



State of Ohio
Environmental Protection Agency
Division of Drinking and Ground Waters

Capability Assurance Strategy Triennial Report to the Governor

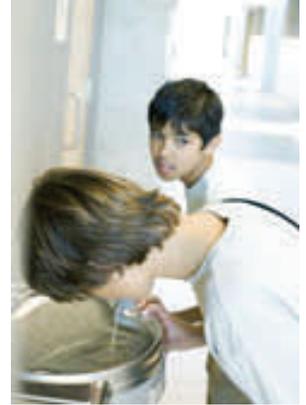


September 23, 2008

Ted Strickland, Governor
Chris Korleski, Director

Introduction

Approximately 90 percent of Ohioans receive water used for bathing, cooking, and drinking from a public water system. Even people who have their own private wells to meet their daily needs will visit other homes or businesses served by a public water system. Children and seniors are the most susceptible to illness and death from several of the contaminants regulated by federal and state drinking water laws including lead, mercury, nitrates, bacteria and viruses. Nearly 800 schools serving nearly 170,000 people have their own water supply and are regulated by the Ohio Environmental Protection Agency (Ohio EPA) as a public water system. Ensuring safe drinking water for students attending these schools, as well as students attending schools connected to community public water systems, is fundamental to ensuring a high quality education. As important as public water systems are to the quality of water we drink and therefore our health, the majority of water produced by public water systems is used by businesses and for fire protection. Properly designed public water systems, including the distribution system, are essential to ensure adequate supplies of water are available for fire fighting. Ohio businesses need adequate supplies of good quality water for processing, cooling and product manufacturing. The availability of adequate supplies of water is often a critical factor in attracting new industry to Ohio.



Ohio EPA's Division of Drinking and Ground Waters is responsible for oversight of Ohio's public water systems to ensure they comply with all federal and state drinking water laws and provide adequate supplies of safe drinking water. There are approximately 5,150 public water systems in Ohio including about 1,275 community public water systems serving cities, villages, rural communities, and mobile home parks, 860 non-transient non-community systems such as restaurants, campgrounds and churches.



Ohio's Capability Assurance Program is designed to help public water systems improve their technical, managerial, and financial capabilities so they can provide safe drinking water consistently, reliably, and cost effectively. By enhancing system operations and ensuring the technical, managerial and financial capacity of public water systems, Ohio can promote greater long-term compliance with national primary drinking water regulations, and public health protection for the citizens of Ohio.

For a system to have capacity, adequate capability is required in three distinct but interrelated areas:

Technical – the physical and operational ability of a water system to meet SDWA requirements, including the adequacy of physical infrastructure, technical knowledge and capability of personnel, and adequate source water.

Managerial – the ability of a water system to conduct its affairs in a manner enabling the system to achieve and maintain compliance with SDWA requirements, including institutional and administrative capabilities, ownership accountability, staffing and organization.

Financial – the ability of a water system to acquire and manage sufficient financial resources to allow the system to achieve and maintain compliance with SDWA requirements, including revenue sufficiency, credit worthiness, and fiscal management.

This Capability Assurance Strategy Triennial Report to the Governor was prepared by Ohio EPA in fulfillment of Section 1420(c)(3) of the 1996 Amendments of the Safe Drinking Water Act which requires:

“Not later than 2 years after the date on which a State first adopts a capacity development strategy under this subsection, and every 3 years thereafter, the head of the State agency that has primary responsibility to carry out this title in the State shall submit to the Governor a report that shall also be available to the public on the efficacy of the strategy and progress made toward improving the technical, managerial, and financial capacity of public water systems in the State.”

The United States Environmental Protection Agency (U.S. EPA) has established a September 30, 2005 deadline for submitting these reports. Further, Section 1452(a)(1)(G)(i) *op. cit.* requires:

“NEW SYSTEM CAPACITY.—Beginning in fiscal year 1999, the Administrator shall withhold 20 percent of each capitalization grant made pursuant to this section to a state unless the state has met the requirements of section 1420(a) (relating to capacity development) if the State has not complied with the provisions of section 1420(c) (relating to capacity development strategies). Not more than a total of 20 percent of the capitalization grants made to a State in any fiscal year may be withheld under the preceding provisions of this clause. All funds withheld by the Administrator pursuant to this clause shall be reallocated by the Administrator on the basis of the same ratio as is applicable to funds allotted under subparagraph (D). None of the funds reallocated by the Administrator pursuant to this paragraph shall be allotted to a State unless the State has met the requirements of section 1420 (relating to capacity development).”

The Capability Assurance Strategy for the State of Ohio was approved by the U.S. EPA Region 5 Safe Drinking Water Branch on September 25, 2000 and may be found on the Ohio EPA, Division of Drinking and Ground Waters (DDAGW) web page at <http://www.epa.state.oh.us/ddagw/dwaf.html>. This report is based on data for State Fiscal Years (SFYs) 2006, 2007 and 2008 which covers the period July 1, 2005 through June 30, 2008, except for the compliance data which is from our shared goals with U.S. EPA.

Primary objectives in Ohio’s capability assurance strategy

- 1) Identify and prioritize the public water systems most in need of improving technical, managerial, and financial capability.
- 2) Identify the institutional, regulatory, financial, tax or legal factors at the federal, state, or local level that encourage or impair capability assurance.
- 3) Use Ohio’s authorities and resources to assist public water systems:
 - in complying with national primary drinking water standards;
 - encourage the development of partnerships between public water systems to enhance the technical, managerial, and financial capacity of the systems;
 - assisting public water systems in the training and certification of operators
- 4) Establish a baseline and measure improvements in capability with respect to national primary drinking water regulations and State drinking water law.
- 5) Identify persons that have an interest in and are involved in the development and implementation of the capability assurance strategy (including all appropriate agencies of federal, state, and local governments, private and nonprofit public water systems, and public water system customers).



Each year Ohio accomplishes the established objectives and continues to make progress beyond the previous years achievements. How Ohio is meeting and surpassing program objectives is described below.

What methods or criteria is Ohio using to identify and prioritize the public water systems most in need of improving technical, managerial, and financial capability?

New Systems

Ohio Revised Code 6109.24, 6109.22(M) and Ohio Administrative Code Chapter 3745-87 provide for Ohio's legal authority to implement the new systems program.

All new public water systems must submit a capability assurance plan (CAP) prior to detail plan approval and start-up of the system.

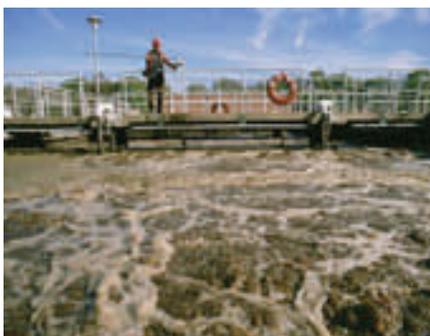
Since the last triennial report submitted September 30, 2005, 73 new community and non-transient non-community public water systems were activated. The activated systems list was reviewed to determine which systems are truly new versus found, existing systems. We determined that 14 systems are new systems. Of the 14 systems, 11 systems have completed a CAP. None of the 14 systems are considered significant non-compliers (SNCs) with federal safe drinking water requirements.



Some additional systems from the last triennium submitted capability assurance plans for new systems, therefore a total of 20 plans were submitted and accepted for new systems from SFYs 2006 through 2008.

Existing Systems

Capability assurance plans are required for all Water Supply Revolving Loan Account (WSLRA) planning, design and construction loan applicants. Seventy-six systems received WSRLA loans in SFYs 2006, 2007 and 2008. All 76 systems had approved capability assurance plans.



Ohio started to prioritize public water systems with capability concerns by completing Capability Assurance Evaluation Forms during each sanitary survey for community systems with populations of 250 or greater to identify and rectify capability issues. In the past three years, 443 capability evaluation forms have been completed. Follow up actions in the form of Compliance and Operational Review Meetings (CORM) for systems with indication of capability issues. Nineteen CORMs were completed during this triennium.

Ohio reviews the significant non-complier (SNC) list and enforcement priority list to determine who is in need of further technical, managerial and financial assistance. Approximately 50 SNCs and systems listed on the enforcement priority list benefit from technical assistance provided by Ohio Rural Community Assistance Program (RCAP). Some systems will be nominated to the Drinking Water State Revolving Fund's Water Supply Revolving Loan Account (WSRLA) for a low interest loan to make necessary repairs or upgrades to their water system. Fifteen WSRLA loans helped water systems to return to compliance during the last triennium.

Additional measures Ohio has identified to improve system capability includes adding supplemental environmental projects in enforcement actions to encourage public water systems to improve their system's capability and reduce their penalty. Eighteen enforcement actions included capability related improvements such as hiring a certified operator or contract lab, system consolidation, and attending technical, managerial and financial training. Also notable, Ohio is identifying public water systems that have not monitored before the end of the monitoring period and sending reminder postcards encouraging the systems to complete their monitoring and stay in compliance.

Priorities

In descending order:

1. Capability assurance plans for new systems and WSRLA loan applicants.
2. Completion of capability assurance evaluation forms during the sanitary survey process and evaluation form follow up to rectify capability issues.
3. Work with systems in enforcement to negotiate voluntary capability assurance remedies as part of enforcement actions against significant non-compliers.
4. Work with systems proactively to encourage compliance and continued sustainability using a multiple barrier approach.

What are the institutional, regulatory, financial, tax or legal factors at the federal, state, or local level that encourage or impair capability assurance?

These factors, incentives, impediments, level and action items are detailed in Appendix A. A listing of the factors considered follows:

- Management
- Maximum contaminant levels and other drinking water requirements
- State and local exemptions
- Federal and state financial assistance
- Awards
- Escrow requirements
- Federal Emergency Management Agency relief
- Audit and financial control requirements
- Taxes
- Low income areas
- Political and community rivalries
- Tax base issues
- Annexation requirements
- No legal requirements for capability assurance
- Local control issues
- Revenue diversion

How is Ohio using its authorities and resources to assist public water systems in complying with national primary drinking water standards?

- Ohio has an agreement with Ohio RCAP to offer financial and managerial technical assistance to community and non-transient non-community systems that serve less than 10,000 population.
- Ohio RCAP held 50 board trainings educating approximately 702 systems over the past three years, which includes 1,318 utility board members and operators in three courses, Utility Management for Local Officials, Financial Management for Local Officials, and Asset

Management for Local Officials. The trainings were all one-day and free for the water systems to attend.

- Ohio conducts outreach to systems with violations that are in need of capital improvements to invite them to use the WSRLA to receive a low interest loan to return to, or remain in compliance.
- Ohio conducts training and presentations to systems impacted by rule or programmatic changes to educate the systems and thereby encourage compliance.
- Ohio has a Drinking Water Advisory Group (DWAC) which meets two to four times per year to discuss rule and programmatic changes with stakeholders/interested parties.
- Ohio sends out reminder postcards to systems that have not monitored to remind the system to monitor so the system can remain in compliance with the rules. For example during SFY 2008, over 11,000 reminder postcards were sent and 82% of systems then completed the monitoring.
- Ohio has six electronic service communications (ListServ) for programs such as Compliance, Drinking Water Assistance Fund, Operator Certification, Rules Update, Underground Injection Control Rules, and LT2/Stage 2 with a total of approximately 1,900 subscribers to disseminate rule and programmatic information.
- Ohio completes capability assurance evaluation forms after each community sanitary survey for populations of 250 or greater and completes follow up with systems including CORMs to encourage system capability.
- During SFYs 2006 and 2007, Ohio had a small systems technical assistance officer at the Northeast District Office to provide additional technical assistance to small systems.

How is Ohio using its authorities and resources to encourage the development of partnerships between public water systems to enhance the technical, managerial, and financial capacity of the systems?

- Ohio encourages systems to work together as a part of Ohio Water/Wastewater Agency Response Network (WARN) which encourages utilities to help utilities in times of emergency.
- Ohio has RCAP work with small systems to facilitate regionalization and consolidation ventures, where appropriate.
- Ohio encourages systems as part of their Emergency Response Plans (ERPs) to work with neighboring communities.
- Ohio works with systems as part of the Small Communities Environmental Infrastructure Group (SCEIG) to coordinate system infrastructure projects and disseminate educational materials to systems, stakeholders and interested parties.

How is Ohio assisting public water systems in the training and certification of operators?

- Ohio has offered 76 training sessions to educate approximately 1,100 people for Class A Operations over the past three years.
- Ohio speakers were provided at Ohio Rural Water Association, Ohio Training Community of Ohio and American Water Works Association conferences, workshops, seminars and meetings during the 2006, 2007, 2008 time period training over 6,000 people.

How did Ohio establish a baseline and how are improvements measured in capability with respect to national primary drinking water regulations and state drinking water law?

Over the past three years, from 2006 through 2008:

- Ohio completed 4,333 sanitary surveys
- Ohio completed 85 enforcement actions
- 18 enforcement actions contained capability assurance provisions

- Ohio completed 443 capability assurance evaluation forms as part of the sanitary survey process.
- Ohio reviewed and accepted 14 capability assurance plans for new systems.
- Ohio reviews and tracks compliance and enforcement to determine trends and needed improvements.

How does Ohio identify persons that have an interest in and are involved in the development and implementation of the capability assurance strategy (including all appropriate agencies of federal, state, and local governments, private and nonprofit public water systems, and public water system customers)?

This objective was completed with the finalization of the Ohio Capability Assurance Strategy, approved by U.S. EPA on September 25, 2000. Ohio identified:

- Public water systems
- Lenders
- Public Utilities Commission of Ohio
- WSOS/Great Lakes RCAP
- Ohio Water Development Authority
- Ohio Rural Water Association
- Ohio Section American Water Works Association
- US Department of Agriculture, Rural Development
- US Department of Housing and Urban Development
- US Department of Commerce, Economic Development Administration
- US Army Corps of Engineers
- Ohio Public Works Commission
- Ohio Department of Development
- Ohio Consumers' Counsel
- Ohio Township Association
- League of Women Voters of Ohio
- Ohio Home Builders Association
- Ohio Nursing Home Association
- Ohio Hospitals Association
- Ohio Industrial Association

Tracking Ohio's progress

What progress is Ohio making in improving the technical, managerial and financial capability of public water systems?



Ohio has identified 12 shared goals with U.S. EPA for public health and compliance assurance. Appendix B includes a report on the four goals that are specific to community water systems and show the strides made. Many of the financial, managerial and technical capability measures indicated throughout this report have contributed to the progress and accomplishment of these goals. Ohio has achieved the four shared goals that pertain to community systems. The increase in capability assurance initiatives has helped Ohio reduce the amount of community SNCs.

What problems are Ohio and its public water systems facing most frequently?

While Ohio continues to make strides by including additional methods to track and encourage capability assurance with existing water systems, there is only a strategy in place, Ohio lacks legislative authority to enforce system capability. If Ohio lacks the authority to enforce capability assurance in existing systems that have issues, then it is difficult for the state to prevent potential public health threats. Ohio EPA has suggested language be added to the Ohio Revised Code to enhance Ohio EPA's authority to enforce capability assurance and prevent recognized public health threats. If the Revised Code language is added, then rule language can be added to the Administrative Code giving Ohio EPA the authority to require capability assurance measures at existing water systems.



Increasing costs to manage and operate water systems has made it increasingly difficult to maintain capable systems. Some systems are mandated to make system improvements due to new rules or public health issues which results in high water and waste water rates based on the income of their population. Unfortunately, some normal operations and maintenance items are delayed due to lack of funding which can cause capability issues when system functions are not routinely maintained. With the downturn in the economy, rural systems have lost businesses/companies making it more difficult to operate and maintain their system with less user base and income received. Additionally, some systems need to make the difficult decision to consolidate with other water systems which often times leads to apprehension/concern about losing autonomy of the water system and potential rate increases from the supplying system.

There are many new regulations systems are trying to comply with. Over the past three years, the most notable rule changes affecting Ohio's systems are arsenic, disinfection by-products and long term enhanced surface water treatment rules. Often times, the need for modifications result in the undertaking of a major capital improvement project to install new treatment, build a new water treatment plant or regionalize with another water system. Ohio has categorized these systems as "priority systems" and has worked with them utilizing the WSRLA program and enforcement agreements (when necessary) to encourage system changes to stay in or return to compliance.

Looking forward

Identification of new challenges, security concerns, new or pending regulatory requirements.

The WSRLA has two new initiatives to encourage capability assurance. The loan program recently started a disadvantaged community program which includes low interest loans with terms up to thirty years and some loan principal forgiveness. As a short term goal, the loan program is also giving a reduced rate interest rate for systems changing their treatment from gaseous chlorine to sodium hypochlorite or like treatment for security purposes.

The WSRLA has also made an effort to include incentives in the SRF point structure for the project priority list to encourage systems to complete asset management plans, source water protection plans, sustainable growth plans, utility board training, water conservation, preventative maintenance, and regionalization/consolidation.

Ohio will be working with systems to comply with new federal rules. Ohio is expecting some water system improvements may be necessary due to the new ground water rule. Ohio is also expecting the results of the 2007 Drinking Water Needs Survey to be released in the next year to help us further evaluate and take action with Ohio's drinking water systems on twenty year capital improvement and infrastructure needs.

Identify Ohio's investment in capability development efforts.

Ohio has started several new initiatives over the past three years in furthering capability assurance. Most notable are the completion of capability evaluation forms for existing systems with completion of sanitary surveys for community systems with populations greater than 250 people. In establishing this method to identify and track systems with capability concerns, Ohio's hope in the next three years is to complete follow up with systems with capability concerns indicated on the evaluation form and work with them to correct issues.

Ohio has worked with Ohio RCAP for several years to educate small public water systems with board training for utility management, financial management and asset management/rate setting. For the next three years Ohio plans to add an applied asset management course to give small public water systems support to complete their own asset management plan. Ohio RCAP will also be implementing short course to help systems better understand what is needed to plan, design and construct a water and waste water project.

Ohio expects to continue many of the efforts detailed in the report as an investment in capability assurance throughout the state. New initiatives will be evaluated and implemented as time and resources permit.



How will Ohio make this report available to the public?

- Ohio will post this report on our Web site, located at: <http://www.epa.state.oh.us/ddagw>
- Ohio will send out an email through the DWAF Listserv
- Ohio will send out a news release to the media

Conclusion

Ohio has made great strides during SFYs 2006 – 2008 in our capability assurance strategy. We have achieved accomplishments in all of our stated goals and objectives, and added many new initiatives to further capability assurance. In summary, we have implemented the use of capability assurance evaluation forms and CORMs, increased RCAP training sessions for local officials, made improvements in our shared goals with U.S. EPA and increased outreach efforts to existing systems using ListServ and reminder postcards. It is our hope to continue efforts with capability assurance during the next triennium with the quest of becoming a more proactive program than a reactive program and ensure public health protection before drinking water issues impact Ohio's citizens.