

Idaho Department of Environmental Quality



**Idaho Drinking Water Program SFY 2010
Annual
Capacity Development Implementation Report to
the
U.S. Environmental Protection Agency**

**State Fiscal Year 2010
(July 1, 2009 – June 30, 2010)**

November 2010

Idaho Drinking Water SFY 2010 Annual Capacity Development Implementation Report

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Introduction

The Idaho Department of Environmental Quality's Drinking Water Program implements the state's Capacity Development Program. The following **Idaho Annual Capacity Development Program Implementation Report** describes Capacity Development efforts during State Fiscal Year 2010 (July 1, 2009 – June 30, 2010).

This 2010 report contains all of the required 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 for implementing Capacity Development. 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 for the state's small systems. Based on EPA's classification of drinking water systems¹, 97% of Idaho's 1,960 public water systems (PWSs) are classified as "small" or "very small." DEQ's TFM training program is designed primarily to meet the needs of these small or very small systems.

(Of the 1,960 systems, 31 are classified as "medium" and 19 as "large." Idaho has one "very large" system serving a population of 186,000.)

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.

1. Capacity Development Strategy

Background. The Idaho Department of Environmental Quality (DEQ) is responsible for implementing the state's Drinking Water Capacity Development Program strategy.

In 1989, the DEQ Director appointed the Drinking Water Citizens Advisory Committee (DWAC) to determine the current status of Idaho's public water systems and to make recommendations for improving system capacity to deliver safe drinking water to the citizens of Idaho.

In July 2000, the DWAC issued a *Report of Findings*² listing its findings and recommendations, which helped to establish the state's Capacity Development Strategy. 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.

The DWAC continues to serve in an advisory role by reviewing and making recommendations on Capacity Development projects.

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 (ESS)

Idaho's Enhanced Sanitary Survey (ESS). Comprehensive sanitary surveys continue to be a fundamental public health protective tool for assessing, evaluating, and documenting the technical, financial, and managerial (TFM) capacity of public water systems 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 assist in coordinating activities between DEQ (the primary agency) and third-party service providers such as Brown Environmental, Inc., the Idaho Rural Water Association (IRWA), the Rural Community Assistance Corporation (RCAC), and the Environmental Finance Center at Boise State University (EFC). 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 procedures. Portions of several other documents previously adopted by reference were incorporated into the rules.

The 2007 changes to the rules 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" and "Recommendations."
- Each question in the ESS has an associated "Enhanced Sanitary Survey Report Statement" (see the Enhanced Sanitary Survey Report Statement section, on page 6) 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 public water system 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 Web site at http://www.deq.idaho.gov/Applications/SDWISReports/files/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 2010 Enhanced Sanitary Survey Report Statements are available on DEQ's Web site at http://www.deq.idaho.gov/water/data_reports/drinking_water/ess_report_statements_2010.pdf.

PIFF (Preliminary Inspection Findings Form). The 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 Web site at http://www.deq.idaho.gov/water/permits_forms/forms/drinking_water/piff_form.pdf.

- ❑ **Rural Community Assistance Corporation (RCAC).** Using the PIFF form, the RCAC provided technical assistance to one public drinking water system in SFY 2010. The assistance covered preparing a sample site plan, developing an access agreement, hiring a new certified operator, and conducting financial planning.
- ❑ **Idaho Rural Water Association (IRWA).** IRWA representatives visited/followed up with 12 systems as a result of the PIFFs. No significant deficiencies at the systems were resolved as a result.

3. Operator Training

Operator Training. DEQ hosts the Idaho Water and Wastewater System Licensing and Classification Web site at <http://www.idahocertificationtraining.com/index.htm>. This site explains the state licensing requirements for all drinking water and wastewater operating personnel and provides links to important training sites.

- ❑ **Brown Environmental, Inc.** For operators seeking specific licensing classes, DEQ continues to contracts with Brown Environmental, Inc. to provide 76 days of training and related support services throughout Idaho. Operator response to these classes continues to be very positive.

A description of the classes offered, class schedules, and the Continuing Education Units (CEUs) is available on the Brown Environmental Web site at <http://www.idahooperatortraining.com/>.

- ❑ **Idaho Rural Water Association (IRWA).** On a smaller scale, the Idaho Rural Water Association also offers classes for operators. Available classes and schedules may be accessed on IRWA's Web site at <http://www.idahoruralwater.com/>.
- ❑ **Area Wide Optimization Program (AWOP) Training.** Due to limited resources, DEQ was forced to reduce its involvement in the AWOP program in SFY 2010. This disinvestment is not likely to be permanent, however, and will be revisited periodically to ensure maximum benefit of available resources.
- ❑ **Idaho Bureau of Occupational Licenses (IBOL).** Additional information for operators on training requirements is provided by the Idaho Bureau of Occupational Licenses (IBOL) at its Idaho Training and Continuing Education Reference Guide Web site at <http://www.ibol.idaho.gov/IBOL/BoardAdditional.aspx?Bureau=WWP&BureauLinkId=140>.

Training Reimbursement. DEQ continues to manage the Drinking Water Operator Reimbursement Program, which benefits operators of “small and very small systems,” some of which are staffed by volunteers and, therefore, are especially burdened by training costs. The most recent report on this activity was completed in March 2010. Reimbursement forms are available at <http://www.idahocertificationtraining.com/forms.htm#reimbursement>.

FAQs for Operators. *Frequently Asked Questions Regarding Drinking Water Operator Licensing for System Owners and Operators* are posted on DEQ's Web site. 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/prog_issues/drinking_water/dw_operator_faqs.cfm and are linked from the Idaho Bureau of Occupational Licenses (IBOL) Web site.

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 Enhanced Sanitary Survey (ESS). DEQ anticipates that increased awareness of the sanitary survey requirements will result in improved operations, thereby ensuring enhanced protection for customers.

The ultimate plan for these training materials is to incorporate them into an online learning management system allowing universal access to training modules without requiring staff to prepare and deliver the presentations.

Online Access to ESS Inspection Form. As noted, drinking water systems can now review the *State of Idaho Public Water System Enhanced Sanitary Survey* form used by DEQ drinking water inspectors to conduct sanitary surveys online. System owners and operators are encouraged to use this form as a checklist to prepare for their next sanitary survey

Operator Manuals. Brown Environmental, Inc. (under contract to DEQ) continues to use its manual, *Introduction to Small Water Systems: Idaho Student Manual*, to train small public water systems. This manual is helpful to operators and managers of small systems with limited knowledge of water production. A copy of the manual is available on DEQ's Web site at http://www.deq.idaho.gov/water/data_reports/drinking_water/intro_small_water_systems_toc.pdf.

Sanitary Survey Fundamentals Prep Course. A "Sanitary Survey Fundamentals Prep Course," developed by the Montana Water Center (MWS) in cooperation with EPA is available at no charge in CD-ROM format or on the MWS Web site 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.

EPA's Interactive Sampling Guide for Drinking Water System Operators. EPA's *Interactive Sampling Guide for Drinking Water System Operators* demonstrates sampling techniques for various contaminants. Upon request, DEQ distributes copies of the guide in CD-ROM format to owners and operators at no charge. The CD-ROM is available in English and Spanish.

Web-based Initiatives to Assist with Succession Planning. 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 recordkeeping 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 resources and training materials available online.

The program continues to educate members of the water industry through DEQ's Web site and the quarterly Idaho Drinking Water Newsletter. On the Web site, water operators can obtain information about various DEQ programs; access state and federal regulations, policies, compliance and guidance documents; and download instructional aids such as the Sanitary Survey Fundamentals Prep Course, the state's sanitary survey form used by inspectors, the Total Coliform Rule Handbook for Small Noncommunity Water Systems, and EPA's CUPSS Program (Check Up Program for Small Systems), a management tool for small drinking water systems.

4. Operator Licensing: Annual Report and Hiring an Operator

2009 Idaho Drinking Water Operator Licensing Report. Each year, DEQ submits a report on the state's Operator Licensing Program to EPA. In addition to drinking water operator licensing, the report includes information on wastewater operator licensing. The most recent report on this activity was completed in October 2010.

Licensed Operator Web Site. For water systems seeking licensed operators, DEQ maintains a Web site 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.

- ❑ **Search for Contract Operators.** If a system 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/WDDWOper/WDDWSearchContractOperatorInfo.cfm>. The search can be narrowed to include only a certain type of license (such as "drinking water distribution") and to a particular county or city.
- ❑ **List of Contract Operators 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/WDDWOper/WDDWOperatorAcceptDisclaimer.cfm> and list themselves as available. This database tool cross-checks with Idaho Bureau of Occupational Licenses (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 system performs this cross-check weekly using information retrieved from the IBOL database. If the listed operator's license lapses, the tool automatically drops the individual from the list, thereby ensuring only those who are appropriately licensed (within a week) are displayed. The list does not constitute an endorsement.
- ❑ **"Hiring a Contract Operator" Booklet Available.** The booklet, *Recommendations for Hiring a Contract Operator*, includes such items as important questions to ask a prospective contract operator. It is available from DEQ regional offices and online at http://www.idahocertificationtraining.com/dw_ww_contractor.pdf.

5. Technical, Financial, and Managerial (TFM) Capacity Reviews for New Public Water Systems

Background. States participating in the Drinking Water State Revolving Loan Fund (SRF) Program are required by the 1996 Amendments to the federal Safe Drinking Water Act to ensure that all new community and non-transient non-community water systems demonstrate adequate technical, financial, and managerial (TFM) capacity (i.e., capabilities) before being allowed to begin operation.

DEQ's Legal Authority and Related Guidance. To fulfill the federal Safe Drinking Water Act requirements, the *Idaho Rules for Public Drinking Water Systems* (IDAPA 58.01.08.500) require that all new public water systems demonstrate TFM capacity.

Review of TFM Capacity for New Systems. DEQ reviews the technical, financial, and managerial aspects of new public water system plans and specifications. A portion of this review is funded by the SRF 2% Technical Assistance Set Aside Grant.

In SFY 2010, DEQ's regional offices completed 794 plan and specification reviews for water systems with populations of less than 10,000.

TFM Guidance. The DEQ guidance document, *How to Demonstrate Financial, Technical, and Managerial Capacity in New Public Water Systems*, describes how to determine if a new system has the capability to function as a public water system. A copy of the document is located at http://www.deq.idaho.gov/water/assist_business/pws/managerial_capacity_guidance.pdf.

DEQ expects the guidance document to evolve as the agency, engineers, consultants, and the public learn more about public water system capacity.

6. Proactive Distribution of Information Regarding Capacity Development

Information about capacity development topics is distributed to public water systems by several methods:

- ❑ **DEQ Regional Office Staff 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 to DEQ to provide technical assistance to the state's small drinking water systems.) Although one-on-one contacts either in person or by telephone or e-mail consume a large portion of staff time, they remain a major method of assisting system operators.
- ❑ **DEQ Regional Operator Workshops.** Idaho's six DEQ 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. Subjects cover technical assistance on a variety of subjects such as operation and maintenance issues, regulatory requirement reviews, and implementation of new upcoming or amended rules.
- ❑ **Safe Drinking Water Information System (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 from SDWIS to a new Web-based platform. The information is available via the online Drinking Water Watch tool at http://www.deq.idaho.gov/Applications/SDWISReports/pws_index.cfm.
- ❑ **DEQ Operator Training Web Site.** Another aid is the DEQ Operator Training Web Site, which provides information about state licensing requirements for drinking water and wastewater operating personnel and links to training opportunities at www.idahocertificationtraining.com.
- ❑ **Public Water System Switchboard.** Using information from DEQ's SDWIS database, the Switchboard provides public drinking water systems with quick links to rules, monitoring schedules, plans and specifications, public notification templates, sanitary survey forms, drinking water system classification requirements, and operator licensing. See http://www.deq.idaho.gov/Applications/SDWISReports/pws_index.cfm.
- ❑ **Idaho Drinking Water Newsletter.** *The Idaho Drinking Water Newsletter* is a quarterly newsletter published by DEQ and distributed to all public water systems in

the state. Recipients of this newsletter include owners, administrative contacts, and operators of water systems, as well as interested individuals from the general public.

The newsletter serves as a vehicle to disseminate information about expected changes to existing regulations or new and anticipated regulations, monitoring deadlines, specific actions that systems need to take to protect public health and to stay in compliance, and announcements of upcoming seminars and training.

Each edition is posted on the DEQ Web site and sent to approximately 3,200 people (e.g., owners and operators of Idaho's 1,964 systems; the mayor and council members of each city; and individuals requesting to be on the mailing list such as consulting engineers and county etc. officials who have requested to be on the mailing list). Systems can also sign up to receive notification through DEQ's govdelivery service when the current issue of the newsletter has been posted (look for "*Sign up for E-mail Updates*").

Occasionally, DEQ publishes special issues that cover specific topics such as operator licensing requirements or procedures for issuing boil water advisories.

Copies of the four newsletters (Issues 53 through 56) published and distributed during SFY 2010 can be accessed below:

http://www.deq.idaho.gov/water/assist_business/pws/H2O_newsletter_53.pdf

http://www.deq.idaho.gov/water/assist_business/pws/H2O_newsletter_54.pdf

http://www.deq.idaho.gov/water/assist_business/pws/H2O_newsletter_55.pdf

http://www.deq.idaho.gov/water/assist_business/pws/H2O_newsletter_56.pdf

- ❑ **DEQ's Web Site: Fact Sheets/Guidances.** During SFY 2010, the Drinking Water Program continued to build on and improve information available to systems on DEQ's Web site. The list of materials developed and/or enhanced in SFY 2010 includes:

- [After the Flood: Protecting Your Drinking Water](#) (brochure and Web content)
- [Boil Water Door Hanger](#)
- [Nitrate Door Hanger](#)
- [Coliform Bacteria](#) (fact sheet)
- [Cross-Connection Control Program](#) (fact sheet)
- [Enhanced Sanitary Survey Form](#)
- [Filter Backwash Recycling Rule \(FBRR\), Implementation Guidance for](#)
- [Frequently Asked Questions about Drinking Water](#) (Web content)
- [Frequently Asked Questions about Drinking Water Operator Licensing](#) (cross-linked with the IBOL site) (Web content)
- [Ground Water Rule, Implementation Guidance for the Drinking Water Program](#)
- [IDWARN](#) (Web content)
- [Mercury Seals and Submersible Pumps](#) (fact sheet)
- [Operator Licensing Database and Search Tool](#)
- [Public Notification Requirements](#) (Web content)
- [Public Water System Switchboard](#)

- [Stage 1 Disinfectants and Disinfection By-products Rule, Guidance for](#)
- [Stage 2 Disinfectants and Disinfection By-products Rule Implementation Guidance](#)
- [Surface Water Treatment Rule \(Interim Enhanced\), Guidance for](#)
- [Surface Water Treatment Rule \(Long-Term 1 Enhanced\), Implementation Guidance](#)
- [Surface Water Treatment Rule \(LT2 Enhanced\), Guidance for](#)
- [govdelivery.com](#) (email subscription service)

7. Additional Technical Assistance: District Health Departments/ Consumer Confidence Reports (CCR) Assistance Tool

DEQ Contracts with 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 1,089 "very small" water systems (those within the 10-25 category) they supervise.

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

Very small systems 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 2010 continued to be for assistance with addressing contamination events, responding to monitoring questions, and preparing the annual Consumer Confidence Reports (CCRs).

Consumer Confidence Report (CCR) Assistance. In response to a high volume of 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 its Web site at http://www.deq.idaho.gov/water/assist_business/pws/ccr.cfm.

This online tool has made the task of preparing the annual report for Idaho's 750 community water systems easier for DEQ and district health department staff as well as the systems. 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.

Systems 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. For the 2009 CCR due July 1, 2010, DEQ mailed hard

copies to fewer than 3% of Idaho's community water systems while the remaining 97% of the community systems obtained their information online.

8. Triennial Capacity Development Report to the Governor of Idaho

Triennial Report. Every three years, DEQ submits a report on the state's Capacity Development Program to the governor of Idaho. In September 2008, DEQ filed Idaho's **2008 Triennial Capacity Development Report to the Governor**, the most recent report which covers the 2006-2008 federal fiscal years. The report is available online at http://www.deq.idaho.gov/water/data_reports/drinking_water/capacity_development_08.pdf.