



**Jeffrey W. Cown, Director**

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MEMORANDUM

09/22/2023

To: Governor Brian P. Kemp  
From: Jeffrey W. Cown, Director *JWC*  
Environmental Protection Division  
Re: "Report to the Governor on Georgia's Capacity Development Program"

The 1996 Federal Safe Drinking Water Act Amendments contained incentives, in the form of Drinking Water State Revolving Fund (DWSRF) withholdings, for States to develop and implement a strategy to assist public water systems in acquiring and maintaining technical, managerial, and financial capacity. The goal is to help public water systems comply with the national primary drinking water regulations and provide safe, reliable drinking water to their customers. Georgia's capacity development strategy was approved by the United States Environmental Protection Agency on September 21, 2000. The strategy was revised in November 2022 to include asset management planning for public water systems serving a population greater than 3,300.

The capacity development provisions of the Safe Drinking Water Act also required states to meet certain reporting requirements, including reporting to the Governor of each state on the efficacy of the capacity development program and the progress made towards improving the technical, managerial, and financial capacity of public water systems in that state. To prevent a 20% withholding of a State's DWSRF allotment, the report must be submitted to the Governor and made available to the public no later than September 30, 2020, and every three years thereafter, as specified in Section 1420(c)(3) of the 1996 Federal Safe Drinking Water Act Amendments.

The Environmental Protection Division is hereby submitting the attached "Report to the Governor on Georgia's Capacity Development Program". The report will also be made available to the public on the internet at <http://epd.georgia.gov> and in hard copy at the Division's Watershed Protection Branch and District Offices. The report contains detailed information on Georgia's capacity development efforts and demonstrates that we are making significant progress toward improving the technical, managerial, and financial capacity of public water systems in Georgia.

There is no action needed on your part in response to this report.

# **REPORT TO THE GOVERNER ON GEORGIA'S CAPACITY DEVELOPMENT PROGRAM**



**Georgia Environmental Protection Division  
Watershed Protection Branch  
Drinking Water Program  
September 2023**

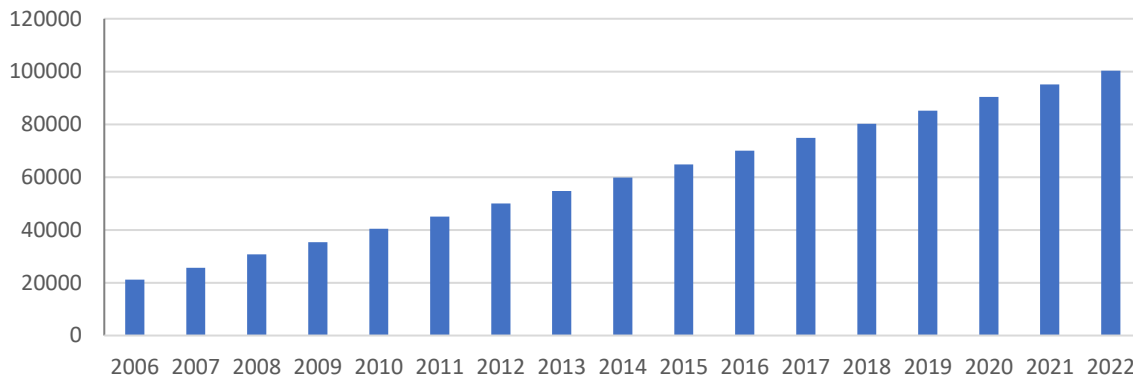
## **EXECUTIVE SUMMARY**

This report outlines the progress being made in the implementation of Georgia's capacity development program. Georgia's Environmental Protection Division (EPD) has an established program that provides a solid foundation for present and future activities to help ensure all Georgians are provided safe and reliable drinking water on a continuous basis. Overall, the quality of drinking water served to the citizens of Georgia is very good. Compliance with the health-related drinking water standards remains high.

As of June 30, 2023, Georgia has 2,384 active public water systems. Approximately 95.8% of the estimated 10.95 million year-round citizens got their drinking water from one of the regulated public water systems. The rest obtained water from their privately-owned water sources, such as wells and springs located on their property.

Approximately, 65.8% of all public water systems in Georgia are privately owned and operated. Federal, State, and local governments own the rest. Unfortunately, the smaller privately owned and operated water systems do not have the resources available to the larger systems. These systems face many challenges and some may struggle to comply with the safe drinking water rules and regulations. In Georgia, as well as other parts of the country, these small private water systems continue to have greater frequency of violations. To improve their status, continuous efforts are made towards the education, training, and certification of the owners and operators of these smaller water systems (refer to Figure 1 below). The Georgia Rural Water Association (GRWA), Georgia Association of Water Professionals (GAWP), and Georgia Environmental Finance Authority (GEFA) partner with EPD in this widespread effort and play very significant roles.

Figure 1. Cumulative number of operators trained by calendar year.



The U.S. Environmental Protection Agency (USEPA) approved Georgia's capacity development strategy program on September 21, 2000. Since then, significant progress has been made towards improving the technical, managerial, and financial (TMF) capacity of the public water systems in Georgia. The capacity development strategy was revised in November 2022 to include the development of asset management plans for systems serving populations greater than 3,300. Asset management will further strengthen the TMF capacity of public water systems in Georgia. Additionally, new systems are being designed and constructed to meet more stringent standards for quality and reliability, and new owners are required to demonstrate adequate managerial and

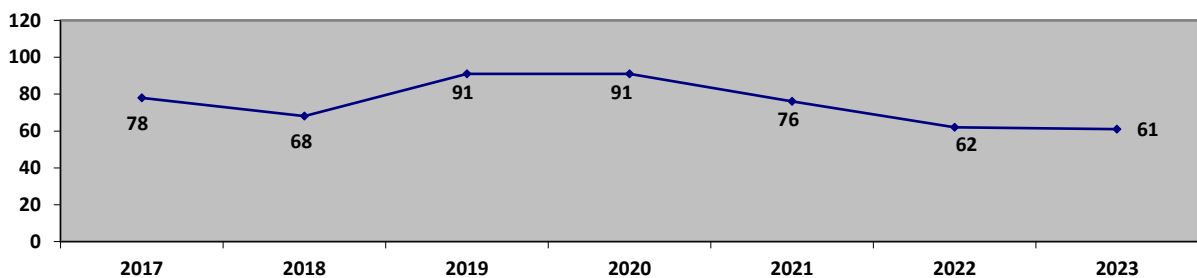
financial capacity through the submission of business plans prior to commencing operation of a public water system.

Georgia uses USEPA’s Enforcement Tracking Tool (ETT) outputs to measure the success of the capacity development program and identify systems that might lack TMF capacity.

Please refer to Attachment A for a list of new community , non-transient non-community , and transient non-community water systems permitted from July 1, 2022, through June 30, 2023. Attachment A also indicates whether these systems had an ETT score greater than or equal to 11 during the same period, an indication of significant compliance problems.

According to the data, none of the 32 new community, non-transient non-community, and transient non-community water systems permitted during the last fiscal year had an ETT score greater than or equal to 11. The data indicates that the capacity development program is effective in assisting public water systems to maintain compliance with state and federal drinking water requirements.

Figure 2. Total Number of Level 1 and Level 2 Assessments



Since 2000, there has been significant improvement in the overall microbial quality of the drinking water being provided to the public. From 2000 – 2017, EPD utilized the number of Total Coliform Rule (TCR) violations. From 2017 onward, to demonstrate compliance with the Revised Total Coliform Rule (RTCR), EPD started tracking the number of Level 1 and Level 2 triggers as a way to measure each systems’ compliance. The total number of Level 1 and Level 2 assessments began to decrease after FY 2020 (refer to Figure 2 above). EPD attributes this success to improved water system operation and management as a result of increased efforts towards training water utility managers and personnel in drinking water regulations and the associated monitoring and reporting requirements.

Improving the TMF capacity of water systems takes time. As detailed in the report, under the various capacity development strategy efforts, all public water systems in Georgia are being offered assistance to acquire and maintain TMF capacity. The assistance includes, but is not limited to, technical engineering review of all water system projects, direct on-site technical assistance, in depth sanitary surveys and more frequent inspections, proactive compliance and enforcement initiatives, inexpensive and convenient training opportunities, low interest financing to correct system deficiencies, affordable monitoring and testing services, and other local government initiatives. Whenever possible, deficient or poorly run public water systems are being encouraged, through various compliance and enforcement mechanisms, to consolidate or merge with nearby governmentally owned and operated water systems or water authorities.

GEFA is the primary State agency for assisting local governments in financing the construction, extension, rehabilitation, repair, and replacement of environmental facilities, as well as other security improvements. Georgia utilizes a large portion of the Drinking Water State Revolving Fund capitalization grant to provide low interest loans to eligible public water systems needing infrastructure improvements to achieve or maintain compliance with the Safe Drinking Water Act requirements or to protect public health. For FY 2023, \$91.1 million in project assistance has been awarded for 18 water system improvement projects.

While EPD has the lead role and regulatory authority for the capacity development program, this agency cannot fully achieve the goals of the program without the involvement of various stakeholder and partner organizations.

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## **LIST OF ABBREVIATIONS**

GA SDWA	Georgia Safe Drinking Water Act of 1977
Minimum Standards	Minimum Standards for Public Water Systems, March 2021
O & M Plan	Operations & Maintenance Plan
Rules	Rules for Safe Drinking Water, Chapter 391-3-5

## **LIST OF ACRONYMS**

ACCG	Association County Commissioners of Georgia
ARC	Atlanta Regional Commission
CCR	Consumer Confidence Report
CWS	Community Water System
DNR	Georgia Department of Natural Resources
DWP	Drinking Water Program (of the Georgia Environmental Protection Division)
DWPEP	Drinking Water Permitting & Engineering Program (of the Georgia Environmental Protection Division)
DWSRF	Drinking Water State Revolving Fund
EPD	Georgia Environmental Protection Division
ETT	Enforcement Targeting Tool
GAWARN	Georgia Water/Wastewater Agency Response Network
GAWP	Georgia Association of Water Professionals
GEFA	Georgia Environmental Finance Authority
GMA	Georgia Municipal Association
GRWA	Georgia Rural Water Association
GWWI	Georgia Water & Wastewater Institute
MCL	Maximum Contaminant Level
MR or M/R	Monitoring / Reporting
MRDL	Maximum Residual Disinfectant Level
NOV	Notice of Violation
NPDWR	National Primary Drinking Water Regulations
NTNCWS	Non-Transient Non-Community Water System
PN	Public Notification (Rule)
PPG	Performance Partnership Grant
PWS	Public Water System
RDC	Regional Development Center
SDWA	Safe Drinking Water Act
SDWIS	Safe Drinking Water Information System
SMP	Scheduled Maintenance Plan
SOP	Standard Operating Procedures
SWAP	Source Water Assessment Program
SWTR	Surface Water Treatment Rule
TCR	Total Coliform Rule
TMF	Technical, Managerial and Financial (Capacity)
TNCWS	Transient Non-Community Water System
TT	Treatment Technique
USEPA	U.S. Environmental Protection Agency
WSID	Water System Identification Number

## INTRODUCTION

The 1996 Safe Drinking Water Act (SDWA) Amendments emphasized prevention and assistance to resolve significant problems small public water systems (PWS) were having providing safe and reliable drinking water to their customers. The legislation included incentives, in the form of Drinking Water State Revolving Fund (DWSRF) withholdings, for states to develop:

- (1) A capacity development authority program to ensure that all new community water systems (CWS) and non-transient non-community water systems (NTNCWS) commencing operation after October 1, 1999, demonstrate adequate technical, managerial, and financial (TMF) capacity to comply with all National Primary Drinking Water Regulations (NPDWR) and
- (2) A capacity development strategy to assist all existing public water systems in acquiring and maintaining TMF capacity.

The Georgia Environmental Protection Division (EPD) has established a capacity development strategy program. USEPA approved Georgia's program on September 21, 2000. Since then, EPD has fully and successfully implemented the strategy, which provides targeted, voluntary, and mandatory assistance to PWSs in need of acquiring and maintaining adequate TMF capacity. The capacity development strategy was revised in November 2022 to include requirements for the development of asset management plans for systems serving populations greater than 3,300. The development of asset management plans will further strengthen the TMF capacity of the water systems.

Since January 1, 1998, several rules became effective relative to the permitting of new privately-owned PWSs. These include, but are not limited to, requirements for the following: development of a "business plan"; performance bonds or letters of credit for certain PWSs and as required by the EPD Director (replacing the prior trust indenture requirements); development of a back-up water source; connecting to an existing governmentally public water system when feasible; adherence to provision of the Revised Total Coliform Rule; and; concurrence from the nearest governmental entity for the development of the privately owned CWS in that jurisdiction. The main objective of these requirements is to assure that new CWS and NTNCWS have adequate TMF capacity to comply with all current and future drinking water regulations and provide safe, reliable service to their customers.

Measurements of success of the strategy and the improvement in the TMF capacity of PWSs include, but are not limited to, the following: TCR compliance data, the number of business plans developed by PWSs, the attendance at operator training sessions and certification examinations, the number of "circuit-rider" type technical assistance visits, and the consolidation of privately owned PWSs with local governmental entities. Georgia is making significant progress towards improving the TMF capacity of PWSs throughout the State.



## **THIS REPORT**

The 2023 Capacity Development Annual Report follows the reporting criteria that has been recommended by the USEPA. The report addresses both the “New Systems Program” and the “Existing Systems Strategy” and covers baselines a period of several years. Emphasis was placed on the current reporting period from July 1, 2022 to June 30, 2023; however, historical data was included, where appropriate, to establish from which to measure success of the capacity development program and to highlight improvements to the technical, managerial, and financial capacity of public water systems in the State.

## **GENERAL INFORMATION**

The Safe Drinking Water Act (SDWA), as amended in 1996, brings significant improvements to the national drinking water program. Capacity development is an important component of the Act's focus on preventing problems in drinking water. The capacity development provisions offer a framework within which states and water systems work together to ensure that systems acquire and maintain the TMF capacity needed to achieve the public health protection objectives of the SDWA.

**What is water system capacity?** Water system capacity is the ability to plan for, achieve, and maintain compliance with applicable drinking water standards. Capacity has three components: technical, managerial, and financial. Adequate capability in all three areas is necessary for a system to have "capacity."

**What is water system capacity development?** Capacity development is the process of water systems acquiring and maintaining adequate technical, managerial, and financial capabilities to enable them to consistently provide safe drinking water. The Safe Drinking Water Act's capacity development provisions provide a framework for the states and the water systems to work together to ensure that PWSs acquire and maintain the technical, managerial, and financial capacity needed to meet the Act's public health protection objectives.

**What is a PWS?** A PWS is a "system for the provision to the public of water for human consumption through pipes or other constructed conveyances, if such system has at least fifteen service connections or regularly serves an average of at least twenty-five individuals daily at least 60 days out of the year." In FY 2023, there were 2,384 PWSs in Georgia that serves approximately 10.5 million people. This category includes community water systems (CWSs), non-transient non-community water system (NTNCWSs), and transient, non-community water system (TNCWSs). Some of these PWSs are very small water systems.

**What is a CWS?** A CWS is a "public water system which serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents." In FY 2023, there were 1,737 CWSs in Georgia that serve approximately 10.33 million people.

**What is a NTNCWS?** A NTNCWS is "a public water system that is not a community water system and that regularly serves at least 25 of the same persons over 6 months per year." NTNCWSs are generally commercial or institutional establishments having their own water supply. Examples include schools, factories, office and industrial parks, and major shopping centers. In FY 2023, there were 171 NTNCWSs that serve a total population of approximately 67,194 people.

**What is a TNCWS?** A TNCWS is a "non-community water system that does not regularly serve at least 25 of the same persons over six months per year." TNCWSs are generally commercial or not-for-profit establishments having their own water supply. Examples include restaurants, roadside stops, campgrounds, and hotels. In FY 2023, there were 476 TNCWSs serving a total population of approximately 76,365 people. Almost all are groundwater systems and most are privately owned and operated.

**What is technical capacity?** Technical capacity is the physical and operational ability of a water system to meet SDWA requirements. Technical capacity refers to the physical infrastructure of the water system, including the adequacy of source water and the adequacy of treatment, storage,

and distribution infrastructure. It also refers to the ability of system personnel to adequately operate and maintain the system and to otherwise implement requisite technical knowledge.

**What is managerial capacity?** Managerial capacity is the ability of a water system to conduct its affairs in a manner enabling the system to achieve and maintain compliance with SDWA requirements. Managerial capacity refers to the system's institutional and administrative capabilities.

**What is financial capacity?** Financial capacity is a water system's ability to acquire and manage sufficient financial resources to allow the system to achieve and maintain compliance with SDWA requirements.

**How are technical, managerial, and financial capacity related?** Many aspects of water system operations involve more than one kind of capacity. Infrastructure replacement or improvement, for example, requires technical knowledge, management planning and oversight, and financial resources. A deficiency in any one area could disrupt the entire effort.

## BACKGROUND

For the reporting period ending June 30, 2023, Georgia had 2,384 active PWSs serving a population of more than 10.5 million. Based on the 2023 population, this means 95.8% of the citizens got their drinking water from one of Georgia’s regulated PWSs. The rest obtain water from their privately owned water sources.

There are 1,737 permitted CWSs in Georgia. Table 1 provides the distribution of these systems by source type and cumulative population served.

Table 1. Community water systems in Georgia.

Source Type	Number of Systems	Cumulative Population Served
Ground Water Under Influence	3	11,837
Ground Water	1,489	1,898,752
Purchased Ground Water	13	5,600
Surface Water	101	6,306,839
Purchased Surface Water	131	2,114,672
<b>TOTAL</b>	<b>1,737</b>	<b>10,337,700</b>

There are 171 permitted NTNCWS in the Georgia. Table 2 provides the distribution of these systems by source type and cumulative population served.

Table 2. Non-transient non-community water systems in Georgia.

Source Type	Number of Systems	Cumulative Population Served
Ground Water	165	61,914
Surface Water	1	420
Purchased Surface Water	5	4,860
<b>TOTAL</b>	<b>171</b>	<b>67,194</b>

There are 476 permitted TNCWS in Georgia. Table 3 provides the distribution of these systems by source type and cumulative population served.

Table 3. Transient non-community water systems in Georgia.

Source Type	Number of Systems	Cumulative Population Served
Ground Water	474	75,815
Purchased Surface Water	2	550
<b>TOTAL</b>	<b>476</b>	<b>76,365</b>

## **CAPACITY DEVELOPMENT AUTHORITY**

Georgia's capacity development authority program to ensure that all new CWSs and NTNCWSs demonstrate adequate TMF capacity for compliance with the NPDWRs began on October 1, 1999. There are two major control points included in the authority program. They are: (1) technical review and approval of proposed PWSs prior to construction; and (2) issuance of a Permit to Operate a Public Water System. An important part of the capacity development authority program is the requirement that the owner submit a multi-year "business plan", which adequately demonstrates the water system's managerial and financial capacity to comply with all drinking water regulations in effect or likely to be in effect.

Since adoption in the 1970s, the Georgia Rules for Safe Drinking Water, Chapter 391-3-5, have required privately owned CWSs to provide a mechanism to assure the continuity of service, such as a third party trustee. In some cases, CWS owners have entered into trust agreements with the local government in which the system is located. In other cases, the owners have used non-government trustees. This requirement of trustee was amended and replaced with requirements for performance bonds or letters of credit, as required by the EPD Director. The Board of Natural Resources adopted the amended requirements via rulemaking on June 29, 2016.

Since January 1, 1998, several rules became effective related to the permitting of new privately owned PWSs. These include, but are not limited to, requirements for the following: development of a "business plan"; performance bonds or letters of credit for certain PWSs and as required by the EPD Director (replacing the prior trust indenture requirements); development of a back-up water source; connection to an existing local government owned system when feasible; adherence to provision of the Revised Total Coliform Rule; and, concurrence from the nearest governmental entity for the development of the privately owned CWS in that jurisdiction. The main objective of these requirements is to assure that new CWS and NTNCWS have adequate TMF capacity to comply with all current and future drinking water regulations and provide safe, reliable service to their customers.

**CONTROL POINTS:** As stated above, EPD has two control points in ensuring that new CWSs and NTNCWSs demonstrate adequate TMF prior to commencing operation. The first control point is the requirement for any person to obtain EPD's approval before constructing a PWS [Section 391-3-5-.04(1) of the Rules for Safe Drinking Water]. EPD's Drinking Water Permitting & Engineering Program (DWPEP) is responsible for the review and approval of proposed surface public water supply systems. This includes all required engineering documentation such as engineering reports, plans and specifications, drinking water source quantity and quality data, business plans, local government concurrence and all pertinent data required for issuance of a permit to operate a PWS. The information that a person must submit to EPD for review and approval and for issuance of a permit to operate is discussed in EPD's "Minimum Standards for Public Water Systems" (Minimum Standards). The requirements also include submittal of a multi-year "business plan".

Any person who desires to develop a PWS is required to first evaluate connecting to an existing governmentally owned PWS if one is available within one mile of the proposed system. If connection to a governmentally owned PWS is demonstrated to not be available or feasible, then the requirements outlined in the Minimum Standards must be satisfied. Failure to submit all the required information for obtaining EPD's approval to construct a PWS will result in EPD stopping its review and returning the project to the owner unapproved. For the project to be reconsidered for approval, the owner must resubmit the project with all required supporting information.

The second control point is the requirement for any person who owns or operates a PWS or desires to commence operation of a PWS to obtain a permit from the EPD Director. The DWPEP will not

prepare the operating permit for issuance by the EPD Director until the owner/operator has satisfied all requirements outlined in the Rules and Minimum Standards necessary to demonstrate adequate TMF capacity. Should an applicant for a permit refuse to provide the required documentation, the Director will deny the permit.

Under Georgia’s capacity development authority program, local governments have been delegated with the responsibility of deciding how water and wastewater services will be provided in each service area. Before any person may initiate construction of a new privately owned and operated water system, that person must receive concurrence for the project from the local government within its jurisdiction. In addition, the person must first evaluate connecting to an existing governmentally owned PWS if one is available within one mile. Next, plans and specifications, prepared by professional engineer licensed to practice in the State of Georgia, must be submitted to EPD for review and approval. The design and construction must conform to the minimum acceptable design criteria published in the Minimum Standards.

An important part of the capacity development authority program is the requirement that the owner submit a multi-year business plan to demonstrate adequate managerial and financial capacity to comply with the existing and future NPDWR. This document should be submitted along with the plans and specifications. EPD has successfully implemented this aspect of the new systems program as detailed by the following:

- As of June 30, 2023, a total of 1,474 business plans have been received from new and existing PWSs.
- During State FY 2023, 140 business plans were received from 32 new PWSs and 108 from existing PWSs.
- As of June 30, 2023, a total of five surface water or GWUDI systems have submitted detailed Operation & Maintenance (O & M) Plans.

Table 4 displays information on business plans for the period from July 1, 2011 to June 30, 2023.

Table 4. Business plan data

	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
New Water Systems	20	6	13	15	19	7	23	21	30	34	17	15	32
Business Plans Submitted	21	33	61	34	30	58	99	101	52	48	42	61	140
Cumulative Business Plans	715	748	809	843	873	931	1,030	1,131	1,183	1,231	1,273	1,334	1474

Prior to issuance of a permit, the owner of a privately owned CWS must also provide a business plan to assure the continuity of operation and maintenance of the water system. All proposed PWSs must also demonstrate that a “certified operator” is available to operate and maintain the water system. The Director will issue no permit until the new water system owner/operator has satisfied all the requirements in the Rules and Minimum Standards.

The State of Georgia's legal authority to implement the new systems program has not changed within this reporting period. Furthermore, there have not been any changes, revisions, or modifications to the State's control points (review and approval of proposed PWSs prior to construction and the issuance of a permit). No water systems that have adequately demonstrated TMF capacity have been denied a permit by EPD.

EPD placed engineering positions in the District Offices to enable technical staff to visit and inspect water systems while they were under construction, prior to permitting, or soon after commencing operation in an effort to minimize early violations and other compliance problems. Currently, EPD has engineering positions in the Mountain (Atlanta), Mountain (Cartersville), Northeast (Athens), East Central (Macon), West Central (Augusta), Southwest (Albany), and Coastal (Brunswick) district offices. These engineers continue to review plans and specifications, provide and offer technical assistance, perform sanitary surveys, conduct inspections, and approve business plans and O & M Manuals, all in an effort to help ensure smaller groundwater PWSs acquire and maintain adequate TMF capacity.

From July 1, 2022, to June 30, 2023, over 2,170 water system projects for new and expanding PWSs were reviewed and approved under EPD's regulatory authority, which includes the delegation of authority program. The projects included, but were not limited to, engineering reports, plans and specifications related to the design and construction of new water source facilities (intakes, wells, and purchased water connections), water treatment plants (surface water and ground water facilities), finished water storage tanks, pumping facilities, water plant sludge/waste handling and disposal facilities, and water main additions and extensions to existing water distribution systems.

**EVALUATING PROGRAM SUCCESS:** EPD uses compliance tracking as measure of success. New water systems are tracked to identify whether any patterns or problems exist in the first three years of a new system's operation. If EPD sees certain persistent trends, then EPD will reevaluate the current program or approach and make appropriate adjustments to the New Systems Program.

Please refer to Attachment A for lists of new community, non-transient non-community, and transient non-community water systems permitted from July 1, 2022, through June 30, 2023. Attachment A also indicates whether these systems had an ETT score greater than or equal to 11 during the same period.

According to the state and federal compliance data, none of the 32 new community, transient non-community, and non-transient non-community water systems permitted from July 1, 2022, to June 30, 2023, had an ETT score of greater than or equal to 11. The ETT keeps a running total of unaddressed violations of safe drinking water regulations, based on the severity and length of time the violation was unaddressed. Since none of the new systems had an ETT score greater than 11, the data suggests that the capacity development program is having a positive effect.

In its capacity development program, Georgia utilizes compliance rates to establish a baseline and measure improvement in the TMF capacity of water systems. EPD has decided to track the total number of Total Coliform Rule (RTCR) violations and the number of systems with these violations. RTCR violations are often a result of a failure to monitor, report, collect, have the correct number of samples analyzed, or perform the required repeat testing. These types of violations can be minimized through capacity development efforts that improve operations and management, such as education, operator training, technical assistance, and compliance and enforcement initiatives. By tracking violations of the RTCR only, the compliance data will not be affected by new regulations

and should be indicative of improvements made towards helping water systems comply with the NPDWR.

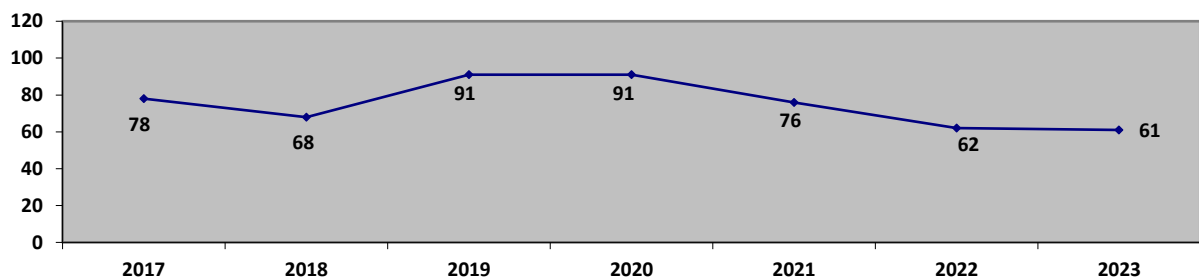
A Level 1 assessment is triggered if any of the following apply: more than two samples test positive for total coliform (for systems collecting less than 40 routine samples per month); more than 5% of the samples test positive for total coliform (for systems collecting 40 or more routine samples per month); or a system fails to take every required repeat sample after any single total coliform positive sample. A Level 2 assessment is triggered if any sample is positive for fecal coliform or *E. Coli*, or if a system has a second Level 1 assessment within a rolling 12-month period. Any system with a positive for fecal coliform or *E. Coli* must notify EPD immediately and appropriate measures must be taken to protect public health, such as issuing Boil Water Advisories. The Level 1 assessment triggers, although very serious, are generally brief and quickly resolved by the PWS and EPD.

Table 5 displays the compliance data for the RTCR, showing the total combined number of Level 1 and Level 2 assessments required for FY 2017 – FY 2023. In the future, EPD will track Level 1 and Level 2 assessments separately in hopes of demonstrating higher compliance rates among systems that require the more serious Level 2 assessments. For example, in FY 2023, EPD tracked the number of Level 1 and Level 2 assessments separately, showing that only 13 of the 61 total assessments required were for Level 2. The data is tabulated in Table 5 and plotted in Figure 3.

Table 5. Total Number of Level 1 and Level 2 Assessments by Fiscal Year

Fiscal Year	Number of Assessments
2017	78
2018	68
2019	91
2020	91
2021	76
2022	62
2023	61

Figure 3. Total Number of Level 1 and Level 2 Assessments



EPD will continue to evaluate program success by comparing the SDWA compliance record of new PWSs with the compliance record of systems constructed before the new regulatory requirements and procedures went into effect.



## **CAPACITY DEVELOPMENT STRATEGY**

USEPA approved Georgia's capacity development strategy program on September 21, 2000. EPD has fully implemented the strategy, which provides targeted, voluntary, and mandatory assistance to PWSs in need of acquiring and maintaining adequate TMF capacity.

Under Georgia's capacity development strategy, all PWSs in Georgia are offered assistance to help them acquire and maintain TMF capacity. The assistance includes, but is not limited to, technical engineering review of all water system projects, direct on-site technical assistance, in-depth sanitary surveys and inspections, proactive compliance and enforcement initiatives, inexpensive and convenient training opportunities, low interest financing alternatives to correct system deficiencies, affordable monitoring and testing services, and other local government initiatives.

Systems are identified and prioritized based upon the knowledge gained by EPD staff through compliance records, sanitary surveys/inspections, complaints, and the potential impact of new regulations. Examples of targeted assistance include, but are not limited to, on-site technical assistance, guidance and support for new rules and regulations, compliance initiatives to reduce the number of monitoring and reporting and violations, and formal enforcement actions aimed at improving the TMF capacity of deficient or poorly run water systems. To date, the targeted assistance has proven to be most challenging, due to the lack of a strong automated information systems capability; coordination between EPD District Offices, programs, and the other organizations participating in the capacity development effort; and the lack of a formal ranking scheme for the identification and prioritization of systems most in need of assistance.

Voluntary assistance is available to all PWSs in Georgia to help them acquire and maintain TMF capacity. PWSs that voluntarily choose to improve their TMF capacity will be able to comply with all regulatory requirements more consistently. Although the assistance is voluntary, compliance with the federal and state rules and regulations is mandatory, and failure to comply may lead to enforcement action, including penalties. Examples of this type of assistance include, but are not limited to, on-site technical assistance by the Georgia Rural Water Association (GRWA) and the Peer Review Program, compliance monitoring and testing at a reasonable cost through EPD's drinking water fee system, Consumer Confidence Report (CCR) assistance, and operator training conducted by GRWA and the Georgia Water & Wastewater Institute (GWWI).

Mandatory assistance is provided by EPD under the authority of the Georgia Safe Drinking Water Act of 1977 (GA SDWA) and the Rules promulgated thereunder. This type of assistance is provided as part of the normal duties of EPD regulatory staff. The assistance is provided to existing systems on a scheduled or triggered basis or to existing systems undergoing changes that may affect the TMF capacity of the system. For example, EPD conducts sanitary surveys on a scheduled basis to identify and correct deficiencies that pose a potential threat to public health or that may lead to future compliance problems. EPD also reviews plans and specifications for systems experiencing growth/expansion to assure technical adequacy of the additions, extension, or modifications. In addition, a new owner is required to submit a business plan to adequately demonstrate managerial and financial capacity prior to transfer of an existing operating permit.

Notices of Violations (NOVs) are an enforcement and compliance mechanism used by EPD to assist PWSs in acquiring and maintaining adequate TMF capacity. NOVs provide water system personnel with official, written documentation of violations of the SDWA and/or the permit and offer the system an opportunity to return to compliance.

Since FY 2020, EPD has taken additional measures to reduce the number of monitoring and reporting violations. To improve in this area, the Drinking Water Program began utilizing the Safe Drinking Water Information System (SDWIS) to identify systems that fail to submit quarterly microbiological samples or annual nitrate/nitrite samples before the end of the monitoring period. Reminder notices are then sent to these water systems in advance of the possible violations to allow them to perform the required testing and remain in compliance. In addition, multiple violation reports, which list systems with a pattern of repetitive violations, are sent to the EPD District Offices on a regular basis to help them identify systems that may need additional attention. Finally, monitoring schedules are now available online via the Drinking Water Watch website (<http://gadinkingwater.net>) for water systems to review them. All these additional efforts have contributed to the reduction in the number of federal monitoring and reporting violations, and the number of systems exceeding a significant non-compliance level (i.e., ETT score greater than 11).

EPD's capacity development strategy is adaptable and will change with the priorities established by EPD. In its efforts, EPD continues to utilize a large portion of the available DWSRF set asides to fund activities necessary to assist PWSs in acquiring and maintaining TMF capacities. The following sections highlight a few of the on-going activities throughout Georgia.

**PLAN REVIEWS/APPROVALS & THE "MINIMUM STANDARDS FOR PUBLIC WATER SYSTEMS":**

Georgia has had a plan review requirement for PWSs since the State legislature enacted the GA SDWA. This requirement helps ensure that new and existing PWSs have the technical capacity to provide safe drinking water to their customers.

The Rules promulgated under the GA SDWA established the policies, procedures, requirements, and standards to implement the GA SDWA. The Rules require that a person obtain EPD's approval before erecting, constructing, or operating a PWS or making substantial enlargements, extensions, additions, modifications, renovations, or repairs. Furthermore, the Rules specify the requirements for the preparation and submission of engineering reports/plans and specifications for new or existing PWSs. A professional engineer, licensed to practice in the State of Georgia, must complete the engineering report/plans and specifications.

In January 1998, EPD's Minimum Standards became effective and provided the minimum acceptable design criteria for public water systems in Georgia. The Rules require that beginning January 1, 1998, all new PWSs and additions or extensions to existing systems must be designed in accordance with the latest edition of EPD's Minimum Standards. The Minimum Standards were revised in March 2021 with input from stakeholders.

During the reporting from July 1, 2022, to June 30, 2023, over 2170 water system projects for new and expanding PWSs were reviewed and approved under EPD's regulatory authority, which includes the delegation of authority program. The projects included, but were not limited to, the design and construction of new water source facilities (intakes, wells, and purchased water connections), water treatment plants (surface water and ground water facilities), finished water storage tanks, pumping facilities, water plant sludge/waste handling and disposal facilities, and water main additions and extensions to existing water distribution systems.

**BUSINESS PLAN AND OPERATIONS & MAINTENANCE PLAN:** In May 2000, the Minimum Standards were revised to include technical guidance for the development of a business plan and O & M Plan. EPD currently requires completion of a business plan and O & M Plan for new systems prior to issuance of a permit and for existing systems when changing ownership. Systems constructing or expanding surface water treatment plants are also required to submit O & M Plans prior to start-up and permitting of the facilities. In a few instances, business plans and O & M Plans

have been required as part of formal enforcement actions in an effort to improve the managerial and financial capacity of these water systems.

Subparagraph 391-3-5-.04(6)(c) of the Rules requires a new owner to submit a multi-year Business Plan, which adequately demonstrates the water system’s managerial and financial capacity to comply with all drinking water regulations in effect, or likely to be in effect. The business plan must be prepared in accordance with the latest edition of the Minimum Standards. The business plan is required be updated at intervals determined by the Director.

**Table 6. EPD Compliance Activities**

Paragraph 391-3-5-.17(8) of the Rules also state that a permit may be transferred due to a change in ownership. The succeeding owner shall, upon the request of the Director, provide such additional information as is necessary to enable the Director to transfer the permit including, but not limited to, proof of ownership and a business plan.

As of June 30, 2023, a total of 1,474 business plans have been received from new and existing PWSs. From July 1, 2022, to June 30, 2023, a total of 140 business plans were received from new and existing PWSs.

Under Georgia’s capacity development strategy, new and existing systems constructing or expanding surface water or GWUDI treatment plants are required to develop and submit an O & M Plan prior to start-up and permitting of the facilities. For FY2023, a total of five surface water or GWUDI systems submitted O & M Plans.

<b><u>Between July 1, 2018, to June 30, 2019</u></b> Sanitary Surveys performed: 688. On-site Inspections conducted: 353.
<b><u>Between July 1, 2019, to June 30, 2020</u></b> Sanitary Surveys performed: 621. On-site Inspections conducted: 232.
<b><u>Between July 1, 2020, to June 30, 2021</u></b> Sanitary Surveys performed: 760. On-site Inspections conducted: 232.
<b><u>Between July 1, 2021 to June 30, 2022</u></b> Sanitary Surveys performed: 643. On-site Inspections conducted: 218.
<b><u>Between July 1, 2022, to June 30, 2023</u></b> Sanitary Surveys performed: 526. On-site Inspections conducted: 246.

**SANITARY SURVEYS AND INSPECTIONS:** EPD regularly conducts sanitary surveys. The principal purpose of the sanitary surveys is to identify and resolve problems that may pose a threat to public health. EPD also uses the sanitary surveys to identify improvements that need to be made to improve the TMF capacity of the water systems. The sanitary survey report provides official, written documentation to the water system officials of the improvements that need to be made to protect public health and to improve the overall capacity of the water system. The sanitary surveys address eight components required by USEPA including the following: water source; treatment; distribution system; finished water storage; pumps, pump facilities and controls; monitoring and reporting and data verification; system management and operation; and operator compliance with State requirements.

The sanitary survey evaluation forms were revised January 2001 and again in 2019 to include areas for EPD staff to verify written procedures, policies, programs, and other documentation that may affect the TMF capacity of these systems. Such items include, but are not limited to, Standard Operating Procedures (SOPs), Scheduled Maintenance Plans (SMPs), O & M Plans, Emergency Plans, Safety Programs, material and construction standards, business plans, water system security plans, organizational charts, plant schematics, distribution maps, documentation of repairs and complaints, unaccounted-for-water, monitoring plans, and field logbooks.

EPD has established a schedule for sanitary surveys where in each system is visited once every three years.

EPD also performs inspections and provides on-site technical assistance and training to water systems. On-site technical assistance is very beneficial since most violations result from a failure of the owner or operator to understand the operational treatment processes, complex monitoring regulations and perform the required testing and reporting. EPD has always attempted to target the water systems with poor track records and visit them more often than systems that do not have any compliance problems. The on-site visits include, but are not limited to, the following: water treatment plant site visits; operator training; emergency assistance; laboratory inspections; unscheduled system inspections; on-site technical assistance; special sample collection; complaint investigations; construction inspections; records review; source water inspections; GPS data collection; cross-connection inspections or investigations; watershed evaluations; and public hearings.

From July 1, 2022, to June 30, 2023, the Drinking Water Program conducted 40 sanitary surveys and no on-site inspections of water systems treating surface water or GWUDI. During the same period, the EPD District Offices performed 559 sanitary surveys and 246 on-site inspections of ground water systems.

**GROUNDWATER UNDER THE DIRECT INFLUENCE OF SURFACE WATER PROGRAM:** The determination of groundwater under the direct influence of surface water is based on documentation of source construction characteristics, geology, topography, site-specific measurements of biological water quality, and field evaluation.

GWUDI water is defined as any water beneath the surface of the ground with: a significant occurrence of insects or other macro-organisms, algae, or large diameter pathogens such as *Giardia lamblia*; or significant and relatively rapid shifts in water characteristics such as turbidity, temperature, conductivity, or pH which closely correlate to climatological or nearby surface water conditions.

In its determination, EPD decided that the focus for proof of GWUDI would be on the first part of the definition (biological indicators) and the second part (physical parameters) would be used for additional evidence or as a priority flag. Microscopic Particulate Analysis (MPA) is a technique used to examine groundwater for the presence of biological surface water indicators. The indicators include plant debris (containing chlorophyll), algae, protozoa, cyanobacteria, living diatoms, nematodes, rotifers, crustaceans, insects, insect parts, spores, pollen, and human pathogens such as *Amoeba*, *Giardia* cysts, and *Cryptosporidium*. A significant occurrence of indicators would mean that the groundwater source is under the direct influence of surface water.

Several factors are considered for risk of GWUDI such as location, historical data, microbiological quality, chemical quality, physical parameters, well/spring construction, hydrogeology, geology, and aquifer type. The sources with the greatest risk are those in karst areas, springs without filtration, and old wells with broken sanitary seals, cracked concrete pads, faulty well casings and wells not grouted into the unweathered rock formation. In Georgia, the northwest, and portions of the southwest and south-central regions contain areas of karst topography.

EPD now requires water systems at risk of GWUDI to make arrangements with a private contractor to complete the sampling. In cases where the water system has a contract with the EPD Laboratory for water analysis, EPD performs the analysis of the MPA sample. EPD District Office personnel work with affected water systems and provide technical assistance in identifying and correcting the deficiencies contributing to the contamination of the sources.

**AREA WIDE OPTIMIZATION PROGRAM:** EPD discontinued participation in USEPA's multi-state Area Wide Optimization Program (AWOP) in 2008. Due to budget constraints and lack of resources, there are no plans to participate in this program in the near future.

**GEORGIA RURAL WATER ASSOCIATION:** During the reporting period from July 1, 2022, to June 30, 2023, EPD used 2% and 15% set aside funds to contract with GRWA for small system technical assistance and operator training (refer to Attachment B).

GRWA made 2,400 system visits to provide on-site technical assistance to water system owners and operators. Under this contract, GRWA also visited 320 water systems for technical assistance and collection of SOC samples. Under the same contracts, GRWA also conducted a total of 12 small water system rules and regulatory training workshops to train approximately 739 small water system personnel. As part of their technical assistance, education, and outreach efforts, GRWA also offered two educational conferences in Helen and Jekyll Island. A total of 1,821 water and wastewater personnel and laboratory analysts attended these training events.

Finally, from July 1, 2022 to June 30, 2023, GRWA provided a total of 128 Water Operator classes to a total of 4196 individuals on the following topics: Class IV Operator Training, Basic Water Training, Advanced Water Training, Backflow Training, Water Distribution Training, Water Lab Training, Water Exam Review Training, Fluoride Training, Management Training and Basic and Applied Math, Pumps, Safety, Confined Space Entry, O&M of Process Analyzers, and Emergency Preparedness and Response Training.

**GEORGIA ASSOCIATION OF WATER PROFESSIONALS:** GAWP's Drinking Water System Capacity Development Support Program continues to field technical support requests for expertise advice and training. During this reporting period, GAWP sent out numerous communication pieces (i.e., Special Advisories, Utility Notices, and Regulatory Updates) directly relevant to the regulated drinking water systems of Georgia. GAWP has an extensive electronic database that is available to EPD for dissemination of critical information to Georgia's drinking water systems.

**GEORGIA WATER AND WASTEWATER INSTITUTE:** GWWI was incorporated in 1993 and today provides the majority of water and wastewater training in Georgia, operating with financial assistance provided through contracts with EPD and modest tuition fees. During the reporting period from July 1, 2022 to June 30, 2023, GWWI conducted a total of 140 courses related to water; wastewater and/or laboratory operations and successfully trained 2,684 operators (refer to Attachment B).

In the training sessions and workshops that were conducted at the annual, fall, industrial, and spring conferences during FY 2023, GWWI's Technical Assistance, Education and Outreach efforts reached over 5,465 water and wastewater treatment plant operators, maintenance personnel, laboratory analysts, design engineers, consultants, and other professionals concerned with water and wastewater issues. Training topics included sessions on traditional issues such as water and wastewater treatment plant operations, maintenance and design, rules and regulations, laboratory operations, security and safety, as well as timely discussions on policy issues such as drought contingency planning, wastewater re-use, and legislative policy.

**OPERATOR TRAINING:** The State of Georgia obtained USEPA approval for its operator certification program on May 1, 2001, in conformance with Section 1419 of the SDWA, as amended. As part of this approval requirement, an annual report must be prepared in accordance with requirements of the "Final Additions to the Final Guidelines for the Certification and Recertification of the Operators of Community and Non-transient Non-community Public Water Systems" (published in the Federal Register on April 18, 2001) and submitted to USEPA to

adequately demonstrate that the State of Georgia is implementing its operator certification program. In addition, Section 1419(b) of the SDWA requires EPA to withhold 20% of the funds that a State is otherwise entitled to receive under the SDWA Section 1452 unless the State has adopted and is implementing a program that meets the requirements of USEPA's operator certification guidelines.

In its capacity development strategy program, EPD has utilized many resources and placed a very high priority on operator training and certification. EPD realizes that experienced, certified operators have the knowledge and dedication needed to properly operate a water system.

**GEORGIA'S OPERATOR CERTIFICATION PROGRAM:** The Georgia State Board of Examiners for the Certification of Water and Wastewater Treatment Plant Operators and Laboratory Analysts was created by legislation enacted in 1969 for the purpose of protecting the public health, safety, and welfare by establishing minimum qualifications for persons who operate public water supply treatment plants, water distribution systems, wastewater treatment plants, wastewater collection systems, or who conduct certain tests of water or wastewater samples in conjunction with the operation of public water system or wastewater treatment plants.

The Certification Board is part of the Professional Licensing Boards Division of the Office of the Secretary of State and is comprised of six members appointed by the governor. Five are active in the profession and one is a member from the public at large. At least two of the six Board members must be operators. All members are appointed for terms of four years. The Board meets six times per year.

The Board certifies six categories of licenses for PWS operators and laboratory analysts. Currently, there are 5,286 licensees who hold current certificates. Requirements for all categories include education, training, experience, and passage of a validated certification examination. Table 7 displays the number of certified operators by classification level for the calendar years 2012-2022. The data is also used to establish a baseline for EPD to measure progress in operator training and certification.

Table 7. Certified Drinking Water Operators

License Type	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Class I	771	735	783	796	821	771	806	790	817	764	825
Class II	454	452	461	427	442	412	446	405	444	409	442
Class III	978	903	973	890	943	882	946	890	939	837	951
Class IV	827	718	779	703	747	667	709	610	645	504	584
Distribution	1438	1383	1531	1596	1715	1671	1,817	1730	1823	1642	1877
Lab Analyst	524	503	531	532	555	534	563	537	575	530	607
Total	4992	4694	5058	4944	5223	4937	5287	4962	5243	4668	5286

**Classification of Systems, Facilities and Operators:** EPD classifies PWSs in accordance with Section 10 of the Certification of Water and Wastewater Treatment Plant Operators and Laboratory Analysts Act. Systems are classified based on plant size or population served, type of source water, and treatment complexity in accordance with Section 391-3-5-.39 of the Georgia Rules for Safe Drinking Water (refer to Attachment C). The system classification determines the level of certification the operator in responsible charge (ORC) of the system must possess. During this

reporting period, there have been no changes made regarding public water system classification for Community Water Systems (CWS) and Non-transient Non-community Water Systems (NTNCWS).

**Enforcement:** EPD is the primary agency in Georgia for enforcing compliance with Georgia's Operator Certification Program. When EPD determines a PWS has violated Georgia's operator certification requirements, EPD takes whatever action is deemed necessary to ensure the PWS returns to compliance. In most cases, this starts as a NOV to the system owner with a time schedule to return to compliance. Failure to comply with the established compliance schedule or repeating the same offense will result in the use of formal enforcement, such as a Consent Order, to obtain compliance with the operator certification requirements.

Historically, EPD records of formal enforcement for the FY23 reporting period that two Consent Orders were issued to water systems without a certified operator or ORC. The other eight enforcement orders were issued for various other State and federal violations, such as monitoring and reporting and violations (VOC, SOC, IOC, nitrate, coliform, lead and copper, radionuclide etc.), acute and non-acute MCL violations, CCR violations, pressure and flow problems, permit violations, and failure to comply with other State requirements. These were not specific violations of the operator certification program.

The Operator Certification Board and the Professional Licensing Boards Division of the Office of the Secretary of State handle specific enforcement actions against certified operators. During the reporting period, there were three complaints received by the Board for practicing without a license and other violations of the Rules for water operators with two cases closed and one under investigation.

**COMPLIANCE AND ENFORCEMENT MECHANISMS:** EPD uses informal and formal enforcement actions, such as Notices of Violation, Consent Orders, and Administrative Orders to obtain compliance with the federal and state drinking water regulations. Enforcement is an important tool to address PWSs that lack adequate capacity. EPD's enforcement program has been a significant factor in encouraging private public water systems with limited capacity to physically merge or consolidate with local governmentally owned water systems or water authorities.

The continued use of negotiated settlements in the form of Consent Orders seems to be the most effective enforcement mechanism, rather than mandatory fines or civil penalties. Consent Orders allow EPD the flexibility to set appropriate penalties based upon the level of deficiencies and the negotiated plan to correct the violations in a timely manner. Figure 4 shows the number of enforcement orders issued for violations of the SDWA and/or the permit during the past eleven years.

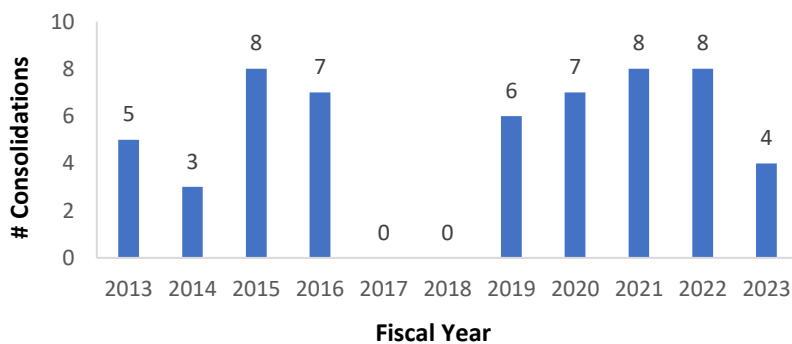
Figure 4. Enforcement Orders for public water systems.



**WATER SYSTEM CONSOLIDATIONS:** Whenever possible, EPD encourages consolidation of a water system with a nearby local governmentally owned water system or water authority. If formal enforcement action is being taken on a private water system, EPD may offer lower penalties if the water system agrees to connect to a local governmentally owned water system or water authority within a reasonable period of time. The governmentally owned larger water systems have the best track records for compliance and customer service, are generally larger systems, and have the TMF resources to provide safe, reliable drinking water on a consistent basis.

As of June 30, 2023, a total of 452 privately owned and operated PWSs have consolidated with a nearby governmentally owned PWS or water authorities. Figure 5 displays the number of consolidations in Georgia for the past 10 years. On average, approximately four water systems per year are successfully consolidated with a local governmentally owned PWS or water authority.

Figure 5. Consolidations with governmentally owned water systems or water authorities.



EPD expects the number of consolidations to remain the same or may be increase slightly in the future as a result of increased financial and managerial burdens associated with complying with the proposed PFAS rule and Lead and Copper Rule Revisions.

**CROSS CONNECTION CONTROL:** EPD requires that all backflow prevention assembly testers hold a valid certification from a certification program recognized by EPD. GAWP has worked under contract to assist EPD in establishing this Statewide Backflow-Prevention Tester Certification Program. GAWP has been designated by EPD to administer the certification program for the State of Georgia utilizing exams provided by the Association of Boards of Certification. In addition, the American Backflow Prevention Association, the American Society of Sanitary Engineering, and the



University of Florida/TREEO Center have been approved as official certification programs and are authorized to provide certification exams to GAWP to be used in this process. A new guidance document for the backflow prevention certification program was posted with an effective date of September 1, 2021. The guidance document was revised with input from the stakeholders.

Approximately 3,085 backflow prevention professionals have been certified inception of the program in 2000.

**INFORMATION MANAGEMENT:** During FY2023, EPD utilized the 10% set-aside for activities associated with information management. This work improves the accuracy of SDWIS data reported to USEPA. In 2021 EPD upgraded to the new web-release SDWIS/State version 3.4. One of the new features of SDWIS/State is the ability to view much of the inventory, monitoring, sampling, and enforcement information for any water system online through the Drinking Water Watch. Water. System owners and operators, along with their customers, can view this information by going to <http://gadinkingwater.net>. EPD staff continues to work to utilize all aspects of SDWIS/State version 3.4 including sample scheduling, automated compliance determinations, and enforcement actions.

EPD continues to support use of the web-based surface water treatment plant monthly operating reporting (MOR) system. The data management system allows the surface water systems to enter their own water quality and compliance data and submit the report to EPD by the 10th day of the month. EPD is then able to review the official data submitted by the ORC and determine compliance in a timely manner. EPD is in the process of replacing the current version of the MOR database with a newer software which would accommodate the monthly report required under the Groundwater Rule (GWR) and the RTCR. EPD expects to make the transition by December 2024.

**DRINKING WATER FEE FOR LABORATORY TESTING AND RELATED SERVICES:** The “Drinking Water Fee for Laboratory Testing and Related Services” program, established by EPD, makes compliance monitoring and laboratory testing available to all PWS at a reasonable cost. Under an optional fee for service, EPD provides a water system with laboratory and related services that are consistent with the owner’s need to comply with the NPDWR and related regulations. EPD specifically agrees to provide the required laboratory analyses, sampling containers and instructions (as monitoring is required), written reports on the results of the analysis of each sample, technical assistance regarding corrosion control treatment, applicable monitoring waivers, and limited vulnerability assessments. The “fee for service” is based on the total population served by the water system, the population type (community or non-community), the type of source water, and the number of entry points.

After the 1986 amendments to the SDWA, EPD found it necessary to implement the voluntary “Drinking Water Fee for Service Laboratory Testing Program” to expand its existing laboratory services to cover new and increase monitoring for Lead and Copper, Phase II, and Phase V contaminants (synthetic organic chemicals, Inorganic chemicals, volatile organic chemicals, PCBs, etc.). The Department of Natural Resources Board approved the voluntary program in April 1992. In addition to the monitoring, the fee system also covers related services such as information management, compliance reporting, vulnerability assessment (asbestos, dioxin, cyanide), waiver program (monitoring reduction), training, technical assistance, corrosion control, on-site investigation, public education and information, and enforcement. With the implementation of the “Drinking Water Fee for Service Laboratory Testing Program,” EPD maintained primacy for drinking water regulations while providing a valuable service to PWSs. Without the program, many small PWSs would have difficulty complying with the NPDWR monitoring requirements due to the cost of testing and the complexity of the monitoring schedules.

The voluntary “Drinking Water Fee for Laboratory Testing and Related Services” program has been invaluable to the PWS owners and operators in Georgia. Currently, approximately 96% of the PWSs in Georgia participate in one of the two optional drinking water fee programs.

EPD will continue to provide this cost-effective laboratory service to help PWSs acquire and maintain financial and technical capacity to comply with current and future drinking water regulations. All regulated chemical, physical, and radiological tests are being performed under the drinking water fee system, including the total trihalomethane and halo acetic acid tests required for the Initial Distribution System Evaluations under the Stage 2 Disinfectants and Disinfection Byproducts Rule and the source water monitoring for *Cryptosporidium* and *E. Coli* under the Long Term 2 Enhanced Surface Water Treatment Rule.

Several years ago, EPD found it necessary to implement a separate fee for coliform testing for the microbiological laboratory services provided by EPD Laboratory. This fee covers analytical services associated with the RTRC, and the costs are based on the number of routine samples a PWS is required to collect each month or quarter. The service includes analyses for routine, repeat, additional routine, replacement, special, source approval, and triggered source water microbiological samples. The coliform fee for service program” offers high quality, efficient and cost-effective microbiological testing services to water systems and helps EPD assure Georgia’s drinking water supply is safe.

**SOURCE WATER ASSESSMENT AND DELINEATION:** In accordance with Georgia’s Source Water Assessment and Protection Implementation Plan, EPD prepares initial source water assessment plans (SWAPs) on all newly permitted privately owned groundwater systems and updates SWAPs for systems serving a population of less than 50,000 on a 10-year cycle. Systems serving a population of more than 50,000 prepare their SWAP on a 10-year cycle. In addition, the program also reviews SWAP prepared by the eleven water planning councils which are updated every 10 years.

From July 1, 2022, through June 30, 2023, approximately 41 SWAPs were initially prepared or updated for privately owned groundwater systems in Georgia. Of those, 27 were for community groundwater systems, 12 were for transient non-community groundwater systems, and two were for non-transient non-community groundwater systems.

Also, in accordance with the Source Water Assessment and Protection Implementation Plan, EPD has review and approval authority for surface water SWAPs prepared by municipalities and privately owned surface water systems and is charged with completing SWAPs for smaller surface water systems. During this reporting period, EPD reviewed and approved of two surface water SWAPs.

**GEORGIA WARN PROGRAM:** Following the impacts of Hurricane Katrina, it became apparent that even with the extraordinary efforts of utilities, water associations, and state regulatory agencies, the demand for resources and knowing where those resources were available overwhelmed the ability to effectively coordinate an initial response to the disaster. Realizing that utilities needed a different approach, leaders in the water community and state agencies have joined together to create the Georgia Water/Wastewater Agency Response Network or GAWARN.

The State of Georgia initiated the formation of the GAWARN (Water/Wastewater Agencies Response Network) in August 2006. The mission of the program is to support and promote statewide emergency preparedness, disaster response, and mutual assistance for public and private water and wastewater utilities for natural and man-made events. It is a network of utilities helping utilities to prepare for emergencies and to organize a response according to established

requirements. This program is consistent with other statewide mutual aid and assistance programs and the National Incident Management System (NIMS).

GAWARN's steering committee board members consist of personnel from EPD, public utilities, GAWP, and GRWA. The board meets periodically to discuss progress of the program. Several large and small water systems that have signed the Mutual Aid Agreement are part of the GAWARN network.

GAWARN has developed an interactive website program where utilities are able to request help, respond to incidents, and upload their resources into the program at <http://www.gawarn.org>. The GAWARN website has integrated the Resource Typing Manual, allowing each member to enter information specific to their utility about their resources including pumps and generators. The website makes it possible to request resources from neighboring utilities that have available resources.

The GAWARN program is a critical step in water incident and disaster preparedness. Other benefits of the program that make it more appealing to water utilities include no cost to participants, enhanced access to specialized resources, provides insurance for access to resources during an emergency without pre-contractual limitations or retainer fees, expedites arrival of aid and the agreement contains indemnification and workers' compensation provisions to protect participating utilities, and provides for reimbursement of costs, as needed. The program launched on March 29, 2007. The GAWARN Mutual Aid and Assistance agreement is available to all public and private water and wastewater utilities in the state.

The GAWARN had its first activation in response to the Iowa Flooding in mid-June of 2008. No actual deployment was necessary; however, the activation served as a preparatory and learning opportunity. Since then, the GAWARN program and EPD have been involved in numerous training and exercise programs to better prepare drinking and wastewater facilities for natural and man-made disasters.

In addition, there have been numerous activations of the State Operations Center (SOC) over the last few years in response to Natural Disasters that have threatened to impact the water sector, and part of the job duties under ESF3 is to fulfill resource requests from impacted utilities via mutual aid. EPD and GRWA have been active participants and leaders in the Emergency Support Function 3 (ESF3) in responding to emergency events in Georgia.

In August 2022, EPA Region 4 hosted a virtual Emergency Drinking Water Supply (EDWS) Workshop. The workshop brought together large water utilities, state agencies (e.g., primacy, local and state emergency management), and federal agencies to outline roles and responsibilities for EDWS planning and implementation.

In September 2022, unusual rainfall caused flooding, which affected the drinking water and wastewater treatment plants of the City of Summerville and the City of Menlo in northwest Georgia. ESF3 and GRWA provided technical assistance, arranged for bottled water, arranged for emergency generators, and helped the plants get back on line when the water receded.

In September 2022, SOC was activated as a part of state-wide preparation for Hurricane Ian. EPD supported ESF-3 and GRWA participated in the preparation. Hurricane Ian changed course and did not impact Georgia.

**CONSUMER CONFIDENCE REPORTS:** In 1998, EPD initially established a three-year contract with GAWP using Performance Partnership Grant (PPG) funds to assist community water systems

in completing the consumer confidence report (CCR) requirements of the 1996 Federal SDWA Amendments. As part of the contract, GAWP prepared and distributed the “Consumer Confidence Report Guidance and Preparation Manual, May 1999”, to water systems affected by the new rule, directly trained over 750 water system personnel in a formal classroom setting, fielded over 1,400 technical support calls, presented material on the CCR program to Georgia Municipal Association (GMA), the Association County Commissioners of Georgia (ACCG), the Carl Vinson Institute of Government, Georgia’s Peer Review Program, numerous Rural Development Centers (RDCs), nine GAWP conferences, and provided direct technical support by various other means. Table 8 summarizes the existing compliance data for the CCR Rule. Based on the compliance history, the CCR assistance was a success and reduced the rate of non-compliance for a new, complex regulation that affected many small water systems in Georgia. It should be noted that the initial compliance rates for the regulation were significantly lower. For example, for the 2000 reporting year, the initial compliance rate for water systems meeting the July 1 delivery deadline was less than 70%. To obtain better compliance, both formal and informal enforcement actions were taken by EPD.

As shown in the table, compliance with the CCR Rule had been high until 2003. Beginning in 2004, the compliance rate began to decline. The compliance rates increased noticeably from a low of 89.7% in State FY 2005 to approximately 97% in State FY 2016. The compliance rate again decreases to 89% in State FY 2017, after which an overall increase can be seen again. The compliance rate for FY 2023 will increase as more reports are received and logged in to the system.

In order to achieve a higher compliance rate, EPD issues enforcement actions. For FY 2023 approximately 150 CCR violations will be sent out. Most of the violations deal with missed deadlines or improperly filled out CCRs. EPD also sends out reminder letters every year ahead of the deadline. EPD staff routinely present on CCR at GRWA and GAWP conferences to increase awareness of the deadline and make the water systems aware of the CCR creation tool available to generate CCRs.

Table 8. CCR compliance rates.

Fiscal Year	CCRs Received	CCRs Required	Compliance Rate (%)
2002	1,586	1,595	99.4
2003	1,594	1,607	99.2
2004	1,574	1,637	96.1
2005	1,481	1,651	89.7
2006	1,601	1,646	97.3
2007	1,613	1,659	97.2
2008	1,665	1,683	98.9
2009	1,640	1,694	96.8
2010	1,696	1,747	97.1
2011	1,746	1,689	96.7
2012	1,748	1,771	98.7
2013	1,734	1,765	98.2
2014	1,735	1,762	98.5
2015	1,739	1,785	97.4
2016	1,694	1,739	97.4
2017	1,565	1,754	89.2
2018	1,584	1,728	91.7
2019	1,642	1,725	95.2
2020	1,605	1,725	93.0
2021	1,649	1,729	95.4
2022	1551	1,720	90.17
2023	1452	1729	84

**DRINKING WATER STATE REVOLVING**

**FUND:** With the passage of the 1996 Amendments to the SDWA, the Administrator of the USEPA was authorized to establish a

DWSRF loan program to assist states in financing local PWS infrastructure needed to achieve or maintain compliance with SDWA requirements to protect public health.

The Georgia General Assembly created GEFA in 1986 as the successor agency of the Georgia Development Authority Environmental Facilities Program. GEFA is the primary state agency for assisting local governments in financing the construction, extension, rehabilitation, repair and replacement, and securitization of environmental facilities necessary for public water purposes. Georgia utilizes a large portion of the grant to provide low interest loans to eligible PWSs needing

infrastructure improvements to achieve or maintain compliance with the SDWA requirements or to protect public health. The areas of infrastructure improvement funded through the DWSRF program include treatment, sources of public water supply, transmission (water mains and pumping facilities), and storage. For FY 2023, \$91.1 million in project assistance has been awarded for 18 water system improvement projects.

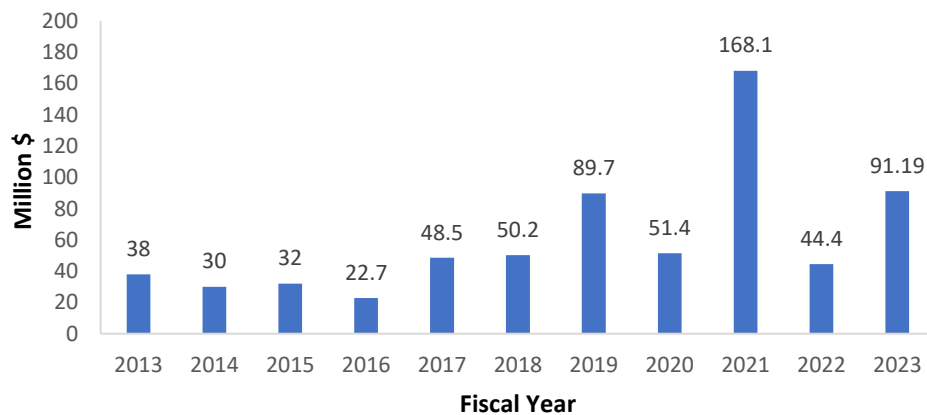
The primary goal of the DWSRF program is to better protect public health. To accomplish this goal, the DWSRF program directs funds toward the most pressing compliance and public health related needs. The remaining loan funds have been used to help utilities achieve compliance with drinking water regulations. A secondary goal of the DWSRF program is to support the continuation of assistance and prevention programs to ensure compliance with drinking water standards. Georgia EPD attempts to utilize 100% of the Public Water System Supervision set-aside from each capitalization grant to accomplish this goal. As stated in the Intended Use Plan, Georgia tries to maximize assistance to small or disadvantaged communities serving less than 10,000 people. Table 9 shows the annual number of assistance agreements by population size for the past 10 years.

Table 9. DWSRF Project Assistance Agreements

DWSRF Assistance by Population Size	Annual Number of Projects Receiving Assistance										
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Less than 500	2	0	1	4	5	2	4	6	4	3	3
501 – 3,300	4	2	8	7	9	12	7	6	6	9	2
3,301 – 10,000	4	2	10	3	8	7	6	9	14	9	6
10,001 – 100,000	6	7	4	3	8	9	3	3	9	3	6
100,001 and Above	0	0	0	0	0	0	1	0	4	0	1
Total Number of Agreements	16	11	23	17	30	30	25	24	37	24	18

Figure 6 displays the total dollar amount of DWSRF project assistance provided to water systems each year from FY 2013 through FY 2023 (in millions). In FY 2023, approximately \$91.1 million in DWSRF assistance was awarded for 18 projects. Eleven of these projects benefited water systems serving less than 10,000 persons.

Figure 6. DWSRF project financial assistance.



Tables 10 and 11 display detailed statistics on DWSRF project assistance for the period from FY 2001 through FY 2023 by project category.

Table 10. DWSRF project financial assistance by category.

Category	Yearly Assistance in Millions (FY2001 – FY2011)										
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Treatment	0	0.11	2.7	18.3	14.2	1.95	11.75	0.06	0	8.3	7.34
Distribution	8.2	2.8	6.1	22.8	10.3	11.79	13.24	8.53	6.1	41.3	21.38
Source	0.93	0.73	1.4	1.06	1.6	1.41	0.396	1.19	1.0	3.5	3.18
Storage	0.92	2.4	4.8	5.0	2.6	2.32	0.57	4.06	0.1	3.5	4.22
Other	0	0.17	0	1.0	0.02	0	0	0	0	0	0
Cumulative Total Dollar Amount: \$265,326,000 (through FY 2011)											

Table 11. DWSRF project financial assistance by category (continued).

Category	Yearly Assistance in Millions (FY 2012 – FY 2023)											
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Treatment	0	7.30	6.05	1.3	2.25	14.5	5.27	11.3	33.9	33.3	18.71	10.1
Distribution	12.18	21.47	17.22	24.4	14.8	26.4	28.7	16.6	10.5	70.7	172.45	74.82
Source	1.27	3.99	1.75	0.83	1.8	2.8	5.54	55.9	6.3	11.5	3.19	4.25
Storage	1.05	5.21	4.63	0	1.5	2.6	6.51	3.3	0.72	8.8	2.06	0
Other	0	0.06	0	1.8	1.5	1.9	4.17	0	0	43.8	7.7	2
Cumulative Total Dollar Amount: \$1,104,813,763 (through FY 2023)												

Throughout this reporting period, GEFA continued to strengthen the Authority’s internal processes in anticipation of the future maturity of the DWSRF program. GEFA has also strived to meet the timely and expeditious use of projects funds to meet the binding commitment and un-liquidated obligation requirements of the DWSRF Program.

**STATEWIDE WATER MANAGEMENT PLAN:** To ensure the availability of high quality and reliable drinking water to the citizens of Georgia, EPD and Georgia’s ten Regional Water Planning Councils are required (by a 2008 joint House-Senate resolution that adopted a Comprehensive Statewide Water Management Plan) to periodically review, revise and implement ten regional water plans (RWPs). An 11th regional plan is developed and periodically updated by the Metropolitan North Georgia Water Planning District under a separate statutory authority. These RWPs help Georgia manage its water supply in a sustainable manner and protect public health and the environment. The RWPs help PWSs address water supply and capacity development issues by providing guidance for a sustainable, reliable, and safe supply of water for all users in Georgia. As provided in the State Water Plan, the regional plans are used to guide EPD’s permitting decisions and GEFA’s consideration of state loans to PWSs, including DWSRF loans.

As required by the State Water Plan and in accordance with EPD guidance, RWPs are developed by Regional Water Planning Councils and then reviewed by EPD before adoption. The planning process includes forecasting water and wastewater demands (municipal, industrial, agricultural, and thermo-electric energy) through 2060 and comparing those demands against assessments of resource capacity. EPD developed water availability and water quality resource assessments to

evaluate the capacity of water resources to meet demands for water supply and wastewater assimilation. The resource assessments are modeling exercises that use several conservative assumptions. The resource assessments identified potential gaps in the capacity of water resources to meet water supply and wastewater demands, within thresholds selected to indicate potential local and regional impacts. The regional water plans address potential gaps through appropriate water management strategies to be implemented by water users (including PWSs) to stay within sustainable capacities.

The initial set of RWPs were adopted in November 2011. The RWPs are subject to review every five years, and the Regional Water Planning Councils reviewed and revised the RWPs in 2017 and 2023. As part of the review and revision process, EPD and the state's Regional Water Planning Council support contractors convened stakeholder groups to provide input to updated forecasts of the municipal, industrial, agricultural and thermoelectric energy sector water demands. Those forecasts, along with updates to the resource assessment models, informed updates to the regional plans.

**ASSET MANAGEMENT:** EPD submitted to EPA Region 4 a revised capacity development plan in November 2022. The revised capacity development plan has the following requirements related to asset management plans:

- Beginning January 1, 2024, Georgia will require all new community water systems and non-transient non-community water systems (NTNCWS) serving population greater than 3,300 to submit an asset management plan that addresses the five core questions framework, along with their business plan, before the permit is issued.
- Beginning January 1, 2024, Georgia will require that the business plan submitted as part of an ownership transfer or renewal application for systems serving populations greater than 3,300 includes an asset management plan that addresses the five core questions framework. For PWSs without a business plan, an asset management plan will still be required to be submitted with the ownership transfer or renewal application.
- Georgia will use its enforcement authority to require asset management plans for water systems that have chronic compliance issues.

EPD held a stakeholder meeting in October 2022 to seek input on the inclusion of asset management plans and addition of a new appendix, Appendix C, to the Georgia Minimum Standards for Public Water Systems. Appendix C, titled "Asset Management Plans for Public Water Systems," provides specific information about asset management plans.

EPD held a public meeting in March 2023 to seek public input to the rule changes requiring submittal of asset management plans. The Georgia Rules for Safe Drinking Water 391-3-5-.04 (11) requiring asset management plans became effective May 21, 2023. EPD will start tracking asset management plans starting January 1, 2024, and will include the information in the next capacity development report.

## **CONCLUSION**

This report has been prepared to outline the progress made in developing and implementing Georgia's capacity development authority and strategy programs. The efforts described above are ongoing. EPD has established a program that provides a solid foundation for current and future activities to ensure all Georgians are provided safe, reliable drinking water. To date, significant

progress has already been made towards improving the TMF capacity of the PWSs in Georgia. New systems are being designed and constructed to meet more stringent standards for quality and reliability, and new water system owners and operators are required to demonstrate adequate managerial and financial capacity prior to commencing operation. At the same time, deficient or poorly run PWSs are being encouraged, through various compliance and enforcement mechanisms, to consolidate or merge with nearby governmentally owned and operated water utilities.

Under the various current capacity development strategy efforts, all PWSs in Georgia are offered assistance to help them acquire and maintain TMF capacity. The assistance includes, but is not limited to, technical engineering review of all water system projects, direct on-site technical assistance, in depth sanitary surveys and more frequent inspections, proactive compliance and enforcement initiatives, inexpensive and convenient training opportunities, low interest financing to correct system deficiencies, affordable monitoring and testing services, and other local government initiatives. EPD has fully implemented the strategy, which provides targeted, voluntary, and mandatory assistance to PWSs. Targeted assistance is directed at systems most in need of acquiring adequate TMF capacity. Systems are identified and prioritized based upon the knowledge gained by EPD staff through compliance records, sanitary surveys/inspections, complaints, and the potential impact of new regulations.

While EPD has the lead role and regulatory authority for the capacity development program, this agency will not be able to fully achieve the goals of the program without the active ongoing involvement of our various stakeholder and partner organizations. These organizations, as mentioned throughout the report, have played a major role in the capacity development program and contributed immeasurably to the success that has been achieved so far. In the future, EPD will continue to evaluate the success of the capacity development program, maximize the use of all available resources to help the systems most in need, and develop effective working relationships with other State and local agencies and organizations to further achieve Georgia's long-term goals.



**ATTACHMENT A: List of New Public Water Systems (FY 2023)**

PERMIT DATE	WSID	NAME	TYPE	ETT > 11?	VIOLATIONS
7/15/2022	GA1110074	Bear Track	C		
7/29/2022	GA3050095	Agnolia Creek Subdivision	C		
8/1/2022	GA0310306	River Bluff Water System	C		
8/5/2022	GA2670055	North Tattnall Elementary School	NTNC		
8/10/2022	GA1950075	Grace Estates	C		
8/16/2022	GA2970057	Creekside at Riverstone	C		
9/1/2022	GA1330078	Sunset Bluff S/D	C		
9/2/2022	GA1870110	University of North Georgia Observatory	NTNC		
9/9/2022	GA1110127	Fannin County-Lakeside	C		
9/21/2022	GA1830070	Dollar General #23660-Ludowici	NC		
9/26/2022	GA0710103	The Enclave Subdivision	C		
9/26/2022	GA0870080	Southern Raceway MX	NC		
11/21/2022	GA0310307	Burktown Subdivision	C		
11/21/2022	GA0390069	Estates at Sanctuary Cove	C		
11/21/2022	GA1470081	Moreland Heights	C		
11/21/2022	GA1470082	Wynword Pointe	C		
12/6/2022	GA2430011	Dollar General #24093	NC		
12/9/2022	GA2370094	Meadow Crest Subdivision	C		
12/9/2022	GA3110100	USFS- Low Gap Recreation Area	NC		
1/4/2023	GA0310308	See Pines Apartments	C		
1/4/2023	GA1230089	Anderson Farms	C		
1/25/2023	GA0050021	Dollar General #22394 (ALMA)	NC		
1/25/2023	GA2290040	Dollar General #23279 (Blackshear)	NC		
2/9/2023	GA1310061	Mejia Produce Migrant Camp	NC		
2/14/2023	GA0510285	Bloomingtondale South	C		
2/20/2023	GA0310239	Luke Estates MHP	C		
3/6/2023	GA1830069	Bakerfield Subdivision	C		
3/7/2023	GA0310305	Fraser Field	C		
4/18/2023	GA1930023	Macon Co.-Whitewater Creek Park	NC		
5/12/2023	GA2850138	Dollar General #24231	NC		
6/1/2023	GA2750082	Dollar General #24600	NC		
6/12/2023	GA1110134	Fannin Co- Evening Shade Water System	C		

Type: C = Community, NTNC = Non-Transient Non-Community, NC = Transient Non-Community

ETT = Enforcement Targeting Tool

The purpose of the enforcement-targeting tool is to prioritize public water systems for enforcement response. It assigns points for each unaddressed violation at a Public Water System in the previous 5 years, which are added to create a total score for each PWS using the formula: Sum of (S1 + S2 + S3 +...) + n where "S" is the severity factor for each unaddressed violation and "n" is a time factor applied to the water system. The S and n factors are described below:

**S = violation severity, generally based on Public Notice Tiers**

S Values

- 10 Acute violation, Tier 1. Nitrate MCLs, Acute MRDL, TCR Acute, Turbidity TT, SWTR TT.
- 5 Other health-based violation, Tier 2. TCR MR Repeats and Nitrate MRs
- 1 Monitoring/reporting violation, or any other violation, Tier 3 (such as PN, CCR, etc.)

**n = maximum number of years since the system's oldest unaddressed violation**

n Values

0 to 5 n = (current calendar year) minus (compliance period begin or end date)

CCR = Consumer Confidence Report (Rule)

MCL = Maximum Contaminant Level

MR (or M/R) = Monitoring / Reporting Violation

TT = Treatment Technique

MRDL = Maximum Residual Disinfectant Level

PN = Public Notification (Rule)

PWS = Public Water System

SWTR = Surface Water Treatment Rule

TCR = Total Coliform Rule

## ATTACHMENT B: GWWI and GRWA Information



### **Georgia Water & Wastewater Institute, Inc.**

A Subsidiary of the Georgia Association of Water Professionals

511 Stadium Drive  
Carrollton, Georgia 30117  
(770) 214-0153

July 1, 2023

#### MEMORANDUM

**To:** Manny Patel, Georgia Environmental Protection Division

**From:** Pamela S. Burnett, Executive Director  
Georgia Water & Wastewater Institute

**RE:** Operator Training Program Update – Fiscal Year July 1, 2022 - June 30, 2023

Georgia's water and wastewater utilities have recently entered a new era in protecting public water supplies and providing safe tap water. Today, new challenges and issues face utility operations that require increased support and guidance from State agencies as well as training from professional organizations such as the Georgia Water & Wastewater Institute.

GWWI was separately incorporated in 1993, and today provides the majority of water and wastewater operator training in the State of Georgia, operating with financial assistance provided through contracts with EPD and modest tuition fees. The curriculum includes training in the areas of basic and advanced water and wastewater treatment plant operations, industrial wastewater treatment plant operations, laboratory operations, backflow prevention and cross-connection control, and numerous related courses in such areas as utilities supervision and management, safety, and maintenance. GWWI annually offers approximately 95 courses, with a total attendance of over 1300 students. GWWI is dedicated to education and dissemination of technical and scientific information.

GWWI is pleased to report the following information related to Operator Training in the State of Georgia.

## **Reporting Period of July 1, 2022 - June 30, 2023**

### **1. DWSRF 15% Set-aside Funds: Class 4 Water Operator Training Update:**

Relating to the Class 4 Water Operator Training Program, GWWI completed the following during the 2023 fiscal period of July 1, 2022 - June 30, 2023:

:

- Offered 5 Class 4 Water Training Course
- Successfully trained 37 operators

While attending these courses, the operators were informed on Georgia's groundwater sources, including types of aquifers and wells, groundwater protection, water treatment, and proper operation of a small water plant under state and federal guidelines. Major topics include Groundwater Resources in Georgia, The Safe Drinking Water Act, Monitoring Requirements, and Basic Mathematics.

Due to the economic climate, cut in travel and training budgets, GWWI has take extra measures in attempts to attract class 4 operators to the Class 4 training course. We continue to look into ways to take these training materials to the operators which are in need. GWWI is open to any suggestions of efforts to attract Class 4 operators.

### **2. DWSRF 10% Set-aside Funds: Water and Wastewater and Laboratory Analysts Training**

Relating to the Water, Wastewater and Laboratory Analysts Training, GWWI completed the following during the 2023 fiscal period of July 1, 2022 - June 30, 2023:

- Conducted 135 courses related to water, wastewater and/or laboratory operations.
- Successfully trained 2,647 operators

GWWI is dedicated to education and dissemination of technical and scientific information. We welcome any comments and/or questions related to our training. Please contact us at (770) 214-0153.

Thank you for your continued support of our efforts.

Sincerely,



Pamela S. Burnett,  
Executive Director  
Georgia Water & Wastewater Institute, Inc.



## Georgia Water & Wastewater Institute, Inc.

A Subsidiary of the Georgia Association of Water Professionals

511 Stadium Drive  
Carrollton, Georgia 30117  
(770) 214-0153

7/1/2023

### MEMORANDUM

To: Manny Patel, Georgia Environmental Protection Division

From: Pamela S. Bumett, Executive Director  
Georgia Water & Wastewater Institute

RE: Technical Assistance, Education & Outreach Update  
Fiscal Year July 1, 2022 – June 30, 2023

Georgia's water and wastewater utilities have recently entered a new era in protecting public water supplies and providing safe tap water. Today, new challenges and issues face utility operations that require increased support and guidance from State agencies as well as training from professional organizations such as the Georgia Water & Wastewater Institute.

The Georgia Water & Wastewater Institute goes beyond typical classroom type training in efforts to reach the needs of the operators in the State of Georgia. In doing so, GWWI participates in many events coordinated by our parent organization, the Georgia Association of Water Professionals (formerly GW&PCA). GAWP conducts numerous conferences and workshops focused on providing continuing education opportunities for professionals in the water and wastewater industry. At these events, GWWI participates in the presentation of technical papers and "short" training sessions throughout the conference and/or event. GWWI also participates in the exhibiting functions of these events by having a display booth explaining and advertising the training opportunities offered by GWWI. GAWP also conducts planning sessions for small, medium, and large utility directors as well as Association-wide District Director Meetings in efforts to better address the needs of the profession around the State. At these planning type meetings, GWWI attends, not only to make utility directors statewide aware of our training programs and offerings, but also to serve as a resource to the utilities as they plan for the future. This has proven to be a very effective tool for both the utility as well as GWWI in making sure the operators receive the types of training that are needed and required.

The following is a report of the events GWWI attended and participated in during Fiscal Year July 1, 2022 - June 30, 2023.

- **July 17-20, 2022** **GAWP Annual Conference**
  - (1744 Attendees) GAWP's Annual Conference includes sessions on traditional topics such as water and wastewater treatment plant operations, maintenance and design, laboratory operations, and safety, as well as timely discussions on policy issues such as drought contingency planning, wastewater re-use, and legislative policy.

- **November 15-16, 2022**                      **GAWP Fall Conference**
  - (410 Attendees) The Fall Conference is targeted towards the operations-level professionals and includes sessions on traditional topics such as water and wastewater treatment plant operations, maintenance and design, laboratory operations, and safety.
  
- **April 18-19, 2023**                      **GAWP Spring Conference**
  - (664 Attendees) The Spring Conference is targeted towards the operations-level professionals and includes sessions on traditional topics such as water and wastewater treatment plant operations, maintenance and design, laboratory operations, and safety.

During the Fiscal Year July 1, 2022 - June 30, 2023 period, GWWI's Technical Assistance, Education & Outreach efforts reached over 5,465 water and wastewater treatment plant operators, maintenance personnel, laboratory analyst, design engineers, consultants, and other concerned about Georgia water and wastewater issues.

GWWI is dedicated to education and dissemination of technical and scientific information. We welcome any comments and/or questions related to our training. Please contact us at (770) 214-0153.

Thank you for your continued support of our efforts.

Sincerely,



Pamela S. Burnett  
Executive Director  
Georgia Water & Wastewater Institute, Inc.



# Georgia Rural Water Association

P.O. Box 383 • Barnesville, GA 30204 • phone 770-358-0221 • fax 770-358-4379  
Website: WWW.GRWA.ORG • E-Mail: [grwal@grwa.org](mailto:grwal@grwa.org) and [info@grwa.org](mailto:info@grwa.org)

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## Georgia Rural Water Association

Public Water System Capacity Development Activities

**JULY 1, 2022, through JUNE 30, 2023**

**Technical Assistance, Education, Outreach Efforts:**

During the subject period, GRWA offered 128 Training Classes reaching 4,196 operators in Georgia. In addition, 1,821 water system and industry personnel attended the 2 Technical Training Conference conducted by GRWA. Over 6,000 water professionals received training by GRWA during the period.

Through the combined efforts of GRWA's Statewide Training Program, On-Line Training Courses, Technical Training Conferences, and On-Site Technical Assistance Program, over 6,000 operators, system personnel, and industry professionals were reached by GRWA to further System Capacity Development.

The following is a breakdown of the different ways GRWA utilized its resources to reach the water industry professionals and meet the needs of System Capacity Development.

GRWA Technical Training & Exhibit Demonstration Conferences:

<u>Dates</u>	<u>Attendance</u>
<b><u>Helen GA Fall Conference:</u></b> <b><u>Oct 24-26, 2022</u></b>	<b><u>667 water system personnel</u></b>
<b><u>Jekyll Island Conference Center</u></b> <b><u>May 9-11, 2023</u></b>	<b><u>1,154 water system personnel</u></b>

**GRWA Water System On-Site Technical Assistance:**

<u>Dates</u>	<u>On-site Technical Assistance (TA)</u>
<b><u>7/1/22 to 6/30/23</u></b>	<b><u>2,440 TAs made to water systems</u></b>

GRWA completed 27 Business Plans for water systems during this period. GA EPD requires systems complete Business plans to demonstrate that a system will technically, managerially, and financially be capable of meeting all regulatory requirements to provide safe and adequate drinking water and to provide for the proper collection and treatment of all wastewater. GRWA assist systems in completing these plans.

**Technical Assistance Visits and SOC Sampling:**

In addition to the number of public water systems visited for technical assistance: **320 WATER SAMPLES** were collected during subject period. **SOC water samples**.

SOC= Synthetic Organic Contaminants: To collect and deliver samples to the state lab for SOC water testing to ensure water quality.

**Capacity Development Training Activities: DWSRF**

**Small Water System Rules & Regulatory Training**  
**Regulatory Training Workshops July 1, 2022- June 30, 2023**

**Training Workshops: 12**                      **Operators Trained: 739**

**Classroom Training for Water System Operators and Personnel**  
**7/1/2022 thru 6/30/2023.**

<b>YEAR</b>	<b>No. of Classes</b>	<b>No. of Operators</b>	<b>Class Topics</b>
July 2022 - June 2023	<b><u>85</u></b>	<b><u>2,070</u></b>	Class IV Operator Training; Basic Water Training; Advanced Water Training; Backflow Training: Water Distribution Training: Water Lab Training; Water Exam Review Training; Fluoride Training: Management Training;
July 2022 – June 2023	<b>On-Line Training Courses:</b> <b><u>43</u></b>	<b>Operators taking On-line Training</b> <b>2,126</b>	Basic and Applied Math; Pump; Safety; Confined Space Entry; O & M of Process Analyzers., Emergency Preparedness & Response Training.
<b><u>Total</u></b>	<b><u>128</u></b>	<b><u>4,196</u></b>	

**ATTACHMENT C: Water System Operator Classification Rules**

**391-3-5-.39 Public Water System Classification. Amended.** In accordance with Section 5 of the Certification of Water and Wastewater Treatment Plant Operators and Laboratory Analysts Act (O.C.G.A. Section 43-51-1) the following classifications shall be considered as minimum levels, and the Division may classify any system or plant at a higher level if the complexity of the System or plant warrants such higher classification in the judgement of the Division. Any system or plant not fitting any of the following standard descriptions shall be classified individually according to the judgement of the Division. Where water is supplied to a distribution system from two or more sources, the classification may be set by the Division.

(1) The following classifications shall be considered as minimum levels:

Public Water System Classification for Community and Nontransient Noncommunity Systems				
System Type	Class I	Class II	Class III	Class IV
Surface water with conventional treatment Plant	5.0 MGD or greater	4.99 MGD or less		
Surface Water with package or nonconventional treatment plant	1.0 MGD or greater	0.99 MGD or less		
Surface Water with approved high-rate filtration	Greater than 3.0 gpm/sq.ft	Less than 3.0 Gpm/sq.ft		
Groundwater under the direct influence of surface water	1.0 MGD or greater	Greater than 0.1 to 0.99 MGD	0.1 MGD or less	
Groundwater	50,000 or Greater	10,000 Pop. to 49,999	1,000 Pop. to 9,999	25 to 999 Pop.
Distribution Systems	Certification is required for the operator of <u>public water</u> distribution systems-			

(2) All Transient Noncommunity water systems with groundwater sources must have at least a Class 4 operator certification.

(3) Certification of Transient Noncommunity water systems with surface water will be specified in their permit to operate a public water system.

(4) When the complexity of water treatment warrants it, a higher classification may be required and specified in the permit to operate a public water system.

Authority O.C.G.A. Sec. 12-5-170 et seq. **History.** Original Rule was filed on July 5, 1977; effective July 26, 1977, as specified by Rule 391-3-5-.47. **Repealed:** New Rule entitled "Public Water System Classification" adopted. F. May 12, 1989; eff. Jun. 1, 1989. . **Amended:** F. Sept. 26, 1997; eff. Oct. 16, 1997. **Amended:** F. Sept. 29, 2000; eff. Oct. 19, 2000.





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