

Mike DeWine, Governor Jon Husted, Lt. Governor Anne M. Vogel, Director

October 23, 2023

Mike DeWine, Governor State of Ohio Riffe Center, 30th Floor 77 South High Street Columbus, OH 43215-6117

Dear Governor DeWine:

Under the federal Safe Drinking Water Act (SDWA), each state is required to complete a report every three years highlighting their efforts in implementing strategies that improve the technical, managerial, and financial capacity of Ohio's public drinking water systems. This report, entitled "State Fiscal Year 2021 through 2023 Triennial Report on the Capability Assurance Strategy for the State of Ohio" is attached. The report is required under the SDWA to be submitted to U.S. EPA and the Governor.

The attached report outlines Ohio EPA's activities and accomplishments over the last three program years. Much of our focus during this time has been in the implementation of comprehensive statewide asset management regulations, developed under the authority of Ohio SB 2, passed in 2017. Implementation of asset management is equivalent to U.S. EPA's capacity assurance.

The intent of an asset management program is to provide public drinking water systems with a comprehensive tool to better manage, operate, and maintain their systems in a cost-effective manner and consistently meet safe drinking water requirements. Ohio EPA continues to implement asset management through our drinking water program, and support communities with technical and financial assistance to both develop plans and make infrastructure improvements. The work done through this program also aligns with our objectives under H2Ohio, particularly in meeting the infrastructure needs in disadvantaged communities.

We look forward to continuing our work in the important area of supporting communities and infrastructure improvements throughout Ohio. Please contact me if you have any questions regarding the attached report.

Sincerely,

Director

Enclosure

ec: Daniel Diedrich, U.S. EPA Region 5

Alison Flenniken, U.S. EPA Headquarters

Sahba Rouhani, Capacity Development Coordinator, U.S. EPA Region 5

Amy J. Klei, Chief, DDAGW

Tanushree Courlas, Assistant Chief, DDAGW

Jon Bernstein, Chief, DEFA

Kathleen Courtright, Assistant Chief, DEFA

50 W. Town Street Suite 700 614 | 644 3020 epa.ohio.gov

Columbus, Ohio 43215 U.S.A.



Capability Assurance Strategy Ohio's Efforts to Ensure Safe Drinking Water for Ohioans Triennial Report to the Governor



Division of Drinking and Ground Waters September 2023

REQUIREMENTS OF THIS REPORT

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 triennial September 30 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 reallotted by the Administrator on the basis of the same ratio as is applicable to funds allotted under subparagraph (D). None of the funds reallotted 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)."

INTRODUCTION

Approximately 90 percent of Ohioans get the water they use to bathe, cook, and drink from a public water system (PWS). Even people who have their own private wells eventually visit other homes or businesses served by a PWS. Children and seniors are the most susceptible to illness and death from several contaminants regulated by federal and state drinking water laws including lead, mercury, nitrates, bacteria, and viruses.

As important as PWSs are to the quality of water we drink, and therefore our health, most of the water produced by PWSs 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 firefighting. 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 overseeing 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 4,255 public water systems in Ohio including about 1,150 systems serving cities, villages, rural communities, mobile home parks and 594 non-transient non-community systems such as schools, day cares, and businesses and 2,511 transient noncommunity systems such as restaurants, campgrounds, and churches.

The Capability Assurance Strategy for the State of Ohio was approved by the U.S. EPA Region 5 Safe Drinking Water Branch on June 3, 2022. This strategy may be found on the Ohio EPA, Division of Drinking and Ground Water's web page at:

https://epa.ohio.gov/divisions-and-offices/drinking-and-ground-waters.

This report is based on data for State Fiscal Years (Program Years (PYs) 2021, 2022, and 2023 which covers the period July 1, 2020, through June 30, 2023, except for the compliance data which is from our shared goals with U.S. EPA.

PRIMARY OBJECTIVES IN OHIO'S CAPABILITY ASSURANCE STRATEGY

- 1. Assist public water systems in complying with National Primary Drinking Water Standards.
- 2. Encourage the development of partnerships between public water systems to enhance the technical, managerial, and financial capacity of the systems.
- 3. Assist public water systems in the training and certification of operators.
- 4. Assist water systems vulnerable to emerging contaminants.
- 5. Assist water systems in protecting source waters.
- 6. Assist water systems in contingency planning.

By working with systems to enhance these areas, Ohio can promote sustainable public water systems, greater long-term compliance with national primary drinking water regulations, and public health protection for the citizens of Ohio. Ohio's commitments to these objectives are highlighted most recently with the H2Ohio initiative, h2.ohio.gov and the Per- and Polyfluoroalkyl Substances (PFAS) Action Plan, pfas.ohio.gov.

CURRENT PUBLIC WATER SYSTEM CHALLENGES IN OHIO

The Drinking Water Infrastructure Needs Survey and Assessment (DWINSA) is a periodic national review of infrastructure projects needed to provide safe drinking water to the public for the next 20 years. According to the 2021 Needs Survey, Ohio's overall drinking water infrastructure needs total approximately \$16.07 billion of capital investment to maintain transmission, distribution, source, treatment, and storage of public drinking water. As U.S. EPA implements the next Needs Survey in 2025, this number is likely to increase.

Across the nation, drinking water system infrastructure is aging. Communities in Ohio and other states face increasing costs to manage and operate water systems, which has made it progressively more difficult to maintain reliable systems. When operations and maintenance items are delayed due to lack of funding, this can cause problems.

Failing drinking water infrastructure can result in temporary losses of water, restrictions on water use, loss of water for fire protection, and damage to other critical infrastructure. Impacts such as increased illness (due to lack of access to safe water and unsanitary conditions) and significant impacts to local economies are critical concerns.

Ohio EPA has developed a state-wide asset management program to help communities identify failing infrastructure and to be proactive in planning, operations, and maintenance activities. Ohio's experience is that many depressurizations and aging infrastructure issues can be prevented or minimized with comprehensive asset management and maintenance. For example, during the last three years, Ohio EPA has focused on ensuring water systems have the appropriate equipment for ongoing maintenance and emergency events, as well as updated asset management programs. Additionally, Ohio EPA

provided grant funding to help small community systems purchase emergency generators and to all communities to purchase well needed distribution equipment. Ohio EPA will continue to explore and leverage set-asides to enhance overall PWS security and preparedness into the future.

ASSET MANAGEMENT PROGRAM

In 2017, Senate Bill 2 (SB 2) was introduced to the Ohio Legislature, which proposed that all public water systems in Ohio must demonstrate technical, managerial, and financial capability by implementing an asset management program by October 1, 2018. With the passing of SB 2, which revised Ohio Revised Code (ORC) 6109.24, Ohio EPA began early stakeholder outreach to ensure that stakeholders were brought into the rule process for early feedback and throughout the rule-development process. Ohio EPA worked with a group of water systems representing the American Water Works Association (AWWA) to refine the draft rules and implement in the Ohio Administrative Code (OAC 3745-87). The OAC changes were effective November 8, 2018, and all PWSs in Ohio are required to have an asset management program developed and implemented. However, on January 3, 2023, House Bill 364 amended Ohio Revised Code 6109.24 and removed the asset management program requirements for transient non-community public water systems. This change became effective in April 2023. Ohio EPA continues to encourage asset management efforts at transient non-community PWSs through direct outreach during sanitary surveys, providing asset management program templates, and other best practices with developing an asset management program.

During the past five years, Ohio EPA has worked to implement an asset management program to ensure technical, managerial, and financial capability at our PWSs. The intent of asset management is to provide PWSs with a tool to better manage, operate, and maintain their water system. This proven structured approach to managing assets allows Ohio PWSs to better plan and minimize risk.

An asset management approach will help systems throughout Ohio identify and proactively address common problems including aging infrastructure, deferred maintenance, lack of financial capability, high water loss, and inadequate maps of distribution piping and service areas. These issues often lead to water-use restrictions for Ohioans and lost revenue from water loss from water systems. By working with systems to enhance these areas of capacity, Ohio can promote sustainable PWSs, greater long-term compliance with national primary drinking water regulations, and public health protection for the citizens of Ohio.

ASSET MANAGEMENT AND OHIO'S CAPABILITY ASSURANCE STRATEGY

Ohio's Capability Assurance Program is designed to help public water systems improve their technical, managerial, and financial capabilities so that they can provide safe drinking water consistently, reliably and cost effectively to Ohioans.

Ohio uses its asset management program requirements as a vital tool to meet U.S. EPA Capability Assurance Program requirements and ensure that all PWSs have technical, managerial, and financial capability. The asset management rules are separated into three interrelated but distinct areas: technical, managerial, and financial.

Technical – This is the physical and operational ability of a water system to meet Safe Drinking Water Act (SDWA) requirements. Under Ohio's asset management rules, PWSs are required to demonstrate adequate technical capacity by developing the following: schematic of the water source treatment, storage and distribution; inventory of assets; evaluation of assets; operation and maintenance programs; emergency preparedness and contingency planning; source water protection; approved capacity

projections; criteria and timelines for infrastructure rehabilitation and replacement; and a capital improvement plan.

Managerial – This is the ability of a water system to operate in a manner that enables the system to achieve and maintain compliance with SDWA requirements, including institutional and administrative capabilities, ownership accountability, appropriate staffing, and organization. The asset management rules require the system decision makers to take responsibility and ownership of the operation of the water system as a whole and run the water system like a business.

Financial – This is the ability of a PWS to acquire and manage enough financial resources to achieve and maintain compliance with SDWA requirements. With the implementation of the asset management rules, systems are required to include a long-term funding strategy to support asset management program implementation, which includes identifying sources and amounts of funds to finance the needed repair, rehabilitation, replacement, or expansion of assets.

PRIORITIZING ASSET MANAGEMENT

Ohio Administrative Code Chapter 3745-87 provides Ohio's legal authority to require all community and non-transient non-community public water systems in Ohio to implement an asset management program. Ohio is identifying public water systems most in need of improving capability through:

- 1. Requiring and reviewing a written asset management program for new systems, existing systems during the sanitary survey process, and Water Supply Revolving Loan Account applicants.
- 2. Working with systems in enforcement to ensure they have implemented a written asset management program.
- 3. Identifying capability issues at systems that have experienced issues in responding and/or recovering from emergencies to improve their capability through asset management planning.

New Systems

All new community and non-transient non-community public water systems must have a written asset management program prior to detail plan approval and system start-up. Since the last triennial report submitted in September 2020, Ohio EPA activated four community systems, and 32 non-transient non-community water systems. All these systems had an acceptable asset management plan or were on a schedule to complete a plan prior to the start-up of the system.

Existing Systems

Following implementation of the asset management rules, Ohio EPA has incorporated questions about asset management in routine sanitary surveys. A sanitary survey is an on-site review of a PWS's water source, facilities, equipment, operations, and maintenance. They are designed to identify conditions that may present a sanitary or public health risk and identify systems that may require technical, managerial, or financial capacity development. Many deficiencies and violations noted during a sanitary survey are directly linked to asset management so co-evaluation allows Ohio EPA to leverage holistic asset management as a tool to achieve compliance.

Community systems undergo a sanitary survey every three years and non-community water systems undergo a sanitary survey every five years. Incorporation of asset management screening into the sanitary survey process provides a structured continual evaluation of PWS capability and asset management program implementation.

Enforcement

Ohio reviews the federal quarterly Enforcement Targeting Tool list and enforcement priority list on a continuous basis to determine if systems need further technical, managerial, and financial assistance or a more in-depth screening of their asset management program.

With the formation of the asset management rules, capability specific items are now addressed in enforcement cases and a deficient asset management program can now be cited so Ohio EPA staff can work towards greater capacity during all enforcement cases.

Systems listed on the enforcement priority list can benefit from technical assistance provided by Great Lakes Rural Community Assistance Program (RCAP).

Identifying Capability Issues in Response to Emergency Incidents and Critical Situations

When a PWS experiences a failure, Ohio EPA works to minimize and prevent future impacts to Ohioans. Oftentimes failures are preventable. The response to an emergency can be planned by implementing an adequate asset management program. For example, a system that did not have the required up-to-date maps experienced a large main break that depressurized the entire distribution system. The system could not find the leak (no leak detection capabilities) and could not find the appropriate valves to isolate the leak. The system was depressurized for an extended period and had issues providing enough bottled water for the citizens' consumption needs. This was a small system with few resources, antiquated infrastructure, very limited financial capacity, and recovery from this event continued to be a burden on this community for a long time. Since these requirements have been in effect, this system developed portions of its asset management program that resulted in accurate maps of their distribution system, increased the number of working valves and effective management of water line breaks.

In another example, a different system did not have adequate, operable valves for isolating waterline breaks resulting in numerous disruption of service events and system-wide boil advisories. As part of the response to the complaints on this situation, an asset management screening was conducted. The screening identified numerous missing components of an asset management program resulting in issuance of a violation letter. The asset management coordinator, inspection staff, and Ohio EPA's enforcement team worked together to resolve the violations over a period of more than two years. The improvements being made to the asset management program took place concurrently with resolution of additional sanitary survey violations. The system is now back in compliance and has successfully improved their asset management program.

Another example showing significant system improvement with Ohio EPA outreach and assistance was for a system that had not had adequate maintenance or asset management planning for many years, resulting in a significant deficiency being identified with their water storage tank during their sanitary survey inspection. As part of the follow up from the sanitary survey, Ohio EPA worked with new water system personnel to conduct an asset management screening. The screening identified several issues with the system's asset management program. Through the enforcement process, Ohio EPA management, inspection staff, and water system personnel worked together to bring the system back into compliance with asset management requirements and other regulatory issues. This allowed the system to be better positioned to make continual improvements to their water system over time, including looking ahead and planning for changes to the lead and copper rule and potential lead service line replacements.

Ohio EPA's asset management rule program makes it easier for water systems to understand expectations regarding a holistic management approach for their water system. These rules also allow Ohio EPA to more accurately provide systems with specific information and guidance as it pertains to their situation.

RESOURCES TO HELP OHIO'S PUBLIC WATER SYSTEMS

Technical and Compliance Assistance

Ohio has an agreement with RCAP to offer technical, managerial, and financial assistance to community and non-transient non-community systems that serve fewer than 10,000 in population. RCAP provides training and technical assistance at no cost to the PWS on various topics and issues. Over the past three years, RCAP provided in-person training to 138 systems and online training to 2,039 systems. Combined, these trainings had 2,909 attendees. RCAP also assisted 294 systems to increase technical, managerial, and financial capability and worked with 21 systems to provide intensive technical assistance.

Additional efforts toward improving asset management across Ohio include RCAP's asset management cohort group. During PY 2023, RCAP identified small systems that have a significant number of deficiencies or wholly lack an asset management program and offered them an opportunity to join the small training cohort. The cohort received assistance through a series of seven formal training sessions, seven follow-up coaching sessions, and individual assistance in presenting an asset management plan and recommendations to their oversight boards. Each coaching session was structured to cover a specific set of asset management program components. The intention of the cohort is to train communities to be ready to implement and update asset management plans on their own. Participating communities have been fully trained in asset management plan creation and prepared for continued updates. RCAP plans to offer the asset management cohort opportunity in PY 2024 as well.

Ohio also established an agreement with Ohio Rural Water Association (ORWA) in PY 2023 to provide small system managerial, technical, and financial assistance to public water systems serving fewer than 10,000 in population. ORWA provided technical assistance directly to four systems, and general assistance related to compliance, operator certification and new operator training. ORWA completed several in-person and web-based training events on a variety of topics, including water process optimization, cybersecurity, and general distribution system updates.

Another measure Ohio has taken, to prioritize and improve existing system capacity is sending reminder emails to systems that are near the end of the monitoring period and have not monitored. These efforts help systems remain in compliance with the rules. For example, during SFY 2021 to SFY 2023, more than 70,000 electronic sampling reminders were sent and as a result, 96 percent of systems then completed the monitoring for total coliform.

Ohio has 11 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 11,000 subscribers to disseminate rule and programmatic information.

Financial Assistance Through the Water Supply Revolving Loan Account

The Water Supply Revolving Loan Account (WSRLA) provides financial assistance for the planning, design, and construction of improvements to community water systems and non-profit non-community public water systems. Ohio issued WSRLA loans to 146 systems in the last triennium. All 146 systems had the required asset management programs. Approvals for WSRLA loans only proceed once the general plan, detail plan (when required), and asset management program are considered acceptable. If the applicant is unable to submit an acceptable plan or revision to any of these items, the loan is subject to denial.

Ohio continues to aid systems vulnerable to emerging contaminants, specifically systems facing the ongoing threats from PFAS and Harmful Algal Blooms (HABs). Ohio EPA is utilizing the WSRLA to offer

zero percent interest on any portion of planning, design, or construction loans that include infrastructure improvements that address PFAS and/or HABs.

Over the past three program years, Ohio has heavily incentivized less-capable disadvantaged communities to improve capability by:

Asset Management Program Development Funding

Funds continue to be offered to help in the development of asset management programs. To date, more than 65 communities in Ohio have received, or are in the process of receiving, WSRLA loan funding to help fund asset management efforts. Systems can currently obtain a zero percent interest planning loan to develop their asset management program. Ohio EPA is once again offering grants to assist eligible PWSs with completing, updating and/or implementing the PWS asset management program. Eligible activities include efforts toward updating the asset management program to comply with OAC 3745-87. Ohio EPA has set aside \$500,000 with up to \$15,000 dollar available per applicant. This grant program is a carryover from PY 2023.

Regionalization Funding

Ohio EPA continues to strongly support drinking water regionalization projects by offering incentives such as principal forgiveness and no interest loans. During the past three program years, Ohio EPA has funded 21 regionalization projects with a total of \$40.8 million in WSRLA funding, including \$8.8 million in principal forgiveness. Regionalization projects funded by WSRLA include waterline extensions that will tie in other existing PWSs such as municipalities, schools, mobile home parks, and homeowners' associations to a public entity that can manage such systems more effectively. In addition, regionalization may involve connecting communities or residential areas served by individual poor quality/quantity wells.

There have been several situations where regionalization has made a huge impact on residents of Ohio in the last three years. One instance eliminated 13 small PWSs that had received numerous violations for coliform bacteria and manganese. There were also PFAS detections at a daycare/school that was provided the opportunity to receive public water. This waterline connection also provided an opportunity for 178 homes and 98 commercial lots to receive public water. \$3.8 million was awarded for this project with \$1.9 million in principal forgiveness. The key factors to the success of this project were readiness to proceed, effective outreach, and thorough documentation. Another instance eliminated nine small public water systems with the opportunity for 229 homes to be connected to public water. \$5.8 million was awarded for this project with \$2.9 million in principal forgiveness. The key factors to the success of this project were readiness to proceed, public participation and thorough documentation.

Generator Funding

Due to the unpredictable nature of power failures, Ohio EPA began offering grant opportunities for emergency generators at small community water systems in PY 2018. Ohio EPA continues to offer grant funding through the emergency generator grant program. In PY 2023, Ohio EPA provided grants to 64 systems for a total of \$2,406,610.87. This program helps community water systems increase their technical capacity to provide a continuous source of safe drinking water. Ohio EPA's emergency generator grant program will reimburse the initial cost of generators and the necessary accessories. Funding obtained under the grant can be used to purchase equipment necessary to power the water treatment plant or distribution components in the event of electrical grid failure. Grants may be requested for generators, supplies, and training in an amount not to exceed \$50,000.

H2Ohio

Ohio was able to further leverage WSLRA and the Federal Water Infrastructure Improvements for the Nation (WIIN) grant funding through the H2Ohio initiative after it was launched in November 2019. Focused on shovel ready projects, H2Ohio money was used to help fund four water infrastructure projects

in disadvantaged communities in rural Ohio serving more than 4000 people. Another \$1.5 million was dedicated to addressing lead pipes and fixtures at high-risk day cares in conjunction with the federal lead testing WIIN grant. H2Ohio highlights Ohio's commitment to improving infrastructure capabilities.

In PY 2021 and 2022, zero percent interest financing for lead service line (LSL) replacement and \$20 million in principal forgiveness was made available to Ohio's PWSs. The general parameters of the funds will be as follows: (a) funds will be available for award during PY 2021 and PY 2022, (b) nominations will remain open through PY 2021, and (c) funds will be awarded at 100 percent principal forgiveness up to \$1 million per applicant per year. Additional funds could be awarded beyond the \$1 million cap as zero percent interest loan funds.

Lead Service Lines

Ohio contracted with Ohio RCAP and Ohio Rural Water Association to assist systems with their service line inventory, identification, and mapping. Between the two organizations, 24 public water systems under 10,000 in population were assisted. Assistance also included education and outreach materials.

In addition, to assist all PWSs with the inventory of their services lines, a total of \$2,365,981 in H2Ohio (round 4) grant assistance, for 53 individual public water systems, were determined eligible for the LSL inventory and mapping grant. This grant opportunity is the first step towards removing and replacing LSLs in Ohio communities.

Distribution Equipment Funding

In PY 2023, Ohio EPA offered a PWS equipment grant opportunity as part of the H2Ohio initiative. Grants were offered to reimburse the initial cost of valve exercising, leak detection, and meter accuracy testing equipment. Grants could be requested for equipment, supplies, and training in an amount not to exceed \$10,000. Ohio EPA provided grants to 112 systems for a total of \$1,000,036.49. This program helps community water systems increase their technical capacity to provide a continuous source of safe drinking water.

As part of the equipment grant opportunity, Ohio EPA collected information on system's willingness to share their equipment with other water systems. Once this information is fully reviewed as part of the disbursement process, Ohio EPA will share the information with our partners at Ohio Water/Wastewater Agency Response Network (OHWARN) and local Emergency Management Agencies (EMAs).

TRACKING OHIO'S PROGRESS

Development and implementation of Ohio's asset management rules represents a major milestone in progress toward capable and sustainable water systems across the state. The intent of an asset management program is to provide PWSs with a comprehensive tool to better manage, operate, and maintain their water system in a cost-effective manner and consistently meet safe drinking water requirements. Ohio EPA is working to implement asset management principles throughout the drinking water program.

As part of developing Ohio's asset management rules, Ohio EPA worked with many stakeholders in a variety of ways. During the early stages, Ohio worked with the American Water Works Association (AWWA) to address comments and revise the proposed rules. There were three in-person meetings held with the group to discuss comments received during the interested party review period. Ohio continues to move forward with asset management rule improvements as part of the required five-year rule review process. Currently, Ohio is updating the asset management rules and processing comments from the 2023 early stakeholder outreach efforts. Ohio EPA received comments from both large and small systems, engineering consultants, technical service providers, and the Ohio Section AWWA Asset

Management Committee. Comments were received in writing and through a series of online meetings targeting specific stakeholders, such as small communities and consultants. Ohio EPA maintains an active, ongoing relationship with Ohio Section AWWA to ensure our joint goals for management of drinking water resources are met in a reasonable and effective way.

Ohio EPA has used a multi-pronged approach to evaluate the required asset management programs. Any system requesting a WSRLA loan must go through an asset management screening and comply with a schedule from the Ohio EPA to meet all requirements of the rule. Asset management related questions have been incorporated into the routine sanitary survey process. Enforcement actions include a required demonstration of compliance with the asset management rules. All new PWSs are required to make a demonstration of compliance with the asset management rules prior to plan approval and operation of the new system. Asset management evaluations are also completed for systems with obvious capability issues and the systems placed on compliance schedules.

Another part of Ohio EPA's multi-pronged approach to evaluate asset management programs is the effort toward protecting Ohio's source waters. The source water assessment and protection program continue to work with PWSs to update their source water assessments and develop and implement protection plans. This includes site visits, virtual meetings, one on one meetings, and workshops. The East Palestine train derailment reinforced the importance of PWSs having updated source water assessment reports. As such, Ohio EPA is currently evaluating prioritization criteria for updating source water assessments statewide. Additionally, Ohio EPA continues to encourage systems to implement source water protection strategies and is planning outreach to provide support for source water protection strategy grants that will be offered beginning in January 2024.

LOOKING FORWARD

Lead Service Lines

On October 4, 2019, the federal Water Infrastructure Funding Transfer Act (WIFTA) was passed into law. Under WIFTA, a state may transfer up to five percent of the cumulative capitalization grants from the Clean Water State Revolving Fund (CWSRF) to the Drinking Water State Revolving Fund (DWSRF) to be used as principal forgiveness for projects that address exposure to lead in drinking water. To this end, Ohio EPA encouraged the nomination of LSL replacement projects in the August 2020 call for nominations to estimate the demand. The exact amount of transfer was \$20 million. The general parameters of the transferred funds will be as follows: (a) funds will be available for award during PY 2021 and PY 2022, (b) nominations will remain open through PY 2021, and (c) funds will be awarded at 100 percent principal forgiveness up to \$1 million per applicant per year. Additional funds could be awarded beyond the \$1 million cap at zero percent loan funds. Readiness to proceed will be a main factor in awarding funds.

For state fiscal year 2024, Bipartisan Infrastructure Law (BIL) funding of \$167 million will be made available for LSL projects. With a portion of these funds, Ohio EPA will be requesting proposals for LSL inventory documentation and consulting services to comply with the Lead and Copper Rule Revision (LCRR). Professional consulting service(s) will be contracted to assist community and non-transient non-community water systems with developing lead service line inventory and replacement plans. Types of assistance provided may include training and outreach related to service line requirements, best practices, and reporting requirements, developing a lead service line inventory, and developing a LSL replacement plan. This grant program is utilizing funds from PY 2023 and PY 2024.

In addition, funding focused on small systems was provided to Ohio Rural Community Assistance Partnership for identification, inventory, and mapping.

Improving Ohio's water infrastructure is vital to protecting public health and reducing lead in drinking water. BIL funding is also available to assist water systems with lead service line replacement. Up to \$81.8 million in principal forgiveness (grant-like funding) is available to disadvantaged communities. For communities not considered disadvantaged, lead service line projects are eligible for zero percent interest financing.

Reducing Non-Revenue Water Loss

In previous years and moving forward, reducing non-revenue water loss will continue to be a goal of Ohio EPA. The source of non-revenue water loss often comes from unmetered consumption, unbilled customers, meter inaccuracy, or distribution leaks. The required asset management program aids systems in realizing the true cost of non-revenue water loss and helps set a path forward in resolving water loss issues. Ohio requires all community water systems to report non-revenue water annually which will help evaluate the effectiveness of asset management program requirements.

Annual Metrics Reporting

Community and non-transient non-community PWSs are required to report metrics on an annual basis to enable Ohio EPA to evaluate asset management program implementation. The required metrics are based on industry standards. This allows Ohio EPA to look at important trends that we can use to focus our outreach, training, and funding efforts. In PY 2023, Ohio EPA changed the metrics submittal process to a more usable format to ensure consistency and improve ability to use data for trend analysis moving forward.

Source Water Protection

Ohio EPA will be offering funding for a source water protection grant to support the implementation of specific and measurable protection strategies to help protect source water. Grants with a maximum of \$20,000 will be offered to ground water community systems with a high susceptibility serving less than 50,000 people. Depending on the type of selected protection strategies, this grant provides PWSs with the opportunity to mitigate risks associated with climate change related to their source water. Ohio EPA will encourage those systems with sources that may be impacted by climate change issues to apply.

Ohio EPA will also be offering well abandonment grants with a maximum of \$15,000 available per well to PWSs to properly abandon former public water system wells.

Tracking Improvements to Capacity

Ohio EPA is continuing efforts to establish and measure enforcement actions and compliance information related to asset management, asset management screenings required by a sanitary survey visit, WSRLA applicants denied loans due to asset management related issues, new water systems denied plan approval due to lack of asset management, and annual metrics reporting required by the asset management rules. As mentioned earlier in this section, Ohio EPA reviews metrics information annually and will create a dashboard using this information as the provided data quality improves. Ohio EPA is also collecting data associated with the other measurements listed above. More information and updates on tracking will be available in Ohio's next annual report.

CONCLUSION

Ohio has made great strides during SFYs 2021 – 2023 implementing the capability assurance strategy. We have achieved accomplishments in all our stated goals and objectives, added many new initiatives and developed additional tools to further the capability of Ohio's PWSs. In summary, we continue to make improvements to Ohio's asset management program by incorporating the concept of capability into our sanitary survey process, enforcement process, and plan review process. We have conducted extensive outreach and educated many of Ohio's PWSs on the concepts of asset management providing water

systems with the framework to develop and implement asset management programs. It is our hope to continue these efforts with asset management during the next triennium with the goal of becoming a more proactive program and to continue to ensure public health protection through safe and reliable supply of drinking water to Ohio's citizens. Ohio will post this report on our website, located at: https://epa.ohio.gov/divisions-and-offices/drinking-and-ground-waters.