

2020 Triennial Governor’s Report on the Efficacy and Progress of the Capacity Development Strategy for Drinking Water Systems in the State of Louisiana

September 30, 2020

I. INTRODUCTION

The 1996 amendments to the Safe Drinking Water Act (SDWA) added a new dimension to federal/state drinking water legislation. It authorized annual federal grant money to the states for creation of a low interest loan program to public water systems that qualify. It also made provisions for a percentage of that grant money to be set aside to assist water systems in improving their technical, financial, or managerial operations. In accordance with the latter provisions, Louisiana, along with all other states, devised a Capacity Development Program and began implementing it for new water systems in January 1999 and for existing water systems in October 2000.

This report to the Governor of the State of Louisiana is submitted as a statutory requirement of the SDWA Amendments of 1996. As cited in Section 1420(c)(3) of the Act: “REPORT – no later than 2 years after the date on which a State first adopts a Capacity Development Strategy under the 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.” It is further stipulated in Section 1420 that failure to submit this report by September 30, 2020, will result in a twenty percent Drinking Water Revolving Fund grant withholding in fiscal year 2021.

Although this report is submitted as a statutory requirement, the intrinsic value of the report is the opportunity to present to the Governor and the public a comprehensive evaluation of the Drinking Water Capacity Development Program in Louisiana. Since all organizational and functional elements of the Louisiana Safe Drinking Water Program are housed in the Department of Health, Office of Public Health, this report is respectfully submitted by that agency to the Governor of Louisiana this September 30, 2020.

II. BACKGROUND

- A. One of the provisions of the Safe Drinking Water Act Amendments of 1996 created a new Section 1420 titled “Capacity Development.” This provision called for the State to obtain legal authority to ensure that all new community water systems and new non-transient, non-community water systems commencing operation after October 1, 1999, demonstrate technical, managerial, and financial capacity to meet National Primary Drinking Water Regulations. A State will receive only 80% of the federal

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grant allotment that the State is otherwise entitled to receive for the Drinking Water Revolving Loan Fund (DWRLF) unless the State has obtained such legal authority.

- B. Section 1420 further requires the State to develop and implement a Capacity Development Strategy to assist public water systems in acquiring and maintaining technical, financial, and managerial capacity. Failure to develop and implement a strategy will also result in withholding a portion of federal grant money for the DWRLF. Withholding for all Capacity Development purposes is capped at 20% total.

III. LOUISIANA AUTHORITY

- A. In response to the requirement for legal authority stated in II-A above, Act 814 of the 1997 Regular Session of the Louisiana Legislature, R.S. 40:4(a) (8) and 5.8, was enacted. It authorizes the State Health Officer to “prepare and promulgate rules and regulations necessary to develop and implement a Capacity Development Strategy----.“
- B. With the above-cited authority, the Office of Public Health proceeded with rulemaking and the Public Water System Capacity Development Rule (LAC 48:7707-7719) became effective September 20, 1998. This rule enabled the development and implementation of a Capacity Development Strategy which had been stipulated as required (II-B above) and has been approved by EPA.

IV. SIGNIFICANT HISTORY

When Congress included Capacity Development requirements in the SDWA Amendments of 1996, it provided a list of factors to be considered and included as appropriate, but generally allowed wide latitude for the states to develop their individual strategies. Though EPA issued guidance, had meetings, and sponsored workshops on Capacity Development, there was (predictably so) a wide diversity of approaches for the Capacity Development Programs among the states. Some were simple, others more complex; ultimately, many have been revised because of what may be generally summarized as unrealistic approaches or goals.

In Louisiana, the Office of Public Health proceeded to produce a Capacity Development Strategy for new water systems. It was approved by EPA and implementation began in January 1999. The new system strategy ensures that, prior to commencing operations; the system has the technical, managerial, and

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financial capacity to properly operate the water system. The approval process for new systems includes several elements:

1. Review and approval of plans and specifications for the water system by an OPH registered professional engineer
2. Review and approval of a Business Plan compiled according to OPH-issued guidelines
3. System conformance with applicable operator certification requirements
4. System management personnel attendance at state-sponsored management training
5. A financial audit conducted by OPH staff to determine if the system meets financial capacity requirements
6. Technical assistance provided as necessary to assist the system in meeting Capacity Development requirements

Subsequently, OPH developed and adopted a Capacity Development Strategy for existing water systems, including a prioritization rationale for selecting the systems to be assessed. This prioritization rationale is based upon the systems’ past compliance record with regulations. Systems selected for this strategy are required to complete a Capacity Assessment Package (CAP). This package includes a simplified business plan in conjunction with sanitary surveys, mandatory management training, and the provision of technical assistance by staff and contract personnel to provide the essential elements of the existing systems Capacity Development Strategy.

V. PERSPECTIVE

The foregoing background and significant history represents what the Office of Public Health has done toward the establishment and implementation of a formal Capacity Development Program in response to the SDWA Amendments of 1996, utilizing specified set-aside monies from the federal grant for the Louisiana Drinking Water Revolving Loan Fund. It is important to note, however, that these Capacity Development activities, however significant, represent only a part of the total Capacity Development efforts which are part of the Office of Public Health’s Safe Drinking Water Program. Therefore, in making this report on the efficacy and progress of the Capacity Development, the following ‘Report’ section presents individual reports on additionally recognized Capacity Development Strategy elements of the Safe Drinking Water Program in Louisiana.

It should be noted that the State’s current Capacity Development Strategy will be revised in order to meet the additional ‘Asset Management’ requirements of America’s Water Infrastructure Act of 2018 (AWIA). The State must submit the revised Capacity Development Strategy to EPA regional office for approval by

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December 31, 2021. Asset management promotion will be addressed in the triennial Governor’s Report required to be submitted by September 30, 2023.

VI. REPORT

A. Sanitary Surveys

A Sanitary Survey is an onsite review of the water source, facilities, equipment operation and maintenance of a public water system for the purpose of evaluating the adequacy of such source, facilities, equipment, operation and maintenance for producing and distributing safe drinking water.

Current Federal and State regulations require that a Sanitary Survey be performed on every water system at least once every three years and at least once a year for specific types of water systems that are larger and more complex. The Office of Public Health (OPH) has been routinely scheduling and performing these Sanitary Surveys through its regional and district offices. In response to the Louisiana Legislature in 2016, Capacity Development Assessments are also now conducted as part of each Sanitary Survey in order to stress the importance of asset management and strategic financial planning.

Sanitary Surveys are also performed in conjunction with certain enforcement actions as described in Section VI.B “Enforcement” below. Following the Sanitary Survey, a letter summarizing the violations of the Louisiana Sanitary Code (LAC 51:XII) and prescribing required corrective action is sent to the water system. Follow-up on any required corrective actions is performed by OPH’s regional and district offices, as well as the OPH Enforcement division if necessary.

Since the last report (2017), a total of 265 Capacity Development Assessments have been performed. Also since 2017, a total of 1536 Sanitary Surveys have been performed.

B. Enforcement

Although Louisiana has had primary enforcement responsibility for SDWA provisions since 1977, it was not until 1991 that ACT 537 (LSA-R.S. 40:5.8 and 5.9) was passed giving the State Health Officer authority to issue administrative orders to public water systems, to provide for penalties for violations of administrative orders issued by the State Health Officer, and to provide recourse through civil actions. Rules to implement this authority became final in 1992.

This authority, together with the creation of an enforcement unit at that time, gave the Office of Public Health the long-needed tools to help bring systems with

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violations into compliance. Since 2017, 123 administrative orders have been issued. 49 have been released. Also, 19 Notices of Imposition of Penalties were issued. The number of administrative orders being issued for DBPs/chemical contaminant has decreased. However, more administrative orders are being issued for significant deficiencies (physical issues within the water system). Bacteriological monitoring violations from monthly sampling of each and every water system in Louisiana have been on the decline for the last several years.

C. Operator Certification

Water system operator certification requirements have been in effect in Louisiana since 1972, which was prior to the Safe Drinking Water Act of 1974. Since then, federal and state legislation has continuously resulted in much stricter educational and training requirements for water system operators in Louisiana. The result is a significantly increased need for new operators and temporary suspensions of hundreds of current operator certifications for lack of being able to meet the increased educational and training requirements.

The lack of properly trained and certified operators is considered to be a significant contributing factor to compliance problems, particularly with small systems. Consequently, operator certification is always assessed during the capacity development surveys. Additionally, new operator training programs are currently in development.

To meet the need for operator training, the Louisiana Department of Health has trained approximately 14,469 individuals since the beginning of 2017 at training sessions throughout the State. Approximately 4,153 Certificates of Operator Certification were also issued during that same time frame. This is a decrease from the 2017 report and is attributed to COVID-19. Also, the renewal process was modified from all operators renewing their hours at the same time to half of them renewing every even numbered year (last names A-J) and the other half renewing every odd numbered year (last names K-Z). Office of Public Health staff are adapting social distancing measures as it applies to the area of operator certification and are also searching for ways to improve the process while maintaining federal and state requirements in the future.

D. Technical Assistance

Set-aside monies from the Drinking Water Revolving Loan Fund (DWRLF) are utilized to contract with Technical Assistance Providers for several water system Capacity Development purposes. The Office of Public Health has contracts with Louisiana Rural Water Association (LRWA), and Thornton, Musso, and Bellemin (TMB). These contractors provide on-site technical assistance to any water systems

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in need, including help regarding their technical, financial, and management capacities. Also, training for very small water systems with a population of fewer than 500 continues to be held quarterly throughout the state.

E. Area-Wide Optimization Program

The Area-Wide Optimization Program (AWOP) is a national program facilitated by the Environmental Protection Agency (EPA) through individual state participation with the goal of providing maximum public health protection to the citizens in each state. The Louisiana Department of Health - Office of Public Health (LDH-OPH) has actively participated in this program since 1999 when the EPA Region 6 AWOP first began. Staff from LDH-OPH participate in quarterly events with other EPA Region 6/Region 7 states, focused on AWOP activities. These quarterly events, as part of the EPA Region 6/7 AWOP, are facilitated by EPA Region 6/7 and EPA Technical Support Center (TSC) out of Cincinnati, OH.

The first component of Louisiana’s AWOP program process is the ‘Status’ component. Ideally, under the Status component, a yearly plant ranking is developed based upon plant performance, operational factors and compliance violations. For many years all Louisiana’s surface water treatment plants (SWTPs), which serve nearly half the population of Louisiana, were ranked based upon risk to public health. These rankings were used to target surface water treatment plant AWOP activities within the state. The program has completed 14 annual rankings of the state’s SWTPs. The program plans to redevelop/reestablish its ranking criteria in the near future, focusing on surface water, groundwater, and distribution systems. Additionally, Louisiana AWOP has developed a draft Disinfection By-Product (DBP) Technical Assistance Program due to the increased knowledge of the threat of DBPs to public health. DBP sample testing equipment, including a Hach DR-2800 Spectrophotometer and associated lab equipment are available. Equipment precision and demonstration studies were completed on-site at the State Lab in association with a volunteer water treatment plant. A SWTP DBP Plant Ranking System has been established for further development and targeting of AWOP activities in the future. The state’s reinvigoration of its AWOP program is focused on involving all drinking water systems, surface and groundwater, in AWOP. Focus has also recently included distribution system optimization (DSO).

In recent years, LDH has focused its AWOP on training staff on optimization concepts, to include in-plant optimization, distribution system optimization, groundwater system optimization, and chloramine treatment optimization. This has included classroom sessions as well as hands-on sessions at water plants.

In past years, based upon the annual plant rankings mentioned above, plants were selected for the second component of the AWOP program, which is the

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‘Evaluation’ component. Over the last few years, selection for participation in this second component of AWOP focused on both surface water and groundwater plants (on a voluntary basis, considering criteria for hands-on LDH-OPH staff training requirements). The Evaluation component consists of performing a Comprehensive Performance Evaluation (CPE) or other on-site studies at a selected plant. The CPE is comprised of an in-depth investigation and assessment of the unit treatment process capabilities and the impact of the design, operation, maintenance, and administration practices on performance of the facility. In addition to CPEs, the state has completed distribution system sampling at plants; focusing on disinfectant residual testing and maintenance of minimum disinfectant levels throughout the distribution system.

The third component of the AWOP program is the provision of comprehensive ‘Technical Assistance’, or the ‘Follow-Up’ component. One means to implement this Technical Assistance component is to utilize the EPA developed Performance-Based Training (PBT) series. PBTs consist of LDH-OPH personnel leading a hands-on training series on-site at one of the selected SWTPs in a group classroom setting over a 12-18 month period of time. Several plants (up to 10) are selected at one time for participation in the PBT series based on their willingness to actively participate and their location to one another. More recently under this component, LDH-OPH has begun development of a ½ day virtual training session for operators, focused on chloramine optimization concepts. Assuming the session is successful, LDH-OPH plans to offer other virtual operator training sessions focused on other optimization topics.

In recent years, LDH-OPH staff has participated in AWOP training (new state training, distribution system optimization training, groundwater optimization concepts, chloramine optimization concepts), to include hands-on CPE training. To date, forty-two (42) Comprehensive Performance Evaluations (CPEs) and 4 turbidity-based PBT series have been conducted in Louisiana. CPEs have been focused on turbidity optimization, DBP optimization and distribution system optimization. Five (5) CPEs, conducted since October 2018, have been part of LDH-OPH staff training, and focused on turbidity optimization and DSO. One (1) of the CPEs was a regulatory-triggered (related to exceedance of turbidity triggers) activity under the Surface Water Treatment Rule. Louisiana’s AWOP program will continue to target evaluation and follow-up activities based upon potential of risk to public health. The state continues to participate in quarterly EPA Region 6/7 AWOP meetings and field events (which includes performing multi-state CPEs alongside other state drinking water personnel). Participation in these events bring key drinking water treatment plan optimization tools to the State of Louisiana.

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F. Consolidation

Consolidation of water systems continues to be a program objective. In Louisiana, there is no law which mandates consolidation, but stricter Capacity Development requirements for new systems have been effective in directing the attention of potential new small systems toward the advantages of consolidation with another water system. Also, existing systems having difficulties are encouraged and assisted in merging with other more successful systems. To ensure safe and affordable drinking water for the citizens of Louisiana, LDH continues to encourage the merging of these systems to share costs and ensure compliance with the Safe Drinking Water Act. Recently, LDH began a new “Public Health Water Infrastructure Consolidation Initiative.” This initiative provides 100% principal forgiveness loans for consolidation projects across the state that involve non-compliant systems merging with compliant systems.

G. Management Training

Management Training sessions are tailored specifically for water system management personnel and are available to any water system in need. Since 2017, a total of 564 attendees were added to the management training attendee database. These attendees were trained by Technical Assistance Providers approved by the State. Please note that attendance can currently only be required through the issuance of an Administrative Order.

H. Rate Reviews

The 2016 State Legislature adopted Act 444 (HB 729). This act requires LDH to review and/or approve any rate changes requested from non-profit water systems which have existing debt with the Drinking Water Revolving Loan Fund. This activity is approved by EPA as an eligible activity within the Financial Capacity portion of the existing systems strategy. Assisting water systems with maintaining capacity, so that long-term sustainability is achieved, continues to be the LDH objective for this work.

VII. REPORT AVAILABILITY

This report is available on the web at:

<http://www.dhh.louisiana.gov/index.cfm/page/433>

It is also available for copying and public viewing at the Office of Public Health, which is located in the Bienville building at 628 N. 4th St., Baton Rouge, LA 70802.