STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

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

October 15, 2013

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

Subject: Idaho DEQ Fiscal Year 2013 Annual Report on Capacity Development

Dear Mr. Chamberlain:

Enclosed is a report on Idaho's Drinking Water Program capacity development efforts for the state fiscal year 2013 (July 1, 2012–June 30, 2013).

The Idaho Department of Environmental Quality continues to support the capacity development program and is convinced that 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,

Curtis Stoehr
Capacity Development Coordinator, Drinking Water Program
State of Idaho, Department of Environmental Quality

Annual
Capacity Development Implementation Report
to the
US Environmental Protection Agency

State Fiscal Year 2013
(July 1, 2012–June 30, 2013)

State of Idaho
Department of Environmental Quality

October 2013

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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 2013 (July 1, 2012–June 30, 2013). 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. The operator training and operator licensing programs and the small systems technical assistance program provide additional funding.

Idaho's Small Public Water Systems

DEQ continues to provide ongoing technical, financial, and managerial (TFM) training to the owners and operators of the state's small public water systems. Based on EPA's classification of drinking water systems, 97% of Idaho's 1,941 public water systems (PWSs) are classified as "small" or "very small." [1] DEQ's TFM training program is designed primarily to meet the needs of these small or very small systems. (Of the 1,941 systems, 27 are classified as medium, 22 as large, and 1 as 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 of Findings" listing its findings and recommendations, which helped to establish the state's capacity development strategy.[2] 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 program strategy. The DWAC continues to serve in an advisory role by reviewing and making recommendations on capacity development projects.

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[1] **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.

[2] *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, included the section "A Strategy for Improving the Technical, Financial, and Managerial Capacity of Idaho's Public Water Systems, Idaho Department of Environmental Quality, Boise, Idaho, 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. These collaborative efforts have become increasingly important to leverage limited resources among organizations for the collective benefit of the public.

Enhanced Sanitary Survey Refinement

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 that become necessary to protect public health.

Highlights of the updated ESS form are listed below:

- Managerial and financial capacity assessments (along with technical evaluations) are incorporated into the modified form.
- 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 Statement 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.

In 2013, DEQ updated all of the ESS documents to be in compliance with IDAPA rule changes that were approved by the Idaho legislature on 4/4/13.

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 *http://www.deq.idaho.gov/media/520560-sanitary_survey_form.xls* .

Having this form available online 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 decreasing the time necessary to complete the inspection for both the inspector and the water system representative.

Some inspectors have found that system operators have conducted self inspections with these forms, identified deficiencies with them and remedied the deficiency in advance of the inspector's arrival at the system.

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. The ESS report statements are available on DEQ's Intranet.

Preliminary Inspection Findings Form

The Preliminary Inspection Findings Form (PIFF) is a carbonless duplicate form that allows sanitary survey inspectors to leave a list of identified deficiencies with the system operators so they can begin to correct these priority problem areas immediately. The PIFF has been updated in 2013 to identify 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 (RCAC)** — RCAC did not pursue any PIFF referrals based upon staffing changes and decreased funding. They did relay that they appreciate seeing the forms and find the information useful.
- **Idaho Rural Water Association (IRWA)**— The Idaho Department of Environmental Quality (IDEQ) received a letter from IRWA listing their activities between April and July, 2013 related to the 56 PIFF forms which were provided to them. IRWA staff followed up with four water systems and assisted in remedy of a potential cross connection at one of them. Many water systems either did not return phone calls/e-mails to IRWA or they were not interested in having IRWA staff members provide assistance.

3 Operator Training

DEQ provides information related to water system classification and licensure at *http://www.deq.idaho.gov/pws-classification-licensure*. This site explains the state licensing requirements for all drinking water and wastewater operating personnel and provides links to important training sites.

- **DEQ Public Water System Switchboard**—DEQ provides information to water system owners and operators through the Public Water System Switchboard at *http://www.deq.idaho.gov/water-quality/drinking-water/pws-switchboard.aspx*. This location is intended to be a "one-stop shop" for information owners and operators need. The switchboard also has a link to the comprehensive training calendar located at *http://www.deq.idaho.gov/water/TrainingEventCalendar/DisplayEvents/InitEventCalendar*. The training calendar previously utilized information collected and maintained by SmallWaterSupply.org. To improve the calendar's functionality and configurability this application was redeveloped at DEQ. The application is now populated and maintained

exclusively with DEQ resources. This change allows us to provide timely adaptation of the output formats and functions as program needs develop.

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

- **Environmental Finance Center (EFC)** – The EFC is providing various webinars to help address the financial and managerial training needs of our operators here in Idaho. Available classes and schedules may be accessed on the EFC website at: *http://efc.sog.unc.edu/event/table/allevents* and are displayed on the training calendar at: *http://www.deq.idaho.gov/water/TrainingEventCalendar/DisplayEvents/InitEventCalendar*.
- **Idaho Bureau of Occupational Licenses (IBOL)**—Additional information for operators on training requirements is provided by IBOL at its Idaho Training and Continuing Education Reference Guide website at *http://ibol.idaho.gov/IBOL/Home.aspx*. Approval letters provided to new training vendors include a request to populate their training events into the training calendar at *http://www.deq.idaho.gov/water/TrainingEventCalendar/DisplayEvents/InitEventCalendar*.

Continuing education and training opportunities are offered by different training providers and include the following:

DEQ—Provides CEUs for small system operators during their Enhanced Sanitary Survey process.

- Other organizations-other organizations that provide drinking water (and/or wastewater) training throughout the state include professional operator organizations, the American Water Works Association (both Intermountain and Pacific Northwest Sections), and the Idaho Rural Water Association. A training calendar is available on the DEQ PWS Switchboard at *http://www.deq.idaho.gov/water-quality/drinking-water/pws-switchboard.aspx6*

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

Anticipating the potential adverse impact of the frequent loss of operator personnel and retirements throughout the industry, 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 website, where water operators can obtain information about various DEQ programs, access state and federal regulations and policies, and download instructional aids:

- **FAQs for Operators** —*Frequently Asked Questions Regarding Drinking Water Operator Licensing for System Owners and Operators* are posted on DEQ's website. The FAQs, which are extensive and detailed, answer many questions of concern to operators.

The FAQs may be accessed at *http://www.deq.idaho.gov/water-quality/drinking-water/faqs-for-water-users.aspx* and are linked from the IBOL website.

- **Operator Training and Sanitary Surveys**—System operators have identified a need for training on sanitary surveys. To address these needs, DEQ staff and contractors conduct classes on the ESS. DEQ anticipates that increased awareness of the sanitary survey requirements will result in improved operations, thereby ensuring enhanced protection for customers.

  Continuing education units are provided by DEQ to the operators of systems classified as "very small" water systems and "distribution1" systems for successful completion of the sanitary survey inspection. Details of this program are available online at the Public Water System Switchboard.
- **Online Access to ESS Inspection Form**—Drinking water systems can now review the "State of Idaho Public Water System Enhanced Sanitary Survey" form used by DEQ drinking water inspectors. System owners and operators are encouraged to use this form as a checklist to prepare for their next sanitary survey.
- **Sanitary Survey Fundamentals Prep Course**—A "Sanitary Survey Fundamentals Prep Course," developed by the Montana Water Center in cooperation with EPA, is available at no charge in CD-ROM format or on the Montana Water Center website at *http://watercenter.montana.edu/training/ssf/default.htm*. Although the course is aimed at sanitary survey inspectors, operators may find it useful as well.
- **Water Sampling Videos (online), American Water Works Association**—The water sampling procedure videos demonstrates sampling techniques for various contaminants and can be viewed at *http://www.deq.idaho.gov/water-quality/drinking-water/pws-switchboard.aspx*.

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 October 2013.

For water system 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 systems in need.

- **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, it can go to http://www.deq.idaho.gov/water/OpForHire/Search. The search can be narrowed to include only a certain type of license (such as "Drinking Water-Distribution").
- **Contract Operators Can List Themselves as Available for Hire**. Operators with a current license that are interested in serving as contract operators can go to the online database at http://www.deq.idaho.gov/water/OpForHire/and list themselves as available. This database tool cross-checks with IBOL, 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.) The database tool performs this cross-check weekly using information retrieved from the IBOL database. If the listed operator's license

lapses, the database tool automatically drops the individual from the list, thereby ensuring only those who are appropriately licensed are displayed. The list does not constitute an endorsement.

5 Technical, Financial, and Managerial Capacity Reviews for New 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 SFY 2013, DEQ's regional offices completed 391 plan and specification reviews of public water systems with 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". This guidance describes the elements of water system infrastructure, financing, management, and operations that should be considered to demonstrate to the Department of Environmental Quality (DEQ) the technical, financial, and managerial (TFM) capability of a new and existing community or nontransient noncommunity public water system. It is intended to provide assistance to existing, new, or modified public water systems in the development of technical, financial, and managerial 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 drinking water system owners and operators. See section 7.) Although one-on-one contacts consume a large portion of staff time, it is a highly 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, as a result, 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 as operation and maintenance issues, regulatory requirement reviews, and implementation of new upcoming or amended rules.

- **Sample Results**—Work was initiated in SFY 2007 to expand the availability of monitoring results online through DEQ's Safe Drinking Water Information System (SDWIS) database. This work was completed in spring 2009, following migration of SDWIS to a new web-based platform. The information is available via the online Sample Results tool at *http://dww.deq.idaho.gov/IDPDWW/*
- **Monitoring Schedules** – DEQ has built an application to help Public Drinking Water 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 SDWIS.
- **Public Water System Switchboard**—Using information from DEQ's SDWIS database, the Switchboard provides public drinking water system owner and operators with quick links to rules, monitoring schedules, plans and specifications, public notification templates, sanitary survey forms, drinking water system classification requirements, operator licensing, and more—see *http://www.deq.idaho.gov/Applications/SDWISReports/pws_index.cfm*.
- **Autodialer**— Since 2010, DEQ has provided automated telephone and e-mail reminders to owners and operators of PWSs to help them stay informed regarding 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, we have expanded the Autodialer calls to include "Unaddressed Significant Deficiencies".
- **Drinking Water Blog** – On June 15, 2012, DEQ launched their new Drinking Water Program blog, which replaced the drinking water newsletter. With this tool, drinking water operators have instant and searchable electronic access to important information affecting public water systems in Idaho. Blog entries include information on new and updated drinking water regulations as well as upcoming dates and other topics of interest. The blog also allows the reader to provide feedback on specific articles and also make suggests for future topics they would like to hear about. DEQ is currently evaluating the effectiveness of this information conveyance platform to this particular audience.
- **Lab Forms** – DEQ has built an application to be used by Public Drinking Water operators or owners to assist in producing laboratory request forms.
  This application utilizes data in the State drinking water database to identify samples that are due during the current year – see *http://www.deq.idaho.gov/water/DWLabForms/*

7 Additional Technical Assistance

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 1,744 "very small" water systems.

- Panhandle District Health
- 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.

The most common requests for technical assistance in SFY 2013 continued to be for assistance addressing contamination events, responding to monitoring questions, and preparing the annual consumer confidence reports (CCRs).

Consumer Confidence Report Assistance

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

This online tool has made the task of preparing the annual report for Idaho's 739 community water systems easier for DEQ, district health department staff, and the system owners. Feedback indicates that the online assistance 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 that 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 via the Internet.

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 *Triennial Capacity Development Report to the Governor*, which covers the 2009–2011 federal fiscal years.