STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

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

May 22, 2012

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

Subject: Idaho DEQ Fiscal Year 2011 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 2011 (July 1, 2010–June 30, 2011).

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,

Don J. Lee
Field Services Lead, Drinking Water Program
State of Idaho, Department of Environmental Quality

Annual
Capacity Development Implementation Report to the US Environmental Protection Agency

State Fiscal Year 2011
(July 1, 2010–June 30, 2011)

State of Idaho
Department of Environmental Quality

May 2012

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Contents

Introduction 1
1 Capacity Development Strategy 1
2 Enhanced Sanitary Survey 2
3 Operator Training 3
4 Operator Licensing 4
5 Technical, Financial, and Managerial Capacity Reviews for New Public Water Systems 5
6 Proactive Distribution of Information Regarding Capacity Development 5
7 Additional Technical Assistance 6
8 Triennial Capacity Development Report to the Governor 7

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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 2011(July 1, 2010–June 30, 2011). 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 primarily 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 1,952 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 1,952 systems, 31 are classified as medium, 19 as large, and 1 as very large, serving a population of 186,000.)

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 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.

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_19_6_2_09.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.

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 form is available on DEQ's Intranet.

- **Rural Community Assistance Corporation (RCAC)** — RCAC representatives visited/followed-up with 2 systems as a result of the PIFFs.
- **Idaho Rural Water Association (IRWA)**—IRWA representatives visited/followed-up with 15 systems as a result of the PIFFs. No significant deficiencies at the systems were resolved as a result.

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 and have requested. The switchboard also has a link to the comprehensive training calendar located at *www.smallwatersupply.org*. Additional partnering activities are underway with Small Water Supply to build additional operator-focused applications.
- **Idaho Rural Water Association (IRWA)**—On a smaller scale, the 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 smallwatersupply.org.
- **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 *smallwatersupply.org*.

DEQ closed out the training reimbursement program during this period.

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 May 2012.

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/Applications/WWDWOper/WWDWSearchContractOperatorInf*

o.cfm. 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/Applications/WWDWOper/WWDWOperatorAcceptDisclaimer.cfm* 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 2011, DEQ's regional offices completed 606 plan and specification reviews of water systems with populations of less than 10,000.

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 contacts with 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, they remain a major 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.

- **SDWIS Database**—Work was initiated in SFY 2007 to expand the availability of monitoring information 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://www.deq.idaho.gov/Applications/SDWISReports/pws_index.cfm*.
- **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**—DEQ began providing automated telephone and e-mail reminders to owners and operators of PWSs to help them stay informed regarding upcoming sampling deadlines. This activity was well received by the operator community and resulted in a 47% reduction in certain monitoring violations.

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 1,034 "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 2011 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 742 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.