STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

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

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

SEP 19 2014

The Honorable C. L. "Butch" Otter
Governor of Idaho
P.O. Box 83720
Boise, Idaho 83720-0034

Dear Governor Otter:

The Safe Drinking Water Act amendments of 1996 directed states to develop a capacity development strategy for assisting public water systems in improving their technical, financial, and managerial capacity. Part of the 1996 amendments require the Idaho Department of Environmental Quality (DEQ) to provide a capacity development report to the governor. Enclosed is a report summarizing many of the activities and work accomplished toward improving the technical, financial, and managerial capacities of Idaho public drinking water systems.

Since 1996, DEQ's Drinking Water Program, in partnership with other service providers, has worked closely with public water system owners and operators across the state to maximize training opportunities and increase awareness regarding information critical to successfully operating their water systems. The ultimate goal of the capacity development program is to ensure that the state's current capacity to deliver safe, reliable drinking water is not only maintained but also expanded to meet future needs.

DEQ efforts have produced successful and measurable outcomes throughout Idaho. Implementing the capacity development strategy continues to provide Idahoans with the following benefits:

- Multiple web applications to assist water system operators in building their capacity
- One-on-one training during sanitary surveys
- Training events throughout the state at locations convenient to water system operators
- Numerous opportunities for partnerships between water system operators
- An auto dialer to reminder operators to sample which has improved compliance rates
- Standardized inspections by qualified inspectors with timely feedback to system operators

These examples are only a few of the success stories associated with capacity development efforts throughout the state. DEQ continues to assist drinking water systems with their public health protection activities. Expanding these partnerships helps ensure that public water systems across Idaho provide safe, reliable drinking water.

Sincerely,

Curt Fransen
Director

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

MEMORANDUM

TO: Curt Fransen, Director

FROM: Curtis Stoehr, Capacity Development Coordinator

THROUGH: Jerri Henry, Drinking Water Program Manager

THROUGH: Barry N. Burnell, Water Quality Division Administrator

Barry 9/11/14

DATE: September 10, 2014

SUBJECT: Triennial Capacity Development Report to the Governor Signature

Enclosed is one document that requires your signature.

The Safe Drinking Water Act (SDWA) amendments of 1996 directed states to develop a capacity development strategy for assisting public water systems in improving their technical, financial, and managerial capacity. Part of the 1996 SDWA amendments require that DEQ provide a capacity development report to the governor on a triennial schedule. The previous report for 2009-2011 can be found at *http://www.deq.idaho.gov/water-quality/drinking-water/capacity-development.aspx*. Enclosed is a report summarizing many of the activities and work accomplished toward improving the technical, financial, and managerial capacities of Idaho public drinking water systems for 2012-2014.

Triennial Capacity Development Report to the Governor

State Fiscal Years 2012–2014

State of Idaho
Department of Environmental Quality

September 2014



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Introduction

As the state's primacy agency for implementing and enforcing the Safe Drinking Water Act (SDWA), the Idaho Department of Environmental Quality (DEQ) is required to develop a capacity development strategy that addresses the technical, financial, and managerial (TFM) needs of Idaho's public water systems (PWSs). The primary goal of the capacity development program is to protect public health by improving the TFM capacity of water systems and ensuring that Idaho's public drinking water supply is safe.

Every three years, the United States Environmental Protection Agency (EPA) requires the state to submit a capacity development report to the governor, as required by the SDWA, outlining the progress, goals, and accomplishments of the state's capacity development program. This document fulfills the reporting requirement for the state fiscal year 2012 – 2014.

Capacity Development Program Defined

Idaho's capacity development program helps PWS owners strengthen their ability to consistently supply safe drinking water to their customers. The program achieves this goal by helping PWS owners and operators (with an emphasis on small systems) improve their *technical abilities, financial capabilities,* and *managerial skills* in order to comply with SDWA requirements.

- *Technical abilities* refer to the adequacy, operation, and maintenance of a drinking water system's infrastructure (e.g., water source, water treatment, storage, and distribution network).
- *Financial capabilities* refer to the monetary resources available to a public drinking water system owner to support the cost of operating, maintaining, and improving the system.
- *Managerial skills* refer to the expertise required of owners and operators who oversee the drinking water system operations.

The capacity development program is federally funded through funds set aside from the Drinking Water State Revolving Fund (DWSRF), which was authorized under the 1996 SDWA amendments.

Capacity Development and Small Drinking Water Systems

The capacity development program focuses on owners of small PWSs (i.e., those serving 3,300 or fewer customers), which are more likely to have difficulty complying with federal and state drinking water standards. In Idaho, 97% of the state's 1,958 PWSs serve 3300 or fewer customers.

Small communities face the greatest difficulty in supplying water of adequate quality and quantity because of small customer bases. Consequently, these communities often lack the revenues needed to hire experienced managers and operators and to maintain and upgrade their drinking water supply facilities. Interruptions in water service due to inadequate management and violations of drinking water standards are often problems for small drinking water systems.

Goals of the Capacity Development Program

The capacity development program goals are geared toward both new and existing PWSs:

- Assist in the formation of new viable community water systems[1] and nontransient, noncommunity water systems[2] through guidance and instructional documents and applications.
- Provide existing public water system owners and operators with technical assistance and information to help achieve viability and maintain compliance with federal and state drinking water regulations.
- Provide training and guidance materials to help drinking water system employees become licensed operators.

Each capacity development goal is detailed below, with an emphasis on achievements from the last three federal fiscal years.

Goal: Assist in the formation of new viable community water systems and nontransient, noncommunity water systems through guidance and instructional documents and applications.

Before owners of new PWSs can begin construction and operation, a comprehensive review is made to ensure the water system owner/operator/developer demonstrates that ongoing TFM capabilities are achievable.

Section 500 of the "Idaho Rules for Public Drinking Water Systems" (IDAPA 58.01.08.500) states that "no person shall proceed, or cause to proceed, with construction of a new or substantially modified community or nontransient, noncommunity drinking water system until it has been demonstrated to the Department that the water system will have adequate technical, financial, and managerial capacity." Demonstration of these capacities must be submitted to DEQ prior to, or concurrent with, submittal of system engineering plans and specifications. The materials are then reviewed by DEQ professional engineers.

Owners proposing material modifications of existing systems must also submit engineering plans and specifications for review and approval. At times, even a change in ownership may result in a system not having adequate TFM capacity. In those instances, DEQ works closely with the PWS owner to clearly outline the steps necessary to achieve the necessary standard, along with establishing a reasonable timeline.

DEQ is in the process of updating its TFM guidance document. The goal is to make the information more understandable and easier for public water system operators, owners, and consultants to complete.

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[1] **Community water system:** A public water system that serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents. Examples include municipally owned public drinking water supplies (cities, towns) or privately owned drinking water suppliers such as homeowner associations, apartment complexes, and mobile home parks.

[2] **Nontransient, noncommunity water system:** A drinking water system that regularly serves at least 25 of the same people over 6 months of the year. Examples include schools, day care centers, hospitals, offices, industrial parks, and major shopping centers.

Goal: Provide existing public water system owners with technical assistance and information to help achieve viability and maintain compliance with federal and state drinking water regulations.

DEQ accomplishes this goal through various means, discussed below.

Public Drinking Water System Owners Assistance

DEQ and its partners strive to improve the viability of PWSs by offering direct assistance and providing online tools to help with reporting requirements.

- **DEQ Technical Assistance.** DEQ regional and state office staff provide a variety of direct technical assistance over the telephone, through correspondence, and in person (both one-on-one and in training workshops) to system owners. This assistance includes providing information on submitting updated facility plans for review, complying with microbiological and chemical sampling requirements, conducting sanitary surveys, reviewing operation and maintenance (O&M) plans, reviewing cross-connection control programs, handling water quality complaints, and issuing public notification regarding drinking water emergencies, such as contamination events and boil water advisories.

  DEQ develops and publishes regulatory guidance for PWS owners and operators to help them interpret and implement rules and regulations. All of these guidance documents are available to the systems and the public at *www.deq.idaho.gov/water-quality/drinking-water/pws-tips-guidance/guidance-fact-sheets*. Hard copies are also available from DEQ regional offices and district health departments.

- **District Health Department Technical Assistance.** DEQ contracts with the state's seven district health departments to provide technical assistance to Idaho's small PWS owners. The district health departments provide the same one-on-one assistance that DEQ provides to larger system owners and performs a service that is essential to the success of the Idaho Drinking Water Program.
- **Consumer Confidence Report Assistance.** DEQ and district health departments assist community PWS owners with meeting the requirements for consumer confidence reports (CCRs). CCRs are annual water quality reports to the customers of community water systems. The report summarizes system information regarding water sources used, any detected contaminants, and the status of system compliance and includes general public educational information. The CCR reports are due to DEQ annually on July 1.

  To make CCR reporting easier, DEQ provides online applications to help owners and operators complete their required CCR report. This report is completed by each community system with the sampling/monitoring and violation information from their files or that same information can be easily downloaded from an online DEQ application. All of these components help water system owners and operators communicate effectively with their customers. The entire CCR report can be prepared online and sent electronically (or by mail) to the local DEQ regional office.
- **Auto Dialer**—DEQ provides automated telephone and e-mail reminders to PWS owners and operators to help inform them of upcoming sampling deadlines. This practice has resulted in a 47% decrease in systems failing to monitor for routine sampling requirements.

Drinking Water State Revolving Fund

The SDWA of 1996 allowed states to establish a DWSRF program to assist public drinking water system owners with financing infrastructure upgrades needed to protect public health and achieve and maintain compliance with SDWA requirements. The DWSRF authorizes grants to states to capitalize revolving loan funds. A revolving loan fund is a self-replenishing pool of money using annual federal capitalization grants, investment earnings, and interest and principal payments on old loans to issue new ones.

DEQ uses DWSRF loans to assist eligible PWS owners with infrastructure improvements. Interested system owners apply to DEQ for assistance, and loans are made to system owners with the managerial and technical capabilities (or who will achieve these capabilities through the loan project) and can demonstrate need through a competitive ranking process. Details regarding all components of this program can be found at *http://www.deq.idaho.gov/water-quality/grants-loans/water-system-construction-loans.aspx*.

Sanitary Surveys

DEQ makes periodic inspections, called sanitary surveys, of all PWSs to ensure they are properly built, operated, and maintained. Sanitary surveys provide a positive approach for evaluating and assisting PWS owners since the physical condition of a PWS often reflects its TFM capacities.

DEQ initiated the Enhanced Sanitary Survey (ESS) Project in 2002 to improve the state's sanitary survey procedures. This project has resulted in consistency in how the state's standard sanitary surveys are conducted. The goal of the project was three-fold:

1. Standardize (statewide) the method by which drinking water inspectors apply the state drinking water rules during a sanitary survey.
2. Produce a report consistent in format and language across the state.
3. Use the sanitary survey form as a tool to assist public drinking water system owners in complying with state and federal regulations.

The Drinking Water Program is currently using an ESS inspection platform focused on questions addressing significant deficiencies that must be corrected within the water system. Some of these deficiencies constitute health hazards and due to their pressing public health impact and must be fixed as soon as possible.

Each year, approximately 20% of the 1,958 PWSs in Idaho undergo an ESS. The survey produces a preliminary findings report that not only reflects the language found in the rules, but also outlines what the system owner must do to meet compliance, and ultimately, to protect public health. To help operators of small water systems maintain their licensure requirements, continuing education units (CEUs) are provided for participating in the ESS.

Transparent Access to Information

Data management and data entry procedures, through DEQ's Safe Drinking Water Information System (SDWIS) database, are critical to efficiently track water system owner compliance and support DEQ enforcement efforts. More importantly, the database is a critical tool for ensuring drinking water standards are met and water is safe to drink. DEQ's database is a vital resource for DEQ's six regional offices and the seven district health departments to oversee the state's

small PWSs and for the operators and owners to maintain compliance and reporting requirements.

The Public Water System Switchboard (Switchboard) has applications within it that use information from DEQ's SDWIS database. The Switchboard provides owners and operators with links to rules, monitoring schedules, 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*. The following tools are among the various aids that use SDWIS data and can be found on the Switchboard:

- **CCR Tool**—The CCR tool provides the sampling and violation history of a community water system to owners for their required annual CCR. Owners or operators can go online to gather the necessary information to produce their own CCR. This "come-and-get-it" approach has been more efficient and effective for the community water system owners as well as the DEQ regional offices and district health departments.
- **Monitoring Schedules**—A DEQ application that helps PWS operators and owners easily review their current monitoring requirements. The report also identifies if the monitoring requirement has been satisfied once the sample has been entered into SDWIS.
- **Lab Forms**—DEQ has an application to help operators and owners produce laboratory request forms using data in the state drinking water database to identify samples that are due during the current year. See *www2.deq.idaho.gov/water/DWLabForms*.
- **Sample Results**—Sampling results are available online through an application that utilizes information from DEQ's SDWIS database. The application is available via the online Drinking Water Watch tool at *http://dww.deq.idaho.gov/IDPDWW*.

IDWARN

The Idaho Drinking Water Program initiated IDWARN (Idaho Water/Wastewater Agency Response Network), a mutual aid organization of communities helping communities by allowing owners of water and wastewater utilities to assist each other during emergencies. IDWARN participants can access specialized resources, including staff, to assist water and wastewater systems until the system can return to normal operating conditions.

The program is administered by an IDWARN statewide committee and is available to all public and private water and wastewater system owners in Idaho. Participation is voluntary.

Capacity Development Public Outreach

Drinking Water Blog—In 2012, DEQ launched its Drinking Water Blog, which replaced the quarterly drinking water newsletter (*http://www.deq.idaho.gov/blog*). 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 and 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 of interest.

DEQ's Drinking Water Website—Over the last three years, the Idaho Drinking Water Program has made more information available to PWS owners on its website, which is being visited by an increasing number of citizens. PWS owners now have an array of information available to them, including the following:

- "Idaho Rules for Public Drinking Water Systems"
- Code of Federal Regulations
- Cross-connection control
- Quick reference guides for drinking water rules
- Guidance, fact sheets, and frequently asked questions
- CCR report tool
- Monitoring schedules for individual water systems
- Source water assessment reports
- Sample results for all water systems in the state
- Lab request forms
- "How to Sample" videos
- A list of certified drinking water labs
- Drinking Water Blog
- Plan and specifications information
- Public notification templates
- Sanitary survey forms
- Flood response information
- Monitoring waivers
- Address update tool
- System classifications
- Operator licensing information
- Become an Operator for Hire
- Search for an operator
- Option to pay fees online
- Sanitary survey CEUs
- Sanitary survey training
- Training calendar
- O&M training videos
- Grant opportunities

Goal: Provide training and guidance materials to help drinking water system employees become licensed operators.

Idaho recognizes the need to ensure proper operation of water facilities through properly trained and educated PWS operators. Operator licensing helps protect human health and the environment by establishing minimum professional standards for the operation and maintenance of PWSs. In short, operator licensing ensures that skilled professionals are overseeing the treatment and distribution of the state's public drinking water.

Operators are responsible for the day-to-day management of a drinking water system's operation. Some of the duties and responsibilities of a licensed operator include sampling, calculating and making chemical applications, operating and maintaining system equipment, issuing public notices to users when systems are not in compliance, and recordkeeping.

Statewide Operator Training

As of January 1, 2011, private vendors supply training events throughout the state. Rural Community Assistance Corporation, the Environmental Finance Center, and Texas A&M Engineering Extension Service all receive EPA training grant money and provide free training to Idaho operators. DEQ provides an online calendar of training events that is populated by vendors as soon as information becomes available. Additionally, DEQ provides training credit in the form of CEUs for operators who participate in the ESS process.

Drinking Water Operator Licensing

In Idaho, DEQ and the Idaho Board of Drinking Water and Wastewater Professionals oversee the licensing of drinking water operators. DEQ determines which PWSs must be operated by

licensed drinking water operators and requires that the PWS owners (with the exception of transient ground water systems) place the supervision and operation of their systems under a properly licensed operator.

The board establishes requirements for operator licenses, sets fees, reviews applications, issues and renews licenses, and determines continuing education requirements. The board contracts with the Idaho Bureau of Occupational Licenses for day-to-day operations.

Owners/operators fill out and submit to DEQ a system classification worksheet to find out the type of licensed operator(s) required for their systems. System classification worksheets are available from DEQ's website or from DEQ's regional offices. This information is used by DEQ to make an accurate system classification determination.

Various resources are available to help find licensed operators or obtain a license:

- To assist owners in finding a licensed operator, DEQ maintains online a "List of Licensed Operators" interested in contracting their services.
- DEQ's booklet "Recommendations for Hiring a Contract Operator" is available online for owners of public drinking water systems at *http://www.deq.idaho.gov/media/758473-recommendations_for_hiring_a_contract_operator.pdf*.
- For operators needing licenses, the Idaho Bureau of Occupational Licenses provides online applications and the required qualifications necessary to obtain a license.

Summary

Idaho's capacity development program focuses resources on the areas of highest public health benefits and promotes voluntary compliance with drinking water standards. The program emphasizes prevention of drinking water contamination by ensuring system owners and operators are equipped with the necessary TFM capabilities to succeed. The program also provides technical assistance to PWS owners and promotes water system operator training and licensing.

The capacity development program, along with other state resources, has continued to help PWS owners acquire or maintain the TFM abilities needed to properly design, operate, finance, and manage their systems. DEQ's goal is to continue to improve the ability of Idaho's PWS owners to provide safe and reliable drinking water.

DEQ continues to support the capacity development program because maintaining overall public drinking water system capabilities is essential to operating a safe and reliable public drinking water supply. The capacity development program will continue to evolve as the program evaluates its successes and as small drinking water system owners face future challenges in complying with new and revised regulations.