



STATE OF IDAHO  
DEPARTMENT OF  
ENVIRONMENTAL QUALITY

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

May 29, 2012

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

Dear Governor Otter:

The Safe Drinking Water Act amendments of 1996 directed states to develop a capacity development strategy for assisting owners of existing 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 effective activities and successful 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 the successful operation of their water systems. The ultimate goal of the capacity development program is to ensure that our 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 has provided Idahoans with the following benefits:

- Standardized inspections by qualified inspectors with timely feedback to system owners and operators
- Quarterly drinking water newsletters to thousands of water system owners and operators
- Training events throughout the state at locations convenient to water system operators
- Numerous opportunities for partnerships between water system owners and operators

These examples are only a few of the success stories associated with capacity development efforts throughout the state. We are continuing to assist owners of drinking water systems with their public health protection activities. Expanding these partnerships helps ensure that when taps are turned on in kitchens and schools across Idaho, safe, reliable drinking water is there.

Sincerely,

A handwritten signature in blue ink, appearing to read "C. Fransen", is written over the typed name.

Curt A. Fransen  
Director

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

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Federal Fiscal Years 2009–2011



**State of Idaho  
Department of Environmental Quality**

**May 2012**

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## Introduction

As the state's primary 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. The primary goal of the capacity development program is to protect public health by ensuring that Idaho's public drinking water supply is safe to use.

Every three years, the United States Environmental Protection Agency (EPA) requires that the state submit a capacity development report to the governor, as required by the SDWA, outlining the progress and accomplishments of the state's capacity development program.

## Capacity Development Program Defined

Idaho's capacity development program helps public drinking water system owners strengthen their ability to consistently supply safe drinking water to their customers. The program achieves this goal by helping public drinking water system 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 water 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 public drinking water systems, which are more likely than other systems to have difficulty complying with federal and state drinking water standards. Many of the small systems were created when regulatory standards were less protective and less challenging than the present regulatory system. Nationwide, most compliance problems occur within the smaller systems (i.e., those serving 3,300 or fewer customers). In Idaho this is especially true, where 90% of the state's 1,952 public water systems serve 500 or fewer customers.

Small communities face the greatest difficulty in supplying water of adequate quality and quantity because of small customer bases. Consequently, they 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 organized into strategies for both new and existing public drinking water systems:

- Prevent the formation of new nonviable community water systems<sup>1</sup> and nontransient, noncommunity water systems.<sup>2</sup>
- 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.
- Provide training and guidance materials to help drinking water system employees become licensed operators.

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

### **Goal: Prevent the formation of new nonviable community water systems and nontransient, noncommunity water systems.**

Before owners of new public drinking water systems can begin construction and operation, a comprehensive attempt is made to ensure ongoing TFM capabilities are achievable.

Section 500 of the “Idaho Rules for Public Drinking Water Systems” (IDAPA 58.01.08.500) states that construction of a new community or nontransient, noncommunity drinking water system cannot proceed until it has been demonstrated that the system will have adequate TFM capacity as defined by the drinking water rules. Demonstration of these capacities must be submitted to DEQ prior to, or concurrent with, the submittal of system plans and specifications.

In addition, owner’s proposing material modifications of existing systems must submit plans and specifications for review and approval. At times, even a change in ownership may result in a system not having adequate TFM capacity to continue as a public water supplier.

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<sup>1</sup> **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.

<sup>2</sup> **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.**

***Public Drinking Water System Owners Assistance***

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

- **DEQ Technical Assistance.** DEQ Regional and State Office staff provide a wide 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 information on submitting updated facility plans for review, complying with microbiological and chemical sampling requirements, 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 drinking water system 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 on the DEQ website. 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 public drinking water system 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 public water system 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 reports are due annually on July 1. To make CCR reporting easier, DEQ generated a CCR report template with instructions and made the sampling/monitoring and violation information available for each community system owner to use in completing the report.  

The entire CCR report can be prepared online and sent electronically (or by mail) to the local DEQ regional office. The template and instructions are available in hard copy for those system owners that do not have access to a computer. (See also "CCR Tool" in the Data Management/SDWIS section, page 4.)
- **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.

***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 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 public drinking water system owners with infrastructure improvements. Interested system owners apply to DEQ for assistance, and loans are made to system owners that have the managerial and technical capabilities (or will achieve these capabilities through the loan project) and can demonstrate need through a competitive ranking process. The state also offers state-funded grants for planning projects using general fund resources.

### ***Sanitary Surveys***

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

DEQ initiated the Enhanced Sanitary Survey (ESS) Project in 2002 to improve the state's sanitary survey. 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.
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 a version of the ESS that has 10 modules and contains approximately 200 questions with specific TFM sections and questions built into the form. The ESS focuses on questions that address "Health Hazards" found during the inspections that constitute "significant deficiencies" the system owners must correct.

Each year, approximately 20% of the 1,952 water systems in Idaho undergo an inspection. This project has resulted in consistency in how the state's standard sanitary surveys are conducted. 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 to them for participating in the ESS.

### ***Data Management/SDWIS***

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 to support department enforcement efforts. More importantly, the database is a critical tool for ensuring that drinking water quality standards are met and water is safe to drink. DEQ's database is a vital resource for the staff of DEQ's six regional offices and the seven district health departments to oversee the state's small drinking water systems and for the operators and owners to maintain compliance and reporting requirements. The following tools are among the various aids currently available in SDWIS:

- **SDWIS QA/QC (Quality Assurance/Quality Control) Tool**—The SDWIS QA/QC tool has allowed the Drinking Water Program staff to identify database issues to be corrected. As a result of the SDWIS QA/QC tool, the program’s commitment to cleaning up the database has resulted in quality information, which gives a true reflection of a public drinking water system owner’s compliance with the “Idaho Rules for Public Drinking Water Systems” and the safety of the drinking water. This information is available for all water system owners through the Public Water System Switchboard at <http://www.deq.idaho.gov/water-quality/drinking-water/pws-switchboard.aspx>.
- **CCR Tool**—The CCR tool provides the sampling and violation history of a community water system to owners for their required annual CCR, which is distributed to system customers each July 1. Owners or operators can go online to gather the necessary information to produce their own CCR without assistance from DEQ regional or district health department staff. 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.  
Drinking water system customers and interested members of the public can also access this information
- **ESS Prep Tool**—The ESS prep tool has allowed DEQ regional office and district health department staff to save valuable time by running this presanitary survey report. The report gathers information from SDWIS that is needed for a sanitary survey. The ESS prep tool pulls data from SDWIS and converts it to an easy-to-read format, saving approximately two hours of preparation work needed for each sanitary survey. This efficiency allows more “face time” with the operators throughout the state.

### **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 and is not mandated by local, state, or federal regulations. At the time of this report, IDWARN is just beginning to acquire member systems, but the potential for assisting neighboring utilities in times of need is promising.

### **Capacity Development Public Outreach**

**Idaho Drinking Water Newsletter**—This quarterly newsletter is distributed to the owners and operators of all 1,952 of Idaho’s public drinking water systems, as well as those entities requesting to be on the mailing list, such as consulting engineers, counties, and federal agencies. Each city in Idaho receives one copy for the mayor and city council to review.

The goal of the newsletter is to provide public drinking water system owners with accurate, timely, and essential information in a straightforward manner to promote compliance with the drinking water standards. The four-page newsletter, with occasional inserts, provides “need-to-

know” articles such as advance notice of upcoming regulations, monitoring reminders, current water quality problems (with suggested solutions), and a training schedule for drinking water operator classes.

The newsletter was transitioned to electronic delivery only during this reporting period. Future communication planning includes use of blog updates for timely dissemination of topical items.

**DEQ’s Drinking Water Website**—Over the last three years, the Idaho Drinking Water Program has continued to make more information available to public water system owners on its website. A DEQ tracking system indicates that the site is being visited by an increasing number of citizens. Public water system owners now have an array of information available to them, including the following:

- “Idaho Rules for Public Drinking Water Systems”
- Code of Federal Regulations
- Quick reference guides for drinking water rules
- Monitoring schedules for individual water systems
- Source water assessment reports
- Sample results for all water systems in the state
- Lab form tool
- “How to Sample” video
- A list of certified drinking water labs
- Public notification templates
- ESS forms
- Monitoring waivers
- Address update tool
- Calendar of important dates
- “Operators for Hire” tools
- Training events
- Grant opportunities

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

Idaho recognizes the need to ensure proper operation of water facilities through properly trained and educated water system operators. Operator licensing helps protect human health and the environment by establishing minimum professional standards for the operation and maintenance of public water systems. 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 include sampling and monitoring, calculating and making chemical applications, operating and maintaining system equipment, issuing public notices to users when systems are not in compliance, and record keeping.

***Statewide Operator Training***

Using the State of Idaho’s request-for-proposal process, DEQ contracted with an in-state water/wastewater operator training firm to provide 75 days of operator training each year in various locations throughout the state. These classes were frequently held in small, somewhat remote towns in an attempt to accommodate operators who might not have the time or funds to travel long distances to attend classes. (See also the bullet regarding operator reimbursement below.) This contract closed at the end of 2010. Private vendors are now supplying training events throughout the state since the closeout of this contract. Additionally, DEQ is providing 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 (WWP Board) oversee the licensing of drinking water operators. DEQ determines which public water systems must be operated by licensed drinking water operators and DEQ requires that the public water system owners (with the exception of transient ground water systems) place the supervision and operation of their systems under a properly licensed operator.

The WWP Board establishes requirements for operator licenses, sets fees, reviews applications, issues licenses, issues license renewals, and determines continuing education requirements. (*Note: The WWP Board contracts with the Idaho Bureau of Occupational Licenses for day-to-day operations.*)

Idaho's operator licensing program has been fine-tuned over the last several years and operates as outlined below:

- Owners/operators fill out and submit to DEQ a system classification worksheet to find out the type of licensed operators required for their systems. System classification worksheets are available from DEQ's website or from the agency's six regional offices.
- Using the classification worksheet, DEQ determines the licensing level that the system's "responsible charge operator" and the "substitute responsible charge operator" (backup operator) must have.
- 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.
- 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 new system owners are equipped with the necessary TFM capabilities to succeed. The program also provides technical assistance to public water system owners and promotes water system operator training and licensing.

The capacity development program, along with other state resources, has continued to help public water system 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 public water system owners to provide safe and reliable drinking water.

DEQ continues to support the capacity development program and is convinced that 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 new challenges in complying with new and revised regulations.