



STATE OF IDAHO  
DEPARTMENT OF  
ENVIRONMENTAL QUALITY

1410 North Hilton • Boise, Idaho 83706 • (208) 373-0502

C.L. "Butch" Otter, Governor  
Curt Fransen, Director

September 12, 2014

Mr. William Chamberlain  
Environmental Engineer  
US Environmental Protection Agency Region 10  
1200 6th Avenue  
Seattle, Washington 98101

Subject: Idaho DEQ Fiscal Year 2014 Annual Report on Capacity Development

Dear Mr. Chamberlain:

Enclosed is a report on the Idaho Drinking Water Program's capacity development efforts for state fiscal year 2014 (July 1, 2013–June 30, 2014).

The Idaho Department of Environmental Quality continues to support the capacity development program because enhancing the technical, financial, and managerial capabilities of the state's small drinking water systems (97% of the state's public drinking water systems are classified as "small" or "very small") is essential to a safe public water supply.

Sincerely,

A handwritten signature in black ink, appearing to read "C. Stoehr", is written over a horizontal line.

Curtis Stoehr  
Capacity Development Coordinator, Drinking Water Program

CS:ls

Enclosure



**Annual  
Capacity Development Implementation Report  
to the  
US Environmental Protection Agency**

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State Fiscal Year 2014  
(July 1, 2013–June 30, 2014)



**State of Idaho  
Department of Environmental Quality**

**September 2014**



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## Introduction

The Idaho Department of Environmental Quality's (DEQ's) Drinking Water Program implements the state's capacity development program. The following annual capacity development implementation report describes capacity development efforts during state fiscal year 2014 (July 1, 2013–June 30, 2014). This report contains all of the required United States Environmental Protection Agency (EPA) reporting elements for the annual state capacity development program implementation report.

Capacity development program accomplishments are funded with set-aside monies from the Drinking Water State Revolving Fund.

### Idaho's Small Public Water Systems

DEQ continues to provide ongoing technical, financial, and managerial (TFM) training and assistance to owners and operators of the state's small public water systems. Based on EPA's classification of drinking water systems, 97% of Idaho's 1,958 public water systems (PWSs) are classified as "small" or "very small."<sup>1</sup> DEQ's TFM training program is designed primarily to meet the needs of these small or very small systems. Of the 1,958 systems, 1760 are classified as very small, 148 are small, 27 are medium, 22 are large, and 1 is very large.

## 1 Capacity Development Strategy

In 1989, the DEQ director appointed the Drinking Water Citizens Advisory Committee (DWAC) to determine the status of Idaho's PWSs and to make recommendations for improving system capacity to deliver safe drinking water to Idaho citizens. In July 2000, the DWAC issued a report listing its findings and recommendations, which helped to establish the state's capacity development strategy.<sup>2</sup> As a result of the DWAC findings, DEQ published *A Strategy for Improving the Financial, Technical, and Managerial Capacity of Idaho's Public Drinking Water Systems* in July 2000, which guides the state's capacity development program. The report is available on request.

DEQ is responsible for implementing the state's drinking water capacity development strategy.

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<sup>1</sup> EPA size classifications for public water systems:

- Very small water systems serve 25–500 people.
- Small water systems serve 501–3,300 people.
- Medium water systems serve 3,301–10,000 people.
- Large water systems serve 10,001–100,000 people.
- Very large water systems serve 100,001+ people.

<sup>2</sup> *Report of Findings: On Improving the Technical, Financial, and Managerial Capacity of Idaho's Public Water Systems*, Drinking Water Citizens Advisory Committee to the Idaho Department of Environmental Quality, July 2000.

## 2 Enhanced Sanitary Survey

Comprehensive sanitary surveys continue to be a fundamental public health protective tool for assessing, evaluating, and documenting the TFM capacity of PWSs throughout the state. The surveys assist owners and operators in both short-term and long-term planning activities associated with their systems.

These surveys are also used to coordinate activities between DEQ (the primacy agency) and third-party service providers such as the Idaho Rural Water Association (IRWA), Rural Community Assistance Corporation (RCAC), and Environmental Finance Center (EFC) at Boise State University (which closed June 20, 2014). These collaborative efforts have become increasingly important to leverage limited resources among organizations for the collective benefit of the public.

### Enhanced Sanitary Survey Procedures

In 2007, DEQ modified the “Idaho Rules for Public Drinking Water Systems” (IDAPA 58.01.08) to refine enhanced sanitary survey (ESS) procedures. Portions of several other documents previously adopted by reference were incorporated into the rules. The 2007 rule changes required updating and modifying the ESS form. As a result, each question on the ESS form has a corresponding rule citation. DEQ’s fine-tuning efforts ensure that the usefulness of the ESS is retained and backed by the enforceability of the rule requirements, should they become necessary to protect public health.

Highlights of the ESS form are listed below:

- The form incorporates managerial and financial capacity assessments (along with technical evaluations).
- An associated ESS Excel spreadsheet automatically identifies “significant deficiencies,” “deficiencies,” and “recommendations.”
- Each question in the ESS has an associated ESS report statement (see the Enhanced Sanitary Survey Report Statements section below) for more efficient report generation.
- Each report statement identifies the rule under which DEQ or the health district has authority to regulate the PWS.

### Online ESS Inspection Form

To assist PWS owners and operators in preparing for their next sanitary survey, the “State of Idaho Public Water System Enhanced Sanitary Survey” form used by state inspectors is available on DEQ’s website at [www.deq.idaho.gov/media/520560-sanitary\\_survey\\_form.xls](http://www.deq.idaho.gov/media/520560-sanitary_survey_form.xls).

Having this form available online provides increased transparency to the inspection process and enables system managers to collect data in advance that they might not otherwise have available in their daily operations. It also standardizes the nature of the inspection, thereby ensuring all systems are held to the same standard regardless of system location or inspector, and decreases the time necessary to complete the inspection for both the inspector and the water system representative.

Some inspectors found that system operators conducted self-inspections with these forms. The operators then remedied the deficiencies identified in advance of the inspector's arrival at the system. This finding demonstrates the educational value of the self-inspection process.

### **Enhanced Sanitary Survey Report Statements**

ESS report statements are standardized statements that assist inspectors in identifying significant deficiencies and making recommendations to alleviate problems. The six DEQ regional offices and the seven district health departments use the ESS report statements to standardize reporting statewide.

### **Preliminary Inspection Findings Form**

The Preliminary Inspection Findings Form (PIFF) allows sanitary survey inspectors to leave a list of identified deficiencies with system operators so they can begin to correct these priority problem areas immediately. The PIFF was updated in 2013 to note that free technical assistance is available for the following areas: financial, training, technical assistance, system operation, and source water protection. Due to this outreach effort, the following technical assistance was provided:

- **Rural Community Assistance Corporation**—Based on staffing changes and decreased funding, RCAC did not pursue any PIFF referrals during this fiscal year. They did relay that they appreciated seeing the forms and found the information useful.
- **Idaho Rural Water Association**—DEQ delivered 160 PIFFs to IRWA to assist them in targeting technical assistance to PWSs.

## **3 Operator Training**

Continuing education and training opportunities are offered by different training providers.

**Department of Environmental Quality**—In Idaho, turnover among small system operators is estimated at 10%–15% annually. This frequent turnover contributes to an ongoing loss of institutional knowledge about how systems function. Turnover may also contribute to a lack of continuity in recordkeeping and monitoring.

Anticipating the potential adverse impact of turnover, the Idaho Drinking Water Program is focusing on making additional web-based resources and training materials available to assist with succession planning. The program continues to educate members of the water industry through DEQ's "Public Water System Switchboard," where water operators can obtain information about various DEQ programs, access state and federal regulations and policies, and download instructional aids. The Switchboard can be accessed at [www.deq.idaho.gov/water-quality/drinking-water/pws-switchboard](http://www.deq.idaho.gov/water-quality/drinking-water/pws-switchboard). This location is intended to be a "one-stop shop" for information for owners and operators. Some of the training information provided on the Switchboard is described below:

- **Training Calendar**—The Switchboard has a link to a comprehensive training calendar. The calendar is populated by trainers with class information as soon as it is available. This calendar provides timely information about training for owners and operators of PWSs.

- **Cross-Connection Control**—A link provides answers to frequently asked questions about cross-connection control. It also explains what a cross-connection is and advises water purveyors on measures that must be taken to protect their water systems against contamination and pollution from cross-connections.
- **Lead**—The Switchboard has two buttons that provide the public with information about lead in drinking water and frequently asked questions about the Lead Reduction Act.
- **Sanitary Survey Continuing Education Units (CEUs)**—System operators have identified a need for training on sanitary surveys. DEQ anticipates that increased awareness of the sanitary survey requirements will result in improved operations, thereby ensuring enhanced protection for customers.

CEUs are provided by DEQ to the operators of systems classified as “Very Small” water systems and “Distribution 1” systems for successfully completing the sanitary survey inspection. During the reporting period, DEQ issued 32 CEU certificates. Details of this program are available online at the Switchboard by clicking on “Sanitary Survey CEUs.”

- **Sanitary Survey Form**—The “State of Idaho Public Water System Enhanced Sanitary Survey” form used by DEQ drinking water inspectors is available to system owners and operators for use as a checklist to prepare for their next sanitary survey.
- **Sanitary Survey Fundamentals**—A “Sanitary Survey Fundamentals Prep Course,” developed by the Montana Water Center in cooperation with EPA, is available as a download or on CD-ROM format at the Montana Water Center website. Although the course is aimed at sanitary survey inspectors, operators may also find it useful.
- **“How to Sample” Videos**—The American Water Works Association water sampling procedure videos (via YouTube) demonstrate sampling techniques for various contaminants.
- **O&M Training Videos**—The EPA has developed a new webpage titled, “Water & Wastewater Utility Operation and Maintenance Training for Small, Rural Systems” that contains operation and maintenance (O&M) training modules.

**Idaho Rural Water Association**—IRWA also offers classes for operators. Available classes and schedules may be accessed at [www.idahoruralwater.com](http://www.idahoruralwater.com) and are displayed on the DEQ training calendar at [www.deq.idaho.gov/water/TrainingEventCalendar/DisplayEvents/InitEventCalendar](http://www.deq.idaho.gov/water/TrainingEventCalendar/DisplayEvents/InitEventCalendar).

**Environmental Finance Centers**—The nine national EFCs provide various webinars to help address the financial and managerial training needs of operators in Idaho. Available classes and schedules may be accessed on the EFC website at <http://efc.sog.unc.edu/event/table/allevnts> and are displayed on the DEQ training calendar at [www.deq.idaho.gov/water/TrainingEventCalendar/DisplayEvents/InitEventCalendar](http://www.deq.idaho.gov/water/TrainingEventCalendar/DisplayEvents/InitEventCalendar). As of June 20, 2014, the Boise State University EFC was closed. DEQ will now be working with the University of New Mexico EFC to fill this niche.

**Idaho Bureau of Occupational Licenses (IBOL)**—Additional information on operator training requirements is provided by IBOL at its Idaho Training and Continuing Education Reference Guide website at <http://ibol.idaho.gov/IBOL/BoardAdditional.aspx?Bureau=WWP&BureauLinkID=130>. Approval letters provided to new training vendors include a request to populate their training

events into the training calendar at

[www.deq.idaho.gov/water/TrainingEventCalendar/DisplayEvents/InitEventCalendar](http://www.deq.idaho.gov/water/TrainingEventCalendar/DisplayEvents/InitEventCalendar).

**Rural Community Assistance Corporation**—RCAC provided DEQ with a draft Idaho implementation plan for its EPA training grant contract titled “Training and Technical Assistance for Small Drinking Water Systems to Achieve and Maintain Compliance through Assessing and Addressing Deficiencies.” Nine systems have initially been identified by DEQ staff to receive assistance. Five of those systems will receive assistance to develop a cross-connection control program. As part of this EPA grant, RCAC will also provide classroom training.

**Process Applications, Inc.**—DEQ, through a request for proposal, sought a qualified contractor to provide optimization training for operators of PWSs that have surface water sources and use membrane and/or conventional filtration treatment. Process Applications was selected as the contractor to provide this specialized training in fiscal year 2015. Each training event will be a free 3-day workshop held at three training locations: Coeur d’Alene (July), Lewiston (August), and Boise (October).

**Texas A&M Engineering Extension Service (TEEX)**—As part of the EPA training grant, TEEX will provide 1-day training events (6–8 hours) on various topics that will help small PWSs understand and comply with the provisions of the Safe Drinking Water Act. DEQ suggested training topic and also provided suggestions for training locations. During August 2014, TEEX will provide Idaho training in Coeur d’Alene, Weiser, Twin Falls, and Idaho Falls.

## 4 Operator Licensing

Each year, DEQ submits a report on the state’s operator licensing program to EPA. The most recent report was completed in September 2014.

For PWS owners seeking licensed operators, DEQ maintains a website listing of licensed operators who are “available for hire” (i.e., contract operators). Although this tool does not represent an all-inclusive directory of licensed operators in the state, it provides convenience for both operators and public water system owners in need. The list does not constitute an endorsement.

- **System owners can search for contract operators.** If a system owner wants to hire a contract operator to fulfill the utility’s requirements for licensed operators, he or she can visit [www.deq.idaho.gov/water/OpForHire/Search](http://www.deq.idaho.gov/water/OpForHire/Search). The search can be filtered by type of license (e.g., “Drinking Water - Distribution”).
- **Contract operators can list themselves as available for hire.** Operators with a current license who are interested in serving as contract operators can visit [www.deq.idaho.gov/water/OpForHire](http://www.deq.idaho.gov/water/OpForHire) and list themselves as available. This database tool cross-checks with the IBOL database weekly then records and posts operator names only if they are properly licensed. (IBOL is the licensing agency for water and wastewater professional operators in Idaho.) If the listed operator’s license expires, the database tool automatically drops the individual from the list.

## 5 Technical, Financial, and Managerial Capacity Reviews for New or Substantially Modified Public Water Systems

States participating in the Drinking Water State Revolving Fund loan program are required by the 1996 amendments to the federal Safe Drinking Water Act to ensure that all new community and nontransient, noncommunity water systems demonstrate adequate TFM capacity (i.e., capabilities) before beginning operation. To fulfill the federal Safe Drinking Water Act requirements, the “Idaho Rules for Public Drinking Water Systems” (IDAPA 58.01.08.500) require that owners of new PWSs demonstrate TFM capacity.

DEQ reviews the TFM aspects of new PWS plans and specifications. A portion of this review is funded by the State Revolving Fund 2% Technical Assistance Set-Aside Grant. In state fiscal year 2014, DEQ’s regional offices completed 413 plan and specification reviews of PWSs serving populations of less than 10,000.

DEQ is currently rewriting the guidance document titled *How to Demonstrate Financial, Technical, and Managerial Capacity in New Public Water Systems*, which describes the elements of water system infrastructure, financing, management, and operations that should be considered to demonstrate to DEQ the TFM capability of new or substantially modified community or nontransient noncommunity PWSs. The guidance is intended to assist new or substantially modified PWSs in developing TFM capacity and thereby ensure the consistent delivery of safe drinking water.

## 6 Proactive Distribution of Information Regarding Capacity Development

Information about capacity development is distributed to PWSs by several methods:

**DEQ Regional Office and District Health Department Drinking Water Staff**—One avenue of disseminating information is through drinking water staff in DEQ’s six regional offices and the state’s seven district health departments. (Idaho’s seven district health departments are under contract with DEQ to provide technical assistance to the state’s small PWS owners and operators. See section 7.) Although one-on-one contacts are time consuming, they are an effective method of assisting system operators.

**DEQ Regional Operator Workshops**—DEQ’s six regional offices recognize the value of local, face-to-face training and hold drinking water workshops in their areas on an as-needed basis for system operators and owners. Topics include technical assistance on a variety of subjects such O&M issues, regulatory requirement reviews, and implementation of new or amended rules.

**Public Water System Switchboard**—Using information from DEQ’s SDWIS database, the Switchboard provides PWS owners and operators with links to rules, checklists to assist in the preparation of plans and specifications, public notification templates, sanitary survey forms, drinking water system classification requirements, operator licensing, and more. See [www.deq.idaho.gov/Applications/SDWISReports/pws\\_index](http://www.deq.idaho.gov/Applications/SDWISReports/pws_index).

- **Monitoring Schedules**—DEQ has an application on the Switchboard to help PWS operators and owners easily review their current year monitoring requirements. The report also identifies if the monitoring requirement has been satisfied once the sample has been entered into the Safe Drinking Water Information System (SDWIS).
- **Lab Forms**—DEQ has an application for PWS operators or owners to produce laboratory request forms. This application uses data in the state drinking water database to identify samples that are due during the current year. See [www2.deq.idaho.gov/water/DWLabForms](http://www2.deq.idaho.gov/water/DWLabForms).
- **Sample Results**—Monitoring results are available online through DEQ’s SDWIS database by using the Sample Results tool at <http://dww.deq.idaho.gov/IDPDWW/>.
- **Drinking Water Blog**—In June 2012, DEQ launched its Drinking Water Blog, which replaced the quarterly drinking water newsletter. With this tool, drinking water operators have instant and searchable electronic access to important information affecting PWSs in Idaho. Blog entries include information on new and updated drinking water regulations, upcoming dates, and other topics of interest. The blog also allows the reader to provide feedback on specific articles and make suggestions for future topics. DEQ is currently evaluating the effectiveness of this platform for this particular audience.

**Autodialer**—Since 2010, DEQ has provided automated telephone and e-mail reminders to owners and operators of PWSs to help inform them of upcoming sampling deadlines. This low-cost, high-impact activity has been well received by the operator community and resulted in a 47% reduction in failure-to-monitor violations. In 2013, DEQ expanded the calls to include “Unaddressed Significant Deficiencies.”

## 7 Additional Technical Assistance

Additional help is available to PWS owners and operators through planning grants, contracts with Idaho’s seven health districts, and assistance with specific tasks such as developing consumer confidence reports (CCRs).

### Planning Grants

Planning grants continue to be funded with the capacity development set-aside to assist PWS owners and operators in preparing the reports and documents necessary to apply for low-interest loans from the State Revolving Fund program. These grants provide significant assistance toward having more PWSs that are located, designed, constructed, maintained, and operated to deliver safe and reliable water to their customers.

## **District Health Departments**

DEQ contracts with the state's seven district health departments, listed below, on a biennial basis to provide technical assistance to the 1,056 "very small" water systems.

- Panhandle Health District
- Public Health–Idaho North Central District
- Southwest District Health
- Central District Health Department
- South Central Public Health District
- Southeastern Idaho Public Health
- Eastern Idaho Public Health District

Very small system owners are most challenged by Safe Drinking Water Act requirements because they typically depend on volunteer or part-time operators and have limited financial resources.

## **Consumer Confidence Report Assistance**

In response to numerous requests for CCR assistance, DEQ developed and maintains report templates and instructions for submitting the CCR report and a listing of the most recent calendar year violations and detections for each system on the Switchboard.

This online tool has made the task of preparing the annual report for Idaho's 740 community water systems easier for DEQ, district health department staff, and the system owners. Feedback indicates that the online tool is successful because it provides quick access to pertinent instructional documents along with summary data for each system's violations and detections.

System owners who do not have access to a computer or the Internet can contact DEQ at (208) 373-0227 to receive hard copies of the CCR templates, instructions, and a listing of the system's violations and detections by mail. The decreasing trend of the number of these requests is expected to continue as more operators become comfortable with accessing their information online.

## **8 Triennial Capacity Development Report to the Governor**

Every three years, DEQ submits a report on the state's capacity development program to the governor of Idaho. In May 2012, DEQ filed Idaho's 2011 report, which covers the 2009–2011 federal fiscal years. The 2014 *Triennial Capacity Development Report to the Governor* will be submitted to EPA by September 2014. Once reviewed and approved, the report will be submitted to the governor of Idaho.