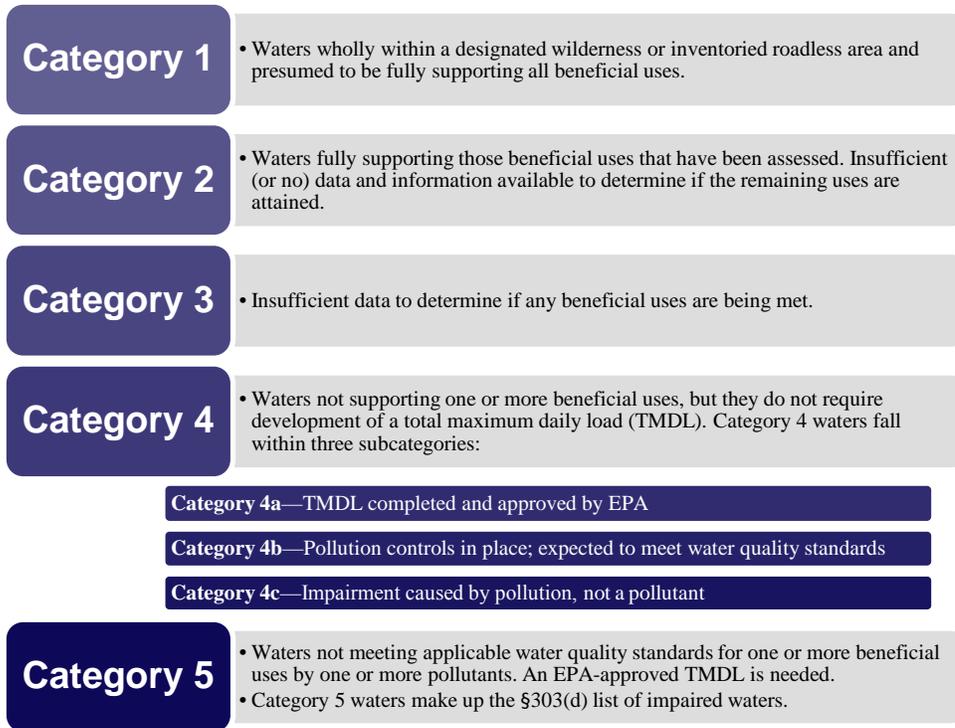


Figure 2. Five categories of the Integrated Report.

For the 2012 reporting cycle, Idaho reported a total of 3,953 AU-cause combinations as impaired (Figure 3).² This total includes AU-cause combinations captured in either Category 4 or Category 5 or both. The leading causes of impairment in streams are temperature, sediment/siltation, and bacteria (*E. coli* or fecal coliform). The leading causes of impairment in lakes are mercury, nutrients, sediment, and dissolved oxygen.

² An AU may be impaired by multiple causes, and in some instances can be listed in multiple categories. As such, category listings are sometimes referred to as AU-cause combinations, rather than simply water bodies, since a particular water body may be divided into multiple AUs impaired by multiple causes.

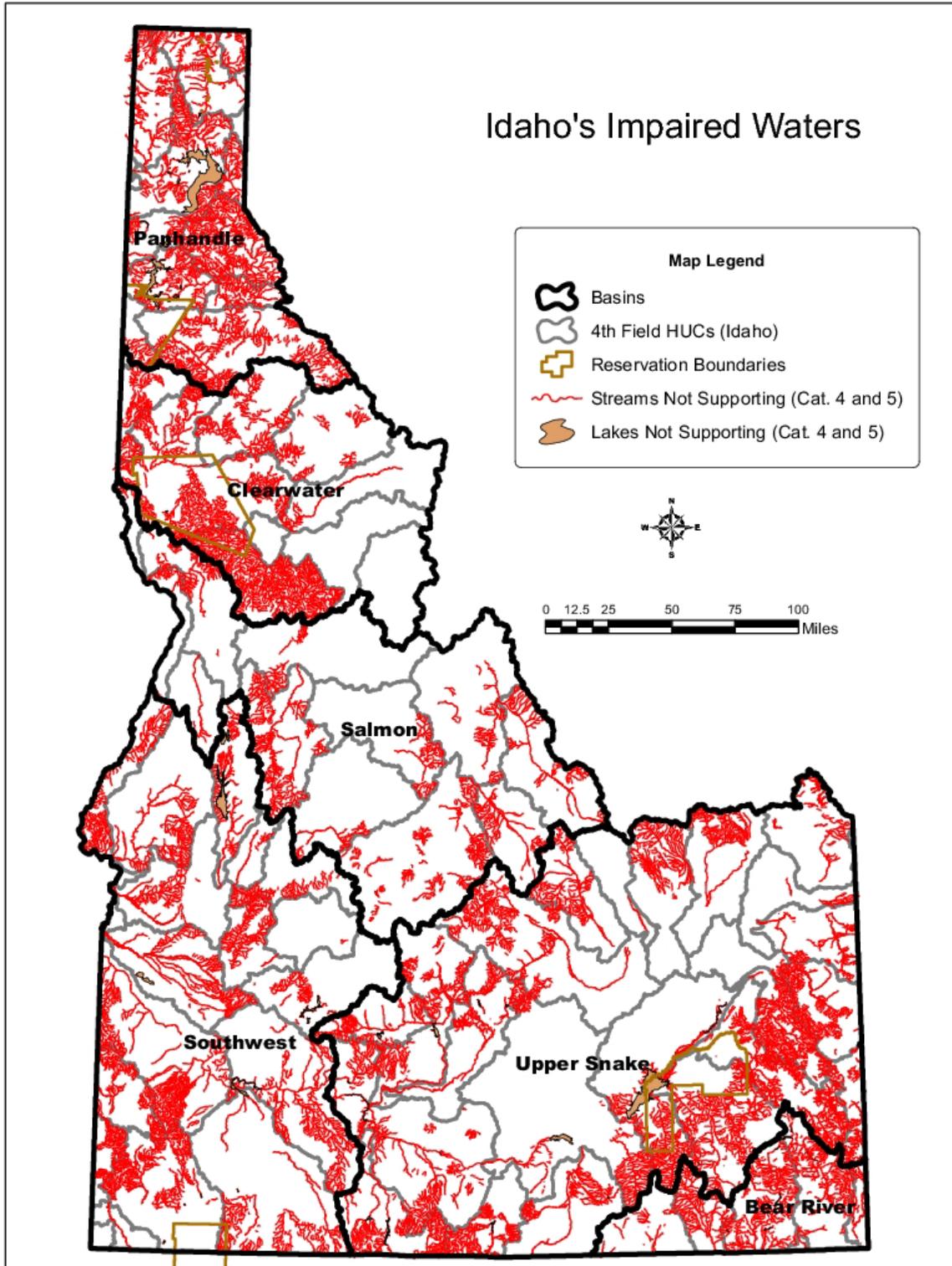


Figure 3. Map of 2012 Integrated Report impaired waters.

Disclaimer: This map only shows a snapshot of the impaired waters from the 2012 Integrated Report. DEQ's actions with respect to the Integrated Report and such waters do not constitute a determination, waiver, admission, or statement on the part of the State of Idaho with respect to jurisdiction over such waters or the boundaries of any tribal reservation.

Evaluate Impaired Waters to Determine Causes and Source of Pollutants (Step 4)

Where monitoring results show that water quality fails to meet state water quality standards (as documented in the Integrated Report), DEQ further evaluates the water body to determine the causes and sources of pollutants. In Idaho, this evaluation is typically included in a subbasin assessment that is housed within the TMDL document that develops the loading analysis and pollutant caps. This information also may be found in a TMDL 5-year review when DEQ reviews existing TMDLs (see next step). Five-year reviews also may evaluate currently listed waters in anticipation of scheduling them for TMDLs. If the analysis determines the water is not impaired by the listed pollutant, it may be proposed for delisting in the next reporting cycle. The assessment is the first step in either developing a TMDL or recommending the water body be delisted from the list of impaired waters (Category 4 and/or 5).

Establish Total Maximum Daily Loads for Water Bodies (Step 5)

Using information found during the subbasin assessment, DEQ establishes a TMDL for each impaired water body. The TMDL establishes maximum allowable levels for pollutants causing water quality violations. A TMDL is the maximum amount (load) of a water quality parameter that can be carried by surface water on a daily basis without causing an exceedance of water quality standards. If a water body fails to meet expectations for a particular standard, it qualifies as impaired and is identified as such on the state's §303(d) list of impaired waters (Category 5 of the Integrated Report).

TMDLs are assessed on a subbasin level, which means water bodies within a hydrologic subbasin are generally addressed in a single document. A subbasin is a cataloging unit established by the US Geological Survey (USGS). Subbasins are identified by USGS 4th-field hydrologic unit codes, or HUCs (Figure 4). Idaho has 86 HUCs, 2 of which do not contain any waters of the state and thus are not included in Idaho's water quality standards and 4 of which do not require any TMDLs at this time.

DEQ is working under a settlement agreement that established a schedule through 2007 for TMDL development based on HUC, AU, and pollutant. DEQ considered the severity of the pollutant and the uses to be made of such waters when developing and prioritizing the schedule. Although the TMDL settlement schedule was not completed by 2007, DEQ still remains under obligation to develop TMDLs for those waters remaining on the settlement agreement. Therefore, DEQ has maintained these waters as *high priority*, with one exception: HUC 17060306. These TMDLs are associated with waters within the Nez Perce Reservation. Any TMDLs that are to be developed for waters on the reservations are to be developed by EPA and not DEQ. Therefore, DEQ is assigning a low priority to these remaining TMDLs. DEQ reserves the right to reprioritize individual AUs or HUCs based on severity of pollution, funding, personnel availability, and executive or legislative direction. Schedule modifications are done on a case-by-case basis.

TMDL development supports many aspects of the NPS Management Program. Monitoring to identify source categories can be used to target key remediation projects. The data can also be used to identify critical conditions when exceedances tend to occur. These conditions must be considered when identifying strategies to reduce loading and when performing effectiveness monitoring.

In practical terms, a TMDL is a plan to attain and maintain water quality standards for waters that are not meeting standards. The basic steps of the process include the following:

1. Develop an understanding of the water quality pollutant problem (e.g., sediment, temperature, arsenic).
2. Identify the pollutant sources.
3. Quantify the pollutant loads from each of the sources.
4. Allocate pollutant reductions to the sources.

Idaho Code §39-3611(7) requires a 5-year cyclic review process for Idaho TMDLs. These reports document the review of approved Idaho TMDLs and implementation plans by considering the most current and applicable information in conformance with Idaho Code §39-3607, evaluating the appropriateness of the TMDL to current watershed conditions, evaluating the implementation plan, and consulting with the WAG. These reviews also evaluate AUs listed as impaired in the most recent EPA-approved Integrated Report. HUCs due for a 5-year review are also deemed *high priority*. Those waters that are not subject to the settlement agreement or due for a 5-year review but are due for a TMDL are assigned *medium* or *low priority* based on multiple factors, including when the AU-pollutant was first listed in Category 5, severity of concern, pollutant, complexity of analysis, and availability of resources.

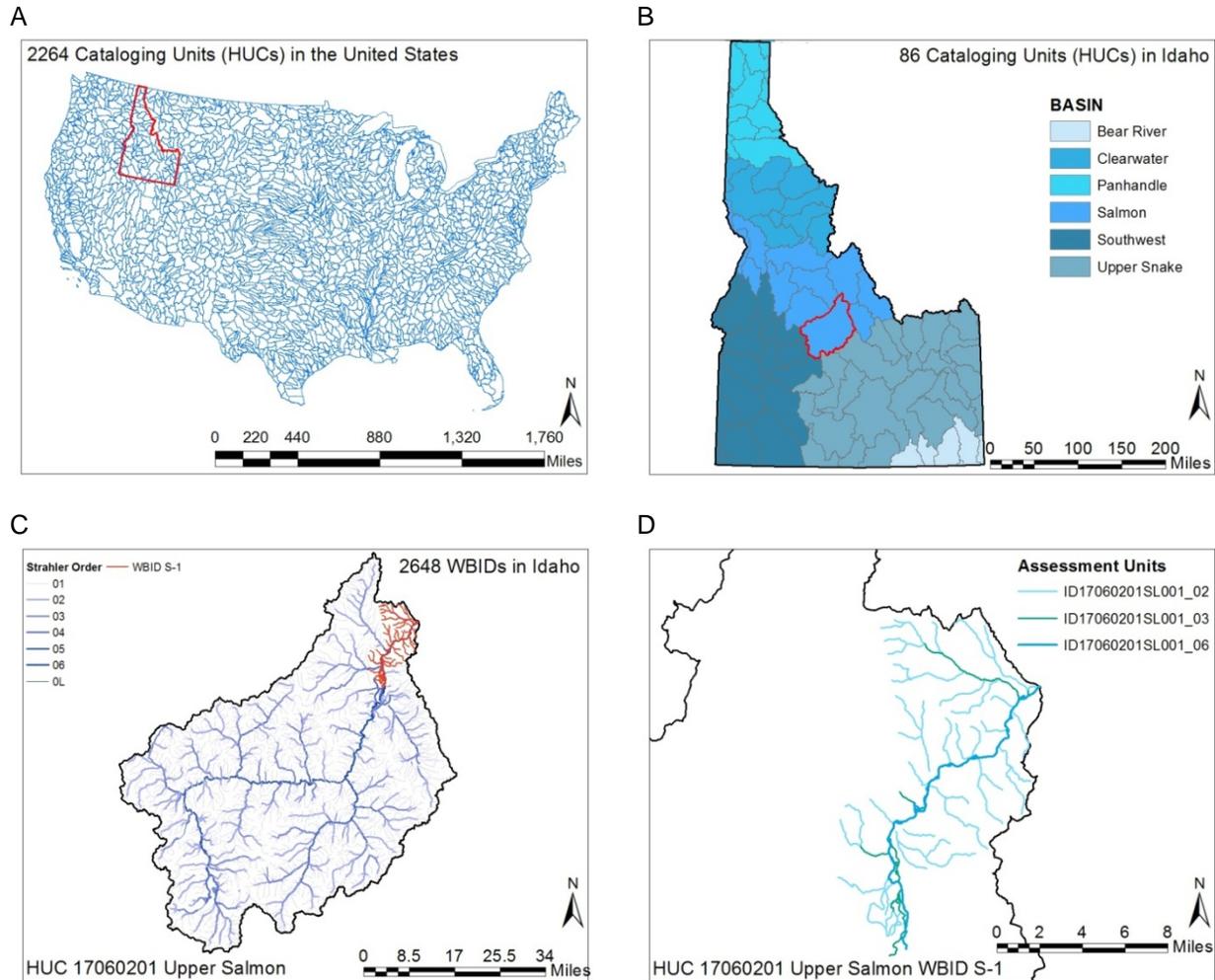


Figure 4. Relationship between 4th-field hydrologic unit codes (HUCs), water body IDs (WBIDs), and assessment units (AUs). (A) Level 4 cataloging units (HUCs) in the nation. (B) 86 HUCs in Idaho (the highlighted HUC is 17060201 Upper Salmon in central Idaho). (C) HUC 17060201, Upper Salmon River, with WBID S-1 highlighted in red. (D) WBID S-1 subdivided into three different AUs.

Develop an Implementation Plan (Step 6)

Implementation plans are developed by the land use management agencies associated with the particular activity, including ISDA, IDL, ITD, ISWCC, NRCS, BLM, and USFS. An implementation plan is written after a TMDL is developed. The plan provides details and a schedule of the actions needed to achieve specific pollutant load reductions. The plan also identifies the monitoring needed to document the progress toward meeting water quality standards.

A list of all the TMDLs, implementation plans, and 5-year reviews that have been developed is available at <http://www.deq.idaho.gov/water-quality/surface-water/tmdls/table-of-sbas-tmdls.aspx>.

Continue to Monitor and Analyze Water Bodies (Step 7)

The implementation plan will specify the monitoring methods needed to determine if the recommended changes are improving water quality and if water quality standards are being met. If a water body is found to be meeting water quality standards (i.e., no TMDL or implementation plan was written), it will be monitored again in the future to ensure it continues to meet standards. Funding is not always readily available for continued monitoring and analysis of water bodies.

5.4 Basin Advisory Groups, Watershed Advisory Groups, and Technical Advisory Groups

Two advisory groups play a role in the §319 grant award process and state water quality management process in general: BAGs and WAGs. BAGs and WAGs do not evaluate projects that are up and running; they evaluate projects at the application stage, before they start implementing work plans. However, as approved and funded projects are in development, the WAGs and BAGs may request updates from DEQ on the status of projects. Normally, DEQ will provide an update at the next available meeting.

BAGs are groups of citizens that advise DEQ's director on water quality objectives within Idaho's six basins (Figure 5). BAG members are appointed by DEQ's director. By statute (Idaho Code §39-3614), BAG membership must be representative of the industries and interests directly affected by implementing water quality programs within the basin. Among the interests that may be represented on BAGs are agriculture, mining, nonmunicipal point source discharge permittees, forest products, livestock, local government, Indian tribes (for areas within reservation boundaries), water-based recreation, and other environmental interests. In addition, each BAG must include a person to represent the public at large who may reside outside the basin. With the exception of the public-at-large member, each remaining seat must be filled by members who reside within the basin or who represent persons with a real property interest within the basin.

Idaho has six BAGs representing the six basins: the Southwest, Panhandle, Salmon, Clearwater, Bear River, and Upper Snake. Each BAG is charged with meeting as necessary to conduct business and to provide general coordination of the water quality programs of all public agencies pertinent to each basin. Their duties include, but are not limited to, providing advice to DEQ's director on the following:

- Priorities for monitoring within the basin
- Necessary revisions in the beneficial uses for water bodies within the basins
- Categories to which water bodies in the basin should be assigned
- Processes for developing and implementing TMDLs
- Members to be appointed to WAGs
- Priorities for water quality programs within the basin based on available economic resources

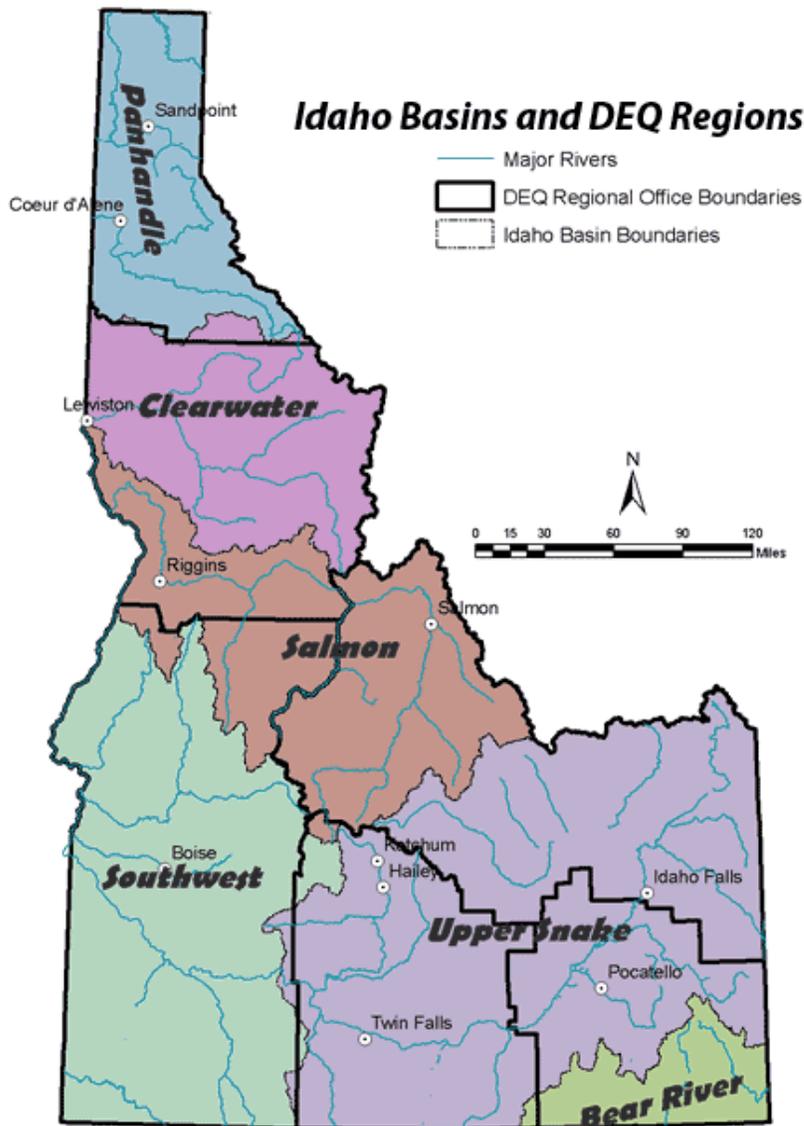


Figure 5. Idaho basins and DEQ regions.

Similar to the BAGs, WAGs are made up of DEQ director-appointed local citizens from the agriculture, mining, forest products, livestock, and water-based recreation industries and from point source dischargers, local government, Indian tribes, environmental groups, and affected land management or regulatory agencies. WAGs provide input and guidance on specific watersheds to DEQ for use in developing a TMDL. The WAG provides an opportunity for concerned and involved citizens to participate in the TMDL process from start to finish. WAGs do not typically write the TMDL document but are an integral part of the process. Their input is given great deference in TMDL development and implementation.

Because efforts to reduce pollution often come with some level of economic, social, or cultural impact, it is important that WAG membership reflect the many interests in the watershed and represent a broad cross-section of the community.

The key responsibilities of WAGs include the following:

- Advise DEQ on matters of concern to the community.
- Contribute, with DEQ, to the education of watershed residents on water quality issues.
- Help DEQ identify contributing pollution sources in the watershed.
- Assist DEQ in assigning pollution reduction allocations among contributors.
- Recommend to DEQ the specific actions needed to effectively control sources of pollution.
- Help DEQ develop an implementation plan and set in motion what is needed to meet the water quality targets identified in the TMDL.

Many of the issues involved in developing a TMDL are technical or legal in nature. Technical advisory groups, or TAGs, can assist a WAG in evaluating these issues. TAGs are comprised of knowledgeable citizens and experts from groups like DEQ, IDFG, USDA, USFS, Indian tribes, EPA, and other groups, organizations, or agencies with a vested interest in the issues at hand.

5.5 Continuing Planning Process

As the agency tasked with implementing the federal Clean Water Act in Idaho, DEQ is required by §303(c) of the act to develop a continuing planning process (CPP) that describes the ongoing processes and planning requirements of the state's water quality program.

In essence, the CPP is a description of how Idaho manages water quality. As the name "Continuing Planning Process" implies, a CPP is not a static document but an evolving process that grows and changes as circumstances change. DEQ's water quality planning activities comprise a continual loop of the interrelated aspects of laws and rules, water quality programs, water quality monitoring and assessment, implementation of water quality maintenance and restoration projects, and ongoing planning. Inherent in these programs is continual feedback, public involvement, improvement, and change.

Federal regulations require that processes be in place to implement the following:

- Limit effluents discharged to water from point sources such as industrial sites and publically owned treatment works.
- Conduct basin-wide and statewide planning aimed at setting priorities.
- Develop water quality improvement plans for water bodies that do not meet Idaho water quality standards.
- Update and maintain water quality management plans composed of various programs and guidance documents.
- Ensure intergovernmental cooperation in the implementation of the state water quality management program through state laws, regulations, and memoranda of understanding or agreement.
- Establish and ensure implementation of new or revised water quality standards for surface water to protect the public and restore the quality of Idaho's surface waters.
- Develop an inventory and ranking in priority order of needs for construction of waste treatment works.
- Ensure adequate control of residual waste from water treatment processing.
- Determine the priority of permit issuance.

6 Addressing Waters Impaired by NPS Pollution

Data, derived from decades of studies, drive Idaho's NPS activities and projects. Before NPS activities are implemented, the public plays a key role through involvement in BAGs, WAGs, and TAGs. Various agencies and other stakeholders are involved in project implementation. These projects must be tracked to assess the effectiveness of BMPs and NPS pollution reduction efforts.

6.1 Water Quality Reports

The quality of Idaho's water bodies has long been a topic of interest among scientists, as evidenced by hundreds of current and historical reports. These reports are available at <http://www.deq.idaho.gov/water-quality/surface-water/water-quality-studies-and-reports.aspx>.

6.1.1 Water Quality Status Reports

Various government agencies have documented a lengthy history of pollution problems in water bodies in Idaho, dating back to 1952 when a biologist for the US Public Health Service reported on an analysis of bottom fauna in collections from the Clearwater and Snake Rivers. Water quality status reports have been prepared to address pollution problems in such water bodies as Bear Lake, Cascade Reservoir, Dry Creek, Indian Creek, and a number of other creeks, lakes, reservoirs, and rivers across Idaho. These reports offer recommendations on how to improve the water quality in these water bodies.

6.1.2 Water Quality Summary Reports

More than two decades of water quality summary reports (published from 1980–2003) summarize water quality in various creeks and rivers. The reports focus on determining the impacts point and nonpoint pollution sources have on water quality in the water bodies studied. The reports assess and document existing conditions and recommend the types of BMPs to implement to improve water quality to fully support beneficial uses.

6.1.3 Water Body Studies and Plans

More recently, other water body studies and plans include such things as the results of use attainability analyses and case studies on temperature criteria. Water quality reports can be searched by geographic area and are accessible via the DEQ regional office webpages.

6.2 Addressing Nonpoint Source Pollutants Through Project Implementation

DEQ develops TMDLs to improve water quality when water bodies are found to not be meeting water quality standards. When a TMDL is completed, the next task is to implement its recommendations and meet its goals. An implementation plan, guided by the approved TMDL, provides details of the actions needed to achieve load reductions and a schedule of those actions. Once the implementation plan has been reviewed and approved, a management agency is called on to implement the actions outlined in the plan.

The DEQ §319 subgrants are critical to Idaho's NPS Management Program because they provide some of the funding necessary to help DEQ achieve its water quality protection realities in

watersheds throughout the state. Each year, DEQ regional offices identify priority program and watershed targets for their respective regions. A successful subgrant recipient will implement a project that focuses on improving the water quality in a lake, stream, river, or aquifer. Funds may be used to address a variety of NPS management and prevention issues that are found in such categories as the following:

- Agriculture
- Urban stormwater runoff
- Transportation
- Silviculture or forestry
- Mining
- Hydrologic and habitat modification and related activities (including wetlands reconstruction)

In many states, §319 funds are distributed to various projects without significant forethought on restoration priorities, in part due to litigation and lack of vision toward adaptive management with limited resources. While states like Idaho predominantly use §319 funds for waters that are §303(d) listed or have TMDLs, the reality is that there are TMDLs in nearly all of the 84 Idaho subbasins. Funding needs exceed the available funding. Idaho expects to engage in future discussions about how to better leverage limited funds toward strategic implementation efforts to achieve measurable water quality improvements and/or protection.

6.3 Assessing the Effectiveness of BMPs

A feedback loop approach (Figure 6) is practiced by DEQ as part of the process that calls for the agency to manage NPS pollution mainly by implementing various BMPs. The appropriate BMPs to apply to a given situation are determined after undergoing a thorough planning process. The BMPs are applied by land managers or cooperators based on the site-specific conditions. The effectiveness of the BMPs implemented is assessed through on-site evaluations and by using other ambient monitoring processes. All monitoring data collected are evaluated against the appropriate criteria. Depending on results, BMPs can later be modified or a new approach can be considered for implementation until beneficial uses are restored and maintained.

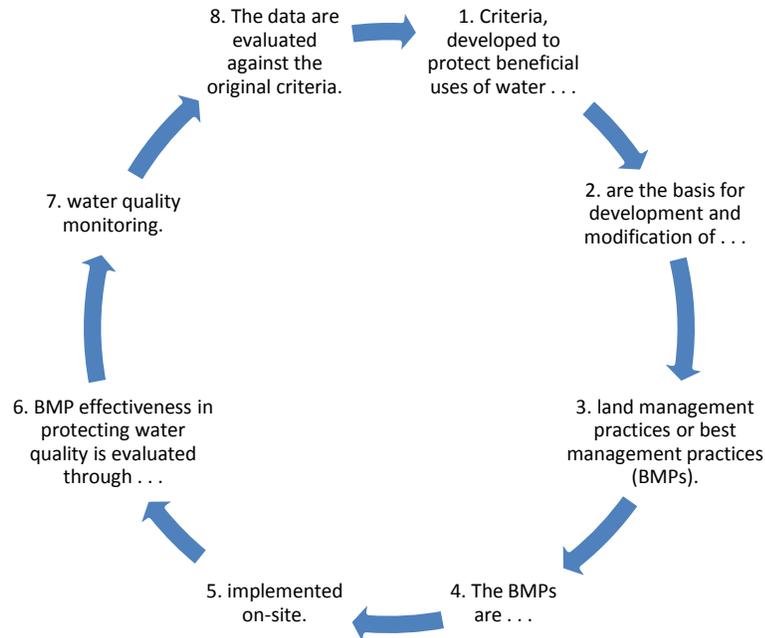


Figure 6. Idaho's best management practice (BMP) feedback loop.

6.4 Assessing Success in Reducing NPS Pollution

The overall achievements of the NPS Management Program are documented in the annual *Nonpoint Source Performance and Progress Report*. On a smaller, more specific scale, individual accomplishments are recorded in the field evaluation forms that are completed following on-site observations of each project:

- Performance and Progress Report.** The Clean Water Act §319(h) requires EPA to make an annual determination of the adequacy of each state's progress in meeting its goals within the schedule included in its approved state NPS management plan. This determination must be made prior to EPA awarding any grant funds to the state. The performance and progress report is a detailed account of the accomplishments of the NPS Management Program. Upon reviewing the report, EPA is able to determine whether the state program has made satisfactory progress toward meeting its annual performance partnership agreement milestones, as well as all other conditions of its annual program grant.
- Field Evaluation Progress Reports.** A majority of DEQ's funding available for implementing NPS projects is passed through to the local level for on-the-ground work on water bodies with an established TMDL. In any given year, DEQ oversees about 50 active projects underway across the state (Appendix D). Field evaluations allow DEQ to evaluate the progress on-site and in real-time. All projects are subject to a field evaluation on a biennial basis.

It is important to evaluate projects after they are completed. Project monitoring is important to determine whether the goals and objectives of each project, and ultimately the program, are being met. Project evaluation helps to answer the critical questions of whether implemented BMPs are functioning as intended, and if so, if water quality standards are being achieved.

Besides tracking watershed restoration and demonstrating program accountability, this information helps the program make better management decisions by understanding which BMPs were most effective for the cost, which were not effective, and what situations led to successful restoration.

One way DEQ is measuring success after the implementation of water body plans and restoration projects is through the EPA National Measure WQ-10 (known as the 319 Program Measure). The WQ-10 measure looks at the number of water bodies identified by states (in 1998 or subsequent years) as being primarily NPS-impaired that are partially or fully restored. For a water to be counted as "partially or fully restored," it must be featured on EPA's "Section 319 Nonpoint Source Success Stories" website (<http://water.epa.gov/polwaste/nps/success319/>). By "fully restored," EPA means that all beneficial uses are now being met. By "partially restored," EPA means either of the following two conditions are being met: (1) a water body that has a use that is initially impaired by more than one pollutant, but after restoration efforts meets the water quality criteria for one or more (but not all) of those pollutants or (2) a water body that initially had more than one use that was less than fully supported, but after restoration efforts one or more (but not all) of those uses are now fully supported. The measure is meant to include not only water bodies restored by §319-funded projects, but also *any* primarily NPS-impaired water bodies that a state or tribe fully or partially restores, regardless of funding source.

EPA has recently highlighted success stories from four north Idaho streams and one stream in southern Idaho. Yellowdog Creek, Steamboat Creek, and Tepee Creek (two segments)—all in northern Idaho—have been removed from Category 4a for sediment impairment and reported as NPS program success stories by EPA. Restoration activities have successfully reduced sediment loading and restored the cold water aquatic life beneficial use. The water bodies total nearly 73 miles and are located within the Idaho Panhandle National Forests. These success stories represent decades of restoration work led by the USFS to reduce NPS pollution and attain sediment TMDL goals. In southern Idaho, the 4th-order segment of Raft River has been removed from Category 4a for bacteria impairment as a result of agricultural and grazing-related BMPs throughout the subbasin. These efforts have successfully reduced bacteria loading and restored the secondary contact recreation beneficial use. The success story reports can be found at <http://water.epa.gov/polwaste/nps/success319/>.

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Appendix A. Nonpoint Source Goals

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Table A1. General program goals.

| Goal No. | Description | Milestones | Lead Agency | Key Entities |
|-----------------|---|--|--------------------------|---|
| G-1 | Build and maintain partnerships. Partnerships are needed to utilize a collaborative approach to addressing issues associated with NPS water pollution. | <ul style="list-style-type: none"> • Continue to maintain and expand use of partnerships. • Continue to dedicate funding and staffing. • Continue to increase coordination between public, private, and government entities. • Continue to encourage partners to prioritize watersheds and resource concerns. | DEQ | DEQ, IDFG, IDL, IDWR, ISDA, ITD, BLM, BOR, USACE, EPA, NRCS, ISWCC, SWCDs, USFS |
| G-2 | Provide technical assistance, outreach, and education. Providing these services and tools will help facilitate NPS assessment, planning, and implementation | <ul style="list-style-type: none"> • Continue to educate the public on the proper implementation of project BMPs and how they help to achieve specific goals. • Continue to make available the §319 spreadsheet to access a project's technical and financial information. • Continue to maintain the §303(d) list. | DEQ | DEQ, IDL, IDWR, ISDA, ITD, BLM, BOR, USACE, EPA, NRCS, ISWCC, SWCDs, USFS |
| G-3 | Support ground and surface water monitoring efforts. | <ul style="list-style-type: none"> • Continue to monitor ground and surface water. Monitoring is performed on schedules developed by the respective agency providing the service. • Continue to implement post-project monitoring protocols needed to evaluate the long-term effect of BMP implementation on water quality in the watershed. • Continue to develop monitoring strategies and plans for use at various scales within a watershed (e.g., field level, tributary, lake). • Conduct MS4 permit-related surface water quality monitoring. | DEQ DEQ DEQ ITD | DEQ, IDWR, ISDA, USGS, ISWCC, SWCDs, IASCD, ITD |

| Goal No. | Description | Milestones | Lead Agency | Key Entities |
|----------|--|---|-------------|--|
| G-4 | Integrate ground and surface water quality activities within basins and watersheds to improve program efficiencies and provide for better protection and restoration (where needed) of ground and surface water beneficial uses. | <ul style="list-style-type: none"> Continue to utilize the 1996 <i>Idaho Ground Water Quality Plan</i> and Idaho's Integrated Report for planning purposes. Continue to utilize TMDL implementation plans to identify resource concerns for both surface and ground water. Concerns are addressed through a comprehensive planning process including the <i>Ag Pollution Abatement Plan</i>, the <i>Field Guide for Evaluating BMP Effectiveness</i>, and the <i>Conservation Reserve Enhancement Program</i> (CREP). | ISWCC | DEQ, ISWCC, SWCDs, IASCD, ISDA |
| G-5 | Implement pollutant trading. | On-going implementation of the pollutant trading policy and requirements as addressed in the <i>Water Quality Pollutant Trading Guidance</i> . | DEQ | DEQ, EPA |
| G-6 | Implement measures to protect drinking water from the effects of NPS pollution. | Continue to coordinate source water protection activities as addressed in <i>source water protection plans</i> and county ground water quality improvement plans. Continue to protect surface water for drinking water beneficial use where applicable. | DEQ | DEQ, ISWCC, SWCDs, IASCD, ISDA |
| G-7 | Encourage the use of bioremediation techniques and biofiltration systems in project plans that involve a need for erosion control and stream channel stabilization. | Ongoing, as needed. | DEQ | DEQ, IDFG, IDWR, ISDA, IDL, ITD, ISWCC, SWCDs, BLM, BOR, USACE, NRCS, USFS |
| G-8 | Implement the Ground Water Quality Rule. | <p>Ongoing, as needed:</p> <ul style="list-style-type: none"> Ensure appropriate monitoring is conducted Implement ground water protection activities | DEQ | DEQ, IDL, IDWR, USFS, BLM, |

Table A2. Agricultural practices.

| Goal No. | Description | Milestones | Lead Agency | Key Entities |
|----------|---|---|--------------------------|--|
| AG-L1 | Update, maintain, and implement the terms of the Agriculture Pollution Abatement Plan (AG Plan). | Update, as needed. | ISWCC | ISWCC, DEQ, IASCD, NRCS, EPA, ISDA |
| AG-L2 | Update and maintain the Idaho OnePlan . | Update, as needed. | ISWCC | NRCS, ISWCC, SWCDs, DEQ, IDWR, IDL, IDFG, EPA, University of Idaho |
| AG-L3 | Update the Field Guide for Evaluating BMP Effectiveness . | Ongoing, as needed. | ISWCC | ISWCC, ISDA |
| AG-L4 | Maintain and improve fish habitat within impacted streams on agricultural lands. | Ongoing, as needed. | IDFG | IASCD, ISDA, ISWCC, SWCDs, NRCS |
| AG-L5 | Complete TMDL implementation plans (watershed management plans) and conservation accomplishment components of 5-year reviews. | Ongoing, as needed. Adhere to the TMDL process , including the TMDL settlement agreement and schedule for TMDL development and 5-year reviews, to guide efforts throughout the year. | ISWCC DEQ | ISDA, ISWCC, SWCDs, DEQ, NRCS |
| AG-L6 | Encourage farm planning and BMP implementation. | Generate project status reviews and progress report as needed. | ISWCC | ISWCC, NRCS |
| AG-L7 | Encourage and implement, when possible, the use of grazing control methods such as fencing, developing riparian buffer zones, implementing grazing systems, providing alternative water sources and supplemental feed, and providing alternative shade sources to limit livestock impacts to streams. | Ongoing, as needed. | Land-ownership dependent | IDL, ISWCC, BLM, USFS, ISDA, SWCDs, DEQ |
| AG-L8 | Restore riparian functions affected by past hydrological modification through BMPs. | Ongoing, as needed. | Land-ownership dependent | BLM, IDL, USFS, IDFG, DEQ |
| AG-L9 | Develop and implement other initiatives to address channel modification, irrigation practices, and flow issues. | Ongoing, as needed. | Land-ownership dependent | BOR, IDWR, USACE, irrigation districts |

Table A3. Natural resource extraction goals.

| Goal No. | Description | Status and Milestones | Lead Agency | Key Entities |
|----------|---|---|--------------------------|---------------------------|
| NRE-L1 | Evaluate and report on the success of the mining NPS program; identify deficiencies and propose remedies. | <p>Ongoing, as needed. The DEQ 2013 Preliminary Assessment Site Inspection Program Work Plan includes the following tasks for DEQ:</p> <ul style="list-style-type: none"> • Obtain site access agreements with private property owners and land management agencies to assess potential waste sites. DEQ and EPA will coordinate prioritization of sites or watersheds to be assessed. • Continue to maintain the Preliminary Assessment Web Page. • Continue to develop and implement a public outreach strategy. • Complete assessments through desktop research and field site inspections with generation of final reports. • Provide both new and routine training for DEQ staff. | DEQ | DEQ, IDL, BLM, USFS |
| NRE-L2 | Maintain the Best Management Practices for Mining Manual . | Ongoing, as needed. | IDL | IDL, DEQ, IDWR, USFS, BLM |
| NRE-L3 | <p>Operate a program that provides incentives for mine operators to control NPS pollution and restore beneficial uses at historic mine sites.</p> <p>Identification of NPS pollution from historic mine sites is accomplished through the DEQ Preliminary Assessment Program.</p> | Ongoing, as needed. | Land-ownership dependent | IDL, DEQ, IDWR, USFS, BLM |

| Goal No. | Description | Status and Milestones | Lead Agency | Key Entities |
|----------|--|-----------------------|--------------------------|---|
| NRE-L4 | Restore riparian functions affected by past hydrological modification through BMPs. | Ongoing, as needed. | Land-ownership dependent | DEQ, IDFG, USFS, BLM, IDL, BOR, USACE, National Marine Fisheries Service, USFWS, IDWR |
| NRE-L5 | Participate in the permitting and licensing process for diversions and dams. | Ongoing, as needed. | Land-ownership dependent | IDL, BLM, USFS, BOR, USACE, DEQ, IDWR, NMFS, USFWS, Federal Energy Regulatory Commission, EPA, IDFG, irrigation districts |
| NRE-L6 | Develop and implement other initiatives to address channel modification and flow issues. | Ongoing, as needed. | IDWR | IDL, BLM, USFS, BOR, USACE, IDWR |

Table A4. Timber/silviculture management goals.

| Goal No. | Description | Status and Milestones | Lead Agency | Key Entities |
|----------|--|---|--------------------------|---------------------|
| TSM-L1 | Restore and maintain beneficial uses impacted by erosion and runoff caused by silvicultural practices, including the construction and maintenance of forest roads. | <ul style="list-style-type: none"> • Conduct inspections of forest practices on a frequency determined by the respective lead agency. If any unsatisfactory conditions are observed, they are documented and an issuance is given to the operator with a deadline to perform any needed remediation. • All inspection data are summarized and published by each respective agency as they become available. | Land-ownership dependent | IDL, USFS, BLM |
| TSM-L2 | Review, develop, refine, and implement BMPs in support of Forest Practices Act administrative rules. | <ul style="list-style-type: none"> • Conduct water quality audits of recently completed harvesting operations on federal, state, and private forestland every 4 years. • Ongoing, as needed, review, develop, and refine BMPs. | DEQ | IDL, USFS, DEQ, BLM |
| TSM-L3 | Manage watershed activities in mixed ownership drainages. | <p>Ongoing, as needed.</p> <ul style="list-style-type: none"> • Endowment land foresters work with neighboring forestland owners and coop-road co-owners to schedule and implement watershed improvement activities on state forestlands. • IDL offers annual educational, BMP update sessions, both in the classroom and in the field. IDL works with the University of Idaho Extension and Associated Logging Contractors to offer targeted BMP educational sessions at Idaho's annual logger-education (Logger Education to Advance Professionalism) sessions and at the annual Non-Industrial Private Forest landowner field day. | IDL | IDL |

Table A5. Urban/suburban development goals.

| Goal No. | Description | Status and Milestones | Lead Agency | Key Entities |
|-------------------------|--|------------------------------|--------------------|-----------------------|
| SHORT-TERM GOALS | | | | |
| U-SS1 | Abate occurrences of failed or illegal subsurface sewage disposal systems resulting in sewage on the ground surface. | Ongoing, as needed. | Health districts | Health districts, DEQ |
| U-SS2 | Maintain up-to-date lists of licensed septic tank installers and pumpers. | Ongoing, as needed. | Health districts | Health districts |
| U-SS3 | Provide training to individual and subsurface sewage treatment system installers. | Annually. | Health districts | Health districts |
| U-SS4 | Maintain and update the public health districts' <i>Subsurface Sewage Disposal System Standard Operating Procedures Manual</i> . | Ongoing, as needed. | Health districts | Health districts |
| U-SS5 | Ensure proper operation of advanced aeration systems throughout the state to safeguard the ground water and environmentally sensitive areas where these on-site systems are installed. | Ongoing, as needed. | DEQ | Health districts, DEQ |
| LONG-TERM GOALS | | | | |
| U-SL1 | Publish and maintain guidance documents for subsurface sewage disposal (i.e., the <i>Technical Guidance Manual for Individual and Subsurface Sewage Disposal Systems</i> [TGM]) | Ongoing, as needed. | DEQ | DEQ, health districts |

| Goal No. | Description | Status and Milestones | Lead Agency | Key Entities |
|----------|---|--|---|--|
| U-SL2 | Monitor ground water quality. | <p>Ongoing, as needed:</p> <ul style="list-style-type: none"> • Statewide ground water monitoring is coordinated by IDWR. There are 1,500 total sites: 300 are monitored annually, and the remaining sites are sampled once every 5 years. • ISDA implements regional and local ground water monitoring for pesticides and other potential pollutants. • DEQ implements statewide monitoring, as needed, to address a variety of potential contaminants such as nutrients, arsenic, and volatile organic compounds. • Update the nitrate priority area plan on a 5-year cycle. | <p>IDWR</p> <p>ISDA</p> <p>DEQ</p> <p>DEQ</p> | <p>DEQ, IDWR, ISDA, health districts</p> |
| U-SL3 | <p>Provide technical assistance to public water systems or local units of government to develop wellhead and source water protection plans. New public water systems are required to complete a source water protection plan in order to demonstrate adequate technical, managerial, and financial capacity. Other systems and communities can voluntarily implement source water protection.</p> | <p>Ongoing, upon request.</p> | <p>DEQ</p> | <p>DEQ, Health District, Idaho Rural Water Association</p> |

| Goal No. | Description | Status and Milestones | Lead Agency | Key Entities |
|----------|--|--|--------------------------------------|---|
| U-SL4 | Manage the Stormwater Program. | Ongoing, as needed. <ul style="list-style-type: none"> • Periodically conduct erosion and sediment control workshops. • DEQ provides technical assistance and support for controlling stormwater through its <i>Catalog of Stormwater Best Management Practices for Cities and Counties</i>. • ITD maintains the storm drain system that lies within the state highway right-of-way and incorporates erosion and sediment controls into its construction projects to keep pollutants out of stormwater. It also maintains best management practices manuals. • IDWR administers the Stream Channel Protection Program. Stream channel alteration permits are required in situations where construction activities may impact a stream below the mean high water mark, including construction of a stormwater outfall along a river, stream, or lake. | EPA DEQ ITD ITD | EPA, DEQ, ITD, IDWR, health districts, cities, counties |
| U-SL5 | Incorporate stormwater BMPs into comprehensive plans and local ordinances. | Ongoing. Stormwater plans and ordinances are routinely updated as BMPs are updated. | EPA | EPA, cities, counties |
| U-SL6 | Maintain and improve programs that address solid waste disposal, land applied biosolids, and hazardous household wastes. | Ongoing, as needed. | DEQ | DEQ |

Table A6. Transportation goals.

| Goal No. | Description | Status and Milestones | Lead Agency | Key Entities |
|-------------------------|--|------------------------------|--------------------------|--|
| SHORT-TERM GOALS | | | | |
| T-S1 | Minimize NPS pollution that may result from the design, construction, and maintenance of roads within the agency's jurisdiction. Construction and maintenance is guided by respective agency BMPs. | Ongoing, as needed | Land-ownership dependent | ITD, USFS, BLM, IDL, cities, counties, highway districts |
| T-S2 | Implement effective BMPs at facilities and storage areas where vehicle and equipment maintenance occurs and materials are stored. BMPs can be found in respective agency maintenance manuals. | Ongoing, as needed. | Land-ownership dependent | ITD, USFS, BLM, IDL, cities, counties, highway districts |
| LONG-TERM GOALS | | | | |
| T-L1 | Increase collaborative efforts to manage NPS pollution from transportation sources. | Ongoing, as needed. | Land-ownership dependent | ITD, USFS, BLM, IDL, cities, counties, highway districts |
| T-L2 | Increase NPS pollution awareness efforts for road maintenance personnel. | Ongoing, as needed. | Land-ownership dependent | ITD, USFS, BLM, IDL, cities, counties, highway districts |

**Appendix B. 2013 Memorandum of Understanding between
the Idaho Department of Water Resources and
the USDA, Forest Service Intermountain and
Northern Regions**

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FS Agreement No. 13-MU-11046000-014
Cooperator Agreement No. _____

MEMORANDUM OF UNDERSTANDING
Between The
IDAHO DEPARTMENT OF WATER RESOURCES
And The
USDA, FOREST SERVICE
INTERMOUNTAIN AND NORTHERN REGIONS

This MEMORANDUM OF UNDERSTANDING (MOU) is hereby made and entered into by and between the Idaho Department of Water Resources, hereinafter referred to as "IDWR," and the USDA, Forest Service, Intermountain and Northern Regions, hereinafter referred to as the "U.S. Forest Service."

Title: Memorandum of Understanding Implementing the Idaho Stream Channel Protection Act

I. PURPOSE: The purpose of this MOU is to document the cooperation between the parties to implement the Idaho Stream Channel Protection Act (SCPA) within Idaho on lands administered by the U.S. Forest Service in accordance with the following provisions.

II. STATEMENT OF MUTUAL BENEFIT AND INTERESTS:

The State of Idaho Legislature has declared public health, safety, and welfare require that the stream channels of the state and their environments be protected against alteration for the protection of fish and wildlife habitat, aquatic life, recreation, aesthetic beauty, and water quality; and has assigned the responsibility for administering the SCPA to the Director, IDWR (Sections 42-3801 to 42-3812, Idaho Code).

The U.S. Forest Service is authorized and directed by acts of Congress, namely the Organic Administration Act of 1897, as amended (16 U.S.C. 551); Multiple-Use Sustained-Yield Act of 1960 (16 U.S.C. 528-53 I); National Forest Management Act of 1976, as amended (16 U.S.C. 1600); Executive Orders including Number 11514, approved 1970 (amended by Executive Order Number 11991, 1977); and regulations issued by the Secretary of Agriculture to administer and protect the lands and resources of the National Forest System (NFS), and to cooperate with other agencies. The U.S. Forest Service has among its objectives, the protection of stream channels for maintenance of fish and wildlife habitat, aquatic life, recreation, aesthetic beauty, and water quality.

This agreement is intended to provide a foundation for the IDWR and U.S. Forest Service to work together in partnership on issues that pertain to stream channel alteration in conjunction with U.S. Forest Service sponsored or authorized projects, recreational dredging and placer mining that impact surface waters within National



Forest System lands ("NFS lands"). This partnership will result in consensus management of mutually beneficial programs and activities consistent with each organization's mission and objectives. Note: The Hells Canyon National Recreation Area and Hells Canyon Wilderness are administered by the All Forest Service administered units within the State of Idaho and are incorporated into this MOU. Activities within these State of Idaho lands administered by the Pacific Northwest Region and related to this MOU will be coordinated by the Wallowa - Whitman National Forest.

In consideration of the above premises, the parties agree as follows:

III. IDWR SHALL:

- A. Provide the U.S. Forest Service a copy of all joint permit applications for activities which alter a stream channel that are located on NFS land. This notification will be provided as joint applications are received.
- B. Notify individual National Forest Supervisors of activities on non-NFS lands, that may affect NFS lands, streams, or programs which develop subsequent to the annual spring meeting.
- C. Consider all U.S. Forest Service and U.S. Forest Service permitted activities that are reviewed at the annual spring meeting or presented by follow up notification, that meet the requirements of IDAPA 37.03.07, Rule 35, as complying with the IDWR's procedural requirements for such activities.
- D. Annually consult with the individual National Forest Supervisors, where NFS lands, streams, or programs are involved to determine permit applicant requirements for recreational dredging, as well as, streams, or segments of streams, that will be open or closed to recreational suction dredging.

IV. THE U.S. FOREST SERVICE SHALL:

- A. To the extent practical as determined by U.S. Forest Service line officers, the U.S. Forest Service shall meet, or cause it permit holders, lessees, and or contractors to meet, the more stringent of the procedural requirements of the IDWR's Stream Channel Alteration Rules and Regulations and Minimum Standards (Rules), adopted by the Idaho Water Resource Board or U.S. Forest Service administrative guidance identified in Section "II" of this MOU to protect stream channels.
- B. Organize and hold annual spring meetings to identify areas where U.S. Forest Service activities planned for the coming year may have an effect on stream channels. The meeting must include, at a minimum, representative(s) from the National Forest where the project is planned, and IDWR. The Idaho Department



of Environmental Quality, Idaho Department of Lands, Idaho Department of Fish and Game, and U.S. Army Corps of Engineers will be invited to attend these meetings.

- C. During this meeting provide IDWR sufficiently detailed summary project description, including maps that identify the project, permitted use and occupancy locations that may affect stream channels, and description of the stream channel protection measures as required by the SCPA. Project descriptions and associated maps and other documents shall be provided electronic or hard copy to IDWR in advance of the annual meeting. Such activities that require this information may include, but are not limited to, proposed timber sales, mining operations, road and bridge construction, maintenance projects, stream channel restoration, fishery habitat improvement projects, and/or activities authorized by special use permits, leases, or contracts.
- D. Notify IDWR of all activities that may alter a stream channel which develop subsequent to the annual spring meeting. The intent is that this notice will be prior to the performance of work but recognized that infrequently (i.e., an emergency), notice will normally follow initiation of work within one business day.
- E. Review and comment on the IDWR's annual recreational suction dredge program and permit application process with respect to impact on NFS lands
- F. Consider an activity jointly authorized in the IDWR's annual recreational suction dredge permit if said proposal meets each of the following requirements: (i) activity meets requirements of the Environmental Protection Agency's NPDES permit, (ii) project has received 401 Water Quality Certification from the Idaho Department of Environmental Quality as non-commercial temporary use of NFS lands, and (iii) project meets the requirements for an approved Plan of Operation from the Forest Service.

V. IT IS MUTUALLY UNDERSTOOD AND AGREED BY AND BETWEEN THE PARTIES THAT:

- A. Annually, hold IDWR/U.S. Forest Service meetings in the spring with the respective National Forest Supervisor offices. The Idaho Departments of Environmental Quality; Lands (Area Office with geographical responsibilities where the U.S. Forest Service project is planned), and Fish and Game (Regional Fishery Biologist), and the US Army Corps of Engineers will be invited to attend these meetings. The Forest Supervisors, or their designees, are responsible for coordinating the spring meeting for their Forests with the respective IDWR Regional Offices/National Forest as follows:



| | |
|---|---|
| Idaho Department of Water Resources | U.S. Forest Service |
| <i>Southern Region</i> | <i>Salmon-Challis National Forest</i> |
| Aaron Golart, Stream Protection Program Coordinator | 1206 South Challis Street |
| PO Box 83720 | Salmon, ID 83467 |
| Boise, ID 83720-0098 | 208-756-5100 |
| 208-287-4941 | <i>Sawtooth National Forest</i> |
| Email: Aaron.Golart@idwr.idaho.gov | 2647 Kimberly Road East |
| | Twin Falls, ID 83301 |
| | 208-737-3200 |
| <i>Northern Region</i> | <i>Idaho Panhandle National Forest</i> |
| Greg Taylor, Stream Channel Specialist | 3815 Schreiber Way |
| 7600 N. Mineral Drive Suite 100 | Coeur d'Alene, ID 83815 |
| Coeur d'Alene, ID 83815 | 208-765-7223 |
| 208-762-2800 | <i>Nez Perce National Forest</i> |
| Email: Greg.Taylor@idwr.idaho.gov | 104 Airport Way |
| | Grangeville, ID 83530 |
| | 208-983-1950 |
| | <i>Clearwater National Forest</i> |
| | 12730 1-lwy 12 |
| | Orofino, ID 83544 |
| | 208-476-4541 |
| | <i>Bitterroot National Forest</i> |
| | 1801 North I st Street |
| | Hamilton, MT 59840 |
| | 406-363-7121 |
| | <i>Kootenai National Forest</i> |
| | 506 Hwy 2 West |
| | Libby, MT 59923 |
| | 406-293-6211 |
| <i>Eastern Region</i> | <i>Caribou-Targhee National Forest</i> |
| Kerrie Mathews, Stream Channel Specialist | 1405 1-lollipop Drive |
| 900 North Skyline Drive | Idaho Falls, ID 83401 |
| Idaho Falls, ID 83402 | 208-524-7500 |
| 208-525-7161 | <i>Salmon-Challis National Forest</i> |
| Email: Kerrie.Mathews@idwr.idaho.gov | 1206 South Challis Street |
| | Salmon, ID 83467 |
| | 208-756-5100 |
| <i>Western Region</i> | <i>Boise National Forest</i> |
| Aaron Golart, Stream Protection Program Coordinator | 1249 South Vinnell Way |
| PO Box 83720 | Boise, ID 83709 |
| Boise, ID 83720-0098 | 208-373-4100 |
| 208-287-4941 | <i>Payette National Forest</i> |
| Email: Aaron.Golart@idwr.idaho.gov | 800 W. Lakeside Avenue |
| | McCall, ID 83638 |
| | 208-634-0700 |
| | <i>Nez Perce National Forest (Salmon R. Drainage)</i> |
| | 104 Airport Way |
| | Grangeville, ID 83530 |
| | 208-983-1950 |
| | <i>Wallowa-Whitman National Forest-Hells Canyon National Recreation Area (Idaho only)</i> |
| | 8840 I Highway 82 |
| | Enterprise, OR 97828 |
| | 541-426-4978 |



| | |
|--|---------------------------------|
| | <i>Sawtooth National Forest</i> |
| | 2647 Kimberly Road East |
| | Twin Falls, ID 83301 |
| | 208-737-3200 |

- B. The purpose of the annual meetings is to exchange information on programs, inform each other of pending activities that fall within the SCPA and to discuss matters pertaining to the accomplishment of mutual objectives of stream channel protection.
- C. Hold other meetings at the IDWR/U.S. Forest Service level when necessary. These meetings may be periodically scheduled or otherwise called with reasonable notice to discuss matters of mutual concern.
- D. Hold a combined U.S. Forest Service Regional Office meeting with IDWR whenever mutually agreed to be necessary to discuss broad policy standards and procedures of mutual interest, including modifications and supplements to this memorandum.
- E. PRINCIPAL CONTACTS. Individuals listed below are authorized to act in their respective areas for matters related to this agreement.

Principal Cooperator Contacts:

| Cooperator Program Contact | Cooperator Administrative Contact |
|--|---|
| IDWR Regional Stream Channel Specialist identified in the table in Section V.A. of this document | Aaron Golart Idaho Department of Water Resources 322 East Front Street, P.O. Box 83720 Boise, Idaho 83702 Telephone: (208) 287-4941 FAX: (208) 287-6700 Email: Aaron.Golart@idwr.idaho.gov |

Principal U.S. Forest Service Contacts:

| U.S. Forest Service Program Manager Contact | U.S. Forest Service Administrative Contact |
|--|--|
| Bruce Sims, Regional Hydrologist Northern Region 200 East Broadway, P.O. Box 7669 Missoula, MT 59807 Telephone: (406) 329-3447 FAX: (406) 329-3141 Email: bsims@fs.fed.us | Elaine Hilliard, Regional G&A Specialist Northern Region 200 East Broadway, P.O. Box 7669 Missoula, MT 59807 Telephone: (406) 329-3649 FAX: (406) 329-3536 Email: ehilliard@fs.fed.us |



| | |
|---|--|
| <p>Greg Bevenger, Regional Hydrologist Intermountain Region, 324 25th Street Ogden, UT 84401 Telephone: (801) 625-5755 FAX: (801) 625-5756 Email: gbevenger@fs.fed.us</p> | <p>Mechele MacDonald, Regional G&A Specialist Intermountain Region, 324 25th Street Ogden, UT 84401 Telephone: (801) 625-5796 FAX: (801) 625-5365 Email: mmacdonald@fs.fed.us</p> |
| <p>Brain Staab, Regional Hydrologist Pacific Northwest Region P.O. 333 SW First Avenue Portland, OR 97208 Telephone: (503) 808-2694 FAX: (503) 808-2964 Email: bstaab@fs.fed.us</p> | <p>Dennis Motsinger Pacific Northwest Region P.O. 333 SW First Avenue Portland, OR 97208 Telephone: (503) 808-2372 FAX: (503) 808-2964 Email: dmotsinger@fs.fed.us</p> |

F. NOTICES. Any communications affecting the operations covered by this agreement given by the U.S. Forest Service or IDWR is sufficient only if in writing and delivered in person, mailed, or transmitted electronically by e-mail or fax, as follows:

To the U.S. Forest Service Program Manager, at the address specified in the MOU.

To IDWR, at IDWR's address shown in the MOU or such other address designated within the MOU.

Notices are effective when delivered in accordance with this provision, or on the effective date of the notice, whichever is later.

G. PARTICIPATION IN SIMILAR ACTIVITIES. This MOU in no way restricts the U.S. Forest Service or IDWR from participating in similar activities with other public or private agencies, organizations, and individuals.

H. ENDORSEMENT. Any of IDWR's contributions made under this MOU do not by direct reference or implication convey U.S. Forest Service endorsement of IDWR's products or activities.

I. NONBINDING AGREEMENT. This MOU creates no right, benefit, or trust responsibility, substantive or procedural, enforceable by law or equity. The parties shall manage their respective resources and activities in a separate, coordinated and mutually beneficial manner to meet the purpose(s) of this MOU. Nothing in this MOU authorizes any of the parties to obligate or transfer anything of value.



Specific, prospective projects or activities that involve the transfer of funds, services, property, and/or anything of value to a party requires the execution of separate agreements and are contingent upon numerous factors, including, as applicable, but not limited to: agency availability of appropriated funds and other resources; cooperator availability of funds and other resources; agency and cooperator administrative and legal requirements (including agency authorization by statute); etc. This MOU neither provides, nor meets these criteria. If the parties elect to enter into an obligation agreement that involves the transfer of funds, services, property, and/or anything of value to a party, then the applicable criteria must be met. Additionally, under a prospective agreement, each party operates under its own laws, regulations, and/or policies, and any Forest Service obligation is subject to the availability of appropriated funds and other resources. The negotiation, execution, and administration of these prospective agreements must comply with all applicable law

Nothing in this MOU is intended to alter, limit, or expand the agencies' statutory and regulatory authority.

- J. USE OF U.S. FOREST SERVICE INSIGNIA. In order for IDWR to use the U.S. Forest Service insignia on any published media, such as a Web page, printed publication, or audiovisual production, permission must be granted from the U.S. Forest Service's Office of Communications. A written request must be submitted and approval granted in writing by the Office of Communications (Washington Office) prior to use of the insignia.
- K. MEMBERS OF U.S. CONGRESS. Pursuant to 41 U.S.C. 22, no U.S. member of, or U.S. delegate to, Congress shall be admitted to any share or part of this agreement, or benefits that may arise therefrom, either directly or indirectly.
- L. FREEDOM OF INFORMATION ACT (FOIA). Public access to MOU or agreement records must not be limited, except when such records must be kept confidential and would have been exempted from disclosure pursuant to Freedom of Information regulations (5 U.S.C. 552).
- M. TEXT MESSAGING WHILE DRIVING. In accordance with Executive Order (EO) 13513, "Federal Leadership on Reducing Text Messaging While Driving," any and all text messaging by Federal employees is banned: a) while driving a Government owned vehicle (GOV) or driving a privately owned vehicle (POV) while on official Government business; or b) using any electronic equipment supplied by the Government when driving any vehicle at any time. All cooperators, their employees, volunteers, and contractors are encouraged to adopt and enforce policies that ban text messaging when driving company owned, leased or rented vehicles, POVs or GOVs when driving while on official Government business or when performing any work for or on behalf of the Government.



- N. PUBLIC NOTICES. It is the U.S. Forest Service's policy to inform the public as fully as possible of its programs and activities. IDWR is/are encouraged to give public notice of the receipt of this agreement and, from time to time, to announce progress and accomplishments. Press releases or other public notices should include a statement substantially as follows:

"Regional Hydrologists of the U.S. Forest Service, Department of Agriculture, Intermountain/Northern/Pacific Northwest Regions."

IDWR may call on the U.S. Forest Service's Office of Communication for advice regarding public notices. IDWR is/are requested to provide copies of notices or announcements to the U.S. Forest Service Program Manager and to The U.S. Forest Service's Office of Communications as far in advance of release as possible.

- O. U.S. FOREST SERVICE ACKNOWLEDGED IN PUBLICATIONS, AUDIOVISUALS AND ELECTRONIC MEDIA. IDWR shall acknowledge U.S. Forest Service support in any publications, audiovisuals, and electronic media developed as a result of this MOU.
- P. NONDISCRIMINATION STATEMENT – PRINTED, ELECTRONIC, OR AUDIOVISUAL MATERIAL. IDWR shall include the following statement, in full, in any printed, audiovisual material, or electronic media for public distribution developed or printed with any Federal funding.

In accordance with Federal law and U.S. Department of Agriculture policy, this institution is prohibited from discriminating on the basis of race, color, national origin, sex, age, or disability. (Not all prohibited bases apply to all programs.)

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 1400 Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

If the material is too small to permit the full statement to be included, the material must, at minimum, include the following statement, in print size no smaller than the text:

"This institution is an equal opportunity provider."

- Q. TERMINATION. Any of the parties, in writing, may terminate this MOU in whole, or in part, at any time before the date of expiration.



- R. DEBARMENT AND SUSPENSION. IDWR shall immediately inform the U.S. Forest Service if they or any of their principals are presently excluded, debarred, or suspended from entering into covered transactions with the federal government according to the terms of 2 CFR Part 180. Additionally, should IDWR or any of their principals receive a transmittal letter or other official Federal notice of debarment or suspension, and then they shall notify the U.S. Forest Service without undue delay. This applies whether the exclusion, debarment, or suspension is voluntary or involuntary.

- S. MODIFICATIONS. Modifications within the scope of this MOU must be made by mutual consent of the parties, by the issuance of a written modification signed and dated by all properly authorized, signatory officials, prior to any changes being performed. Requests for modification should be made, in writing, at least 30 days prior to implementation of the requested change.

- T. COMMENCEMENT/EXPIRATION DATE. This MOU is executed as of the date of the last signature and is effective through 4/1/2018 at which time it will expire.

- U. AUTHORIZED REPRESENTATIVES. By signature below, each party certifies that the individuals listed in this document as representatives of the individual parties are authorized to act in their respective areas for matters related to this MOU. In witness whereof, the parties hereto have executed this MOU as of the last date written below.

Gary Spackman

4/11/2013

GARY SPACKMAN, Director
Idaho Department of Water Resources

Date

George C. Gresson

4/22/2013

NORA B. RASURE, Regional Forester (FOR)
U.S. Forest Service, Intermountain Region

Date

Sara L. Cottrell

5/7/13

for FAYE KRUEGER, Regional Forester
U.S. Forest Service, Northern Region

Date

eh



The authority and format of this agreement have been reviewed and approved for signature.

Mechele M. Macdonald

MECHELE MACDONALD

U.S. Forest Service Grants Management Specialist

3/23/2013

Date

Burden Statement

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0596-0217. The time required to complete this information collection is estimated to average 3 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, 1400 Independence Avenue, SW, Washington, DC 20250-9410 or call toll free (866) 632-9992 (voice). TDD users can contact USDA through local relay or the Federal relay at (800) 877-8339 (TDD) or (866) 377-8642 (relay voice). USDA is an equal opportunity provider and employer.

Appendix C. Unfunded NPS Programs

The following are programs that are currently unfunded:

- The Agricultural Water Quality Cost-Share Program for Idaho is a program that is jointly administered by the Idaho State Soil and Water Conservation Commission and the Idaho State Department of Agriculture (IDAPA 60.05.03).
 - The Idaho Department of Environmental Quality on-going water quality monitoring of 319 subgrant projects.
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Appendix D. Active §319 Subgrants

Funded NPS subgrant projects as of August 12, 2014.

| Subgrant | Project Name | Project Sponsor |
|-----------------|--|---|
| S381 | Boulder Creek Restoration | Idaho Department of Fish and Game (IDFG) |
| S389 | Little Salmon River Watershed Improvement | IDFG |
| S394 | SF Clearwater Watershed Vegetation | Palouse-Clearwater Environmental Institute |
| S396 | Potlatch River Watershed Management Plan Phase 2 | Latah Soil and Water Conservation District (SWCD) |
| S399 | Marsh Creek Middle Portneuf Watershed | Portneuf SWCD |
| S400 | Teton Creek Channelization Repair | Friends of the Teton River |
| S401 | Little Weiser River Streambank Stabilization | Adams SWCD |
| S404 | Bear Valley Casner Creek Restoration | Trout Unlimited |
| S406 | American Red River Phase 2 | Framing Our Community, Inc. |
| S425 | Potlatch River Watershed Management Plan Phase 3 | Latah SWCD |
| S427 | St Maries River Road Improvement | Benewah County |
| S428 | Grimes Creek Restoration Cooling Waters | Trout Unlimited |
| S430 | Upper Blackfoot River Improvement Phase 1 | Caribou SWCD |
| S431 | Bear River and Whisky Creek AFOs | Caribou SWCD |
| S432 | Boulder and Willow Creek Restoration | IDFG |
| S433 | Little Salmon River Watershed Improvement | IDFG |
| S443 | Canyon County BMPs | Lower Boise Watershed Council |
| S444 | Mud Creek /Silo Creek | Balanced Rock SWCD |
| S458 | Cold Springs Creek Riparian Restoration | Elmore SWCD |
| S459 | Rock Creek BMPs | Idaho SWCD |
| S460 | Potlatch River Phase IV | Latah SWCD |
| S461 | Upper Bear River Streambank Stabilization | Bear Lake Regional Commission |
| S462 | Clear Creek Road Restoration | Valley County Road Department |
| S463 | Cove Creek Wetlands | Weiser River SWCD |
| S464 | Coeur D'Alene River at Medimont | Kootenai-Shoshone SWCD |
| S465 | Valley County Watershed | Valley SWCD |
| S467 | Pebble Creek Channel Reconstruction | Portneuf SWCD |
| S468 | St. Maries River Road Phase 2 | Benewah County |
| S469 | Twin Falls Coulee | Snake River SWCD |
| S471 | Station Creek Watershed Improvement | Franklin SWCD |
| S472 | Lindsay Creek Water Quality Improvement Phase 1 | Nez Perce SWCD |
| S490 | Fish Creek Restoration | Twin Lakes Improvement Association |
| S491 | Potlatch River Watershed Management Plan Phase 5 | Latah SWCD |

| Subgrant | Project Name | Project Sponsor |
|-----------------|---|--|
| S492 | Upper Lanes Creek Restoration | Trout Unlimited |
| S493 | Middle Snake-Payette Clean Water Phase 2 | Payette SWCD |
| S494 | Owyhee Restoration Incentive Program | Owyhee Watershed Council |
| S495 | PBJ Diversion | Bear Lake SWCD |
| S496 | Wide Hollow Erosion Reduction | Oneida SWCD |
| S498 | Mica Creek Sediment and Nutrient Reduction | Kootenai-Shoshone SWCD |
| S516 | Wolf Lodge Creek Restoration | Kootenai-Shoshone SWCD |
| TBD | 39/39A Lateral Drain Sediment Reduction | Balanced Rock Soil Conservation District (SCD) |
| S520 | Alder Creek Road BMP Implementation | Benewah County Highway District |
| TBD | Bear River Bank Stabilization | Bear Lake Regional Commission |
| S521 | Canyon County BMP Implementation Phase III | Lower Boise Watershed Council |
| TBD | Cocolalla Lake Wetlands Restoration | IDFG |
| S518 | Lewis County Soil Improvement | Lewis SCD |
| TBD | Pebble Creek Irrigation Conversion | Caribou SCD |
| S519 | Snake Creek Bridge Installation | Clearwater SWCD |
| TBD | Upper Weiser River Bank Stabilization | Adams SWCD |
| S522 | Weiser Flats Wetlands Development Phase III | Weiser River SCD |
| TBD | Wimpey and Pratt Creek Riparian/Channel Restoration | The Nature Conservancy |
| TBD | Stauffer Creek Riparian Restoration | Bear Lake SWCD |
| WW1010 | Middle Bear River Watershed Mound Valley | Franklin SWCD |
| WW1103 | Teton Creek Channelization Repair | Friends of the Teton River |
| WW1201 | Trout Creek AFO | Caribou SWCD |
| WW1205 | North Fork Payette River | Alzar School |
| WW1207 | Ovid Creek Stream Protection | Bear Lake SWCD |