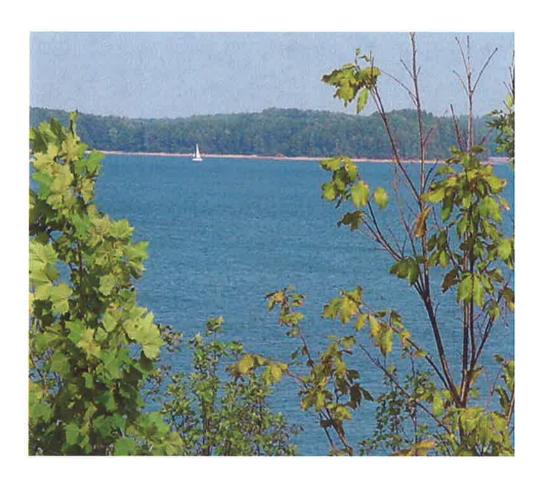
The Report to the Governor on the Efficacy of Georgia's Capacity Development Program



Georgia Environmental Protection Division

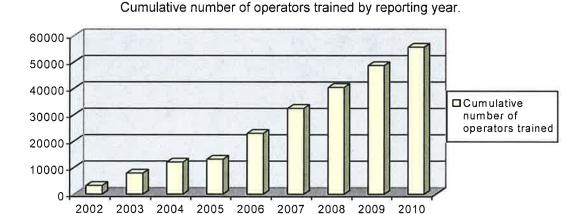
Watershed Protection Branch Drinking Water Program September 2011

EXECUTIVE SUMMARY

This report is prepared to outline the progress that is 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 insure 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.

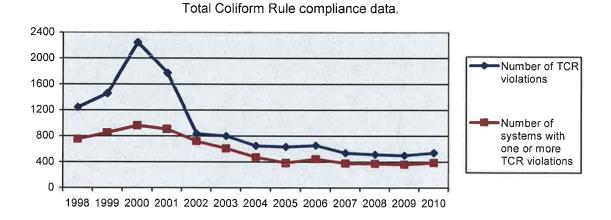
Currently, Georgia has approximately 2,484 active public water systems serving a population of approximately 8.4 million people. This means approximately 87% of the more than 9.7 million citizens get their drinking water from one of the regulated public water systems in the State. The rest obtain water from their privately owned water sources, such as wells and springs located on their properties.

Approximately, 66% of all public water systems in the State are privately owned and operated. Federal, State, and local governments own the rest. Unfortunately, the smaller privately owned and operated water supply systems do not have the resources available to the larger systems. These small privately owned water systems face many challenges and often 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 and occurrence of compliance violations. In order to improve their status, continuous efforts are being made towards the education, training and certification of the owners and operators of these smaller water systems (refer to chart below). The Georgia Rural Water Association, Georgia Association of Water Professionals, and Georgia Environmental Finance Authority partner with EPD in this widespread effort and play very significant roles. We are getting good results.



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 capacity of the public water systems in Georgia. New public water 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 submission of business plans prior to commencing operation of a public water system.

Recently, Georgia has seen an overall decrease in the number of new public water systems becoming significant non-compliers (SNCs) with the federal drinking water rules and regulation. According to our records, none of the new water systems approved or permitted during the last year was classified as a SNC by USEPA (refer to Attachment A). For the three-year reporting period from July 1, 2007 to June 30, 2010, 17 of the total 104 new CWS and NTNCWS were classified as SNCs by USEPA at some point during the last three years (refer to Attachment A). These new public water systems became SNCs mainly due to failure to comply with the consumer confidence report (CCR) requirements and lead and copper initial tap monitoring. The available data suggests that the capacity development authority program is having a positive affect.



Since 2000, there has been significant improvement in the overall microbial quality of the drinking water being provided to the public. Available data indicate that the total number of Total Coliform Rule (TCR) violations have decreased over time and remained fairly constant since 2004 (refer to figure above). We attribute 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, monitoring and reporting requirements, and etc.

Improving the TMF capacity of water systems is a gradual, long-term process. Over the next several years, as a result of capacity development efforts, we expect the success to continue. As detailed in the report, under the various capacity development strategy efforts, all public water systems in Georgia are being offered or provided assistance to help them acquire and maintain technical, managerial, and financial 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.

The Georgia Environmental Finance Authority 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 grant to provide low interest loans to eligible public water systems needing infrastructure

improvements to achieve or maintain compliance with the SDWA requirements or to protect public health. From July 1, 1997 to June 30, 2010, more than \$253 million in project assistance has been awarded to 133 water systems for various improvement projects, benefiting approximately 2.9 million citizens in Georgia.

While EPD has the lead role and regulatory authority for the capacity development program, this agency cannot 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 maintain effective working relationships with other State and local agencies and organizations.

TABLE OF CONTENTS

EXECUTIVE SUMMARY

LIST OF ABBREVIATIONS AND ACRONYMS

TΑ	BL	E	OF	CC	N	Т	F	N	TS	3

NTRODUCTION	1
THIS REPORT	2
GENERAL INFORMATION	3
BACKGROUND	5
CAPACITY DEVELOPMENT AUTHORITY (New System Program)	7 7 9 11
Plan Review/Approval and "Minimum Standards for Public Water Systems Business Plan and Operations & Maintenance Plan Sanitary Surveys and Inspections Ground Water Under the Direct Influence of Surface Waters Area Wide Optimization Program Georgia Rural Water Association (GRWA) Georgia Association of Water Professionals (GAWP) Georgia Water & Wastewater Institute (GWWI) Operator Training Georgia's Operator Certification Program Operator Expense Reimbursement Grant Compliance and Enforcement Mechanisms Water System Consolidations Cross-Connection Control Information Management Drinking Water Fee System Source Water Assessment and Delineation Georgia WARN Program Consumer Confidence Reports Drinking Water State Revolving Fund Program Statewide Water Management Plan	12 14 14 15 16 17 18 19 20 21 22 23 24 25 26 27 30
CONCLUSION	32
ATTACHMENT A - New Public Water System Lists	

ATTACHMENT B - Reports from GWWI and GRWA

ATTACHMENT C – Water System Operator Classification

LIST OF ABBREVIATIONS

GA SDWA

Georgia Safe Drinking Water Act of 1977

Minimum Standards

Minimum Standards for Public Water Systems, May 2000

O & M Plan

Operations & Maintenance Plan

Rules

Rules for Safe Drinking Water, Chapter 391-3-5

The Campaign

The Georgia Water Management Campaign

LIST OF ACRONYMS

ACCG

Association County Commissioners of Georgia

ARC

Atlanta Regional Commission Consumer Confidence Report

CCR **CWS**

Community Water System

DNR

Georgia Department of Natural Resources

DWP

Drinking Water Program (of the Department of Natural Resources, Environmental

Protection Division)

DWPEP

Drinking Water Permitting & Engineering Program (of the Department of Natural

Resources, Environmental Protection Division)

DWSRF

Drinking Water State Revolving Fund

EPD

Georgia Environmental Protection Division (of the Georgia Department of Natural

Resources)

GEFA

Georgia Environmental Finance Authority

GMA

Georgia Municipal Association

GWAP

Georgia Association of Water Professionals (previously known as GWPCA)

GWPCA

Georgia Water & Pollution Control Association

GRWA

Georgia Rural Water Association

GWWI

Georgia Water & Wastewater Institute

MCL

Maximum Contaminant Level

NOV

Notice of Violation

NPDWR

National Primary Drinking Water Regulation Non-Transient Non-Community Water System

NTNCWS

Performance Partnership Grant

PPG **PWS**

RDC

Public Water System

SDWA

Regional Development Center

SDWIS

Safe Drinking Water Act

SMP

Safe Drinking Water Information System

SNC

Scheduled Maintenance Plan Significant Non-Compliance

SOP

Standard Operating Procedure

SWAP

TMF

Source Water Assessment Program

TNCWS

Technical, Managerial and Financial Transient Non-Community Water System

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 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 (NPDWRs); and
- (2) A capacity development strategy to assist all existing public water systems in acquiring and maintaining TMF capacity.

The Environmental Protection Division (EPD) has established a capacity development strategy program for Georgia. 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 public water systems in need of acquiring and maintaining adequate TMF capacity.

Since January 1, 1998 several new rules became effective relative to the permitting of new privately owned public water systems. These include, but are not limited to, requirements for the following: development of a "business plan"; execution of a trust indenture; development of a back-up water source; connection to an existing local government owned system when feasible; 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.

The information provided in this report shows that a substantial amount of activity and workload has been associated with both the capacity development authority program (new water systems) and capacity development strategy program (existing water systems). Measurements of success of the strategy and the improvement in the TMF capacity of public water systems include, but are not limited to, the following: SNC lists, TCR compliance data, the number of business plans developed by public water systems, the attendance at operator training sessions and certification examinations, the number of "circuit-rider" type technical assistance visits, the consolidation of private public water systems with local governmental entities, and etc. This report clearly demonstrates that the Georgia EPD is making significant progress towards improving the TMF capacity of public water systems throughout the State.

THIS REPORT

The Governor's Report on the Efficacy of Georgia's Capacity Development Program follows the reporting criterion that has been recommended by the USEPA. The report addresses both the "New Systems Program" and the "Existing Systems Strategy" and covers a period of several years. Emphasis was placed on the current reporting period from July 1, 2007 to June 30, 2010; however, historical data was included, where appropriate, to establish baselines 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 public water systems acquire and maintain the technical, managerial, and financial capacity needed to meet the Act's public health protection objectives.

What is public water system (PWS)? A public water system 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." Currently, there are about 2,484 PWSs in Georgia that serve approximately 8.4 million people. This category includes CWSs, NTNCWSs, and TNCWSs. Some of these PWSs are very small. Approximately 76% of the PWSs in Georgia serve populations less than 500 people.

What is a community water system (CWS)? A community water system 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." Currently, there are about 1,778 CWSs in Georgia that serve more than 8.3 million people.

What is a non-transient non-community water system (NTNCWS)? A non-transient non-community water system 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, which serves 25 or more of the same people on a regular basis. Examples include schools, factories, office and industrial parks, and major shopping centers. In Georgia, there are 209 NTNCWSs that serve a total population of 65,784 people.

What is a transient, non-community water system (TNCWS)? A transient, non-community water system 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, which serves 25 or more people per day, but not the same people on a regular basis. Examples include restaurants, roadside stops, campgrounds, and hotels. In Georgia, there are approximately 497 TNCWSs serving a total population of 81,886 people. Almost all of them are groundwater systems and most of them are privately owned and operated.

What is technical capacity? Technical capacity is the physical and operational ability of a water system to meet Safe Drinking Water Act requirements. Technical capacity refers to the physical infrastructure of the water system, including the quality and quantity of the 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 Safe Drinking Water Act requirements. Managerial capacity refers to the system's institutional and administrative capabilities. Managerial capacity can be assessed through key issues and questions, including:

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 Safe Drinking Water Act 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, 2010, the State of Georgia had approximately 2,484 active PWS serving a population over 8.4 million people. Based on the latest census figures, this means approximately 87% of the citizens get their drinking water from one of the regulated public water systems in the State. The remainder obtain water from privately owned water sources.

Specifically, there are 109 water production systems that use surface water or Groundwater Under the Direct Influence (GWUDI) of surface water as their sources of water supply. After these systems treat the water, they distribute it directly to their own customers and also sell it to an additional 123 other communities for distribution. Together, these 232 systems that depend upon surface water or GWUDI supplies provide drinking water to approximately 6.7 million of the State's population. The other 2,252 water systems mainly use groundwater sources (wells and springs) as their water supplies to serve approximately 1.7 million citizens.

Community water systems in Georgia.

Source Type	Number of Systems	Cumulative Population Served		
Ground Water Under Influence	3	97129		
Purchased Ground Water Under Influence	1	13260		
Ground Water	1547	1622901		
Purchased Ground Water	7	6754		
Surface Water	105	4970354		
Purchased Surface Water	115	1574176		
TOTAL	1778	8284574		

Approximately 72% (1,778 out of the total 2,484 public water systems) provide water to residential customers. These systems are referred to as CWSs and serve at least 15 service connections used by year-round residents or regularly serve at least 25 year-round residents daily at least 60 days out of the year. Approximately 13% (224 out of the total 1,778 community water systems) are supplied by surface water sources and the remaining 87% (1,554 CWSs) are served by groundwater sources.

Non-transient non-community water systems in Georgia.

Source Type	Number of Systems	Cumulative Population Served		
Ground Water Under Influence	1	75		
Ground Water	492	81063		
Purchased Surface Water	4	748		
TOTAL	497	81886		

In addition, there are 209 NTNCWSs that regularly serves at least 25 of the same persons over 6 months per year. Examples of these systems are hospitals, day care centers, major shopping centers, children's homes, institutions, factories, office and industrial parks, schools, and etc. Furthermore, there are 497 TNCWSs that do not regularly serve at least 25 of the same persons

over six months per year, such as restaurants, highway rest areas, campgrounds, roadside stops, and hotels. With the exception of 5 NTNCWS and 5 TNCWS that use surface water supplies, all of the NTNCWSs and the TNCWSs use primarily groundwater sources for their drinking water needs.

Transient non-community water systems in Georgia.

Source Type	Number of Systems	Cumulative Population Served		
Ground Water	204	63628		
Surface Water	2	826		
Purchased Surface Water	3	1330		
TOTAL	209	65784		

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: (1) technical review and approval of proposed public water systems 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.

Since January 1, 1998 several new rules became effective relative to the permitting of new privately owned public water systems. These include, but are not limited to, requirements for the following: development of a "business plan"; execution of a trust indenture; development of a back-up water source; connection to an existing local government owned system when feasible; and, concurrence from the nearest governmental entity for the development of the privately owned CWS within the 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 public water system [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 public water system. The information that a person must submit to EPD for review and approval and for issuance of a permit to operate is discussed in the EPD's "Minimum Standards for Public Water Systems" (Minimum Standards). The requirements also include submittal of a multi-year "business plans".

Any person who desires to develop a public water system is required to first evaluate connecting to an existing governmentally owned public water system if one is available within one mile or less of the proposed system. If connection to a governmentally owned system is demonstrated to not be available or feasible, then the requirements outlined in the Minimum Standards must be satisfied. Failure to submit all of the required information for obtaining EPD's approval to construct a public water system will result in EPD stopping its review and returning the project to the owner unapproved. In order 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 public water system or desires to commence operation of a public water system to obtain a permit from the Director of EPD. The Drinking Water Permitting & Engineering Program will not prepare the operating permit for issuance by the Director of EPD 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 to Operate a Public Water System.

Under Georgia's capacity development authority program, local governments have been delegated 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 public water system if one is available within one mile or less. Next, plans and specifications, prepared by a 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 Georgia EPD's "Minimum Standards for Public Water Systems."

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 National Primary Drinking Water Regulations. 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:

- During the reporting period from July 1, 2007 to June 30, 2010, a total of 130 business plans were received from 115 new and 15 existing public water systems.
- As of June 30, 2010, a total of 694 business plans have been received from new and existing public water systems.
- As of June 30, 2010, 58 surface water or GWUDI systems have submitted detailed O&M Plans. Only four of these O&M Plans were submitted during this reporting period.

The table below displays similar information for the period from July 1, 2003 to June 30, 2010.

	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010
New Water Systems	56	24	59	64	26	50	37	28
Business Plans Submitted	107	63	99	55	53	48	40	42
Cumulative Business Plans	294	357	456	511	564	612	652	694

Prior to issuance of a permit, the owner of a privately owned community water system must also provide an executed "trust indenture" or other legal document to assure the continuity of operation and maintenance of the water system. All proposed public water systems 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 of the requirements in the Rules for Safe Drinking Water and "Minimum Standards for Public Water Systems."

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 public water systems prior to construction and the issuance of an Permit to Operate a Public Water System).

No water systems that have adequately demonstrated technical, managerial and financial capacity have been denied approval and an operating permit by EPD.

EPD's decision to place engineering positions in the District Offices has enabled the technical staff to visit and inspect the new water systems while they are under construction, prior to permitting, or soon after commencing operation in an effort minimize early violations and other compliance problems. Currently, EPD has engineering positions in the Albany, Athens, Augusta, Brunswick, Macon, and Cartersville Mountain District Offices. These engineers continue to review plans and specifications, provide and offer technical assistance, perform sanitary surveys,

Fiscal Year	Number of SNCs	SNCs due to MCL	SNCs due to M/R	
2001	139	9	130	
2002	63	10	53	
2003	128	3	125	
2004	269	4	265	
2005	62	6	56	
2006	57	10	47	
2007	128	8	120	
2008	121	9	112	
2009	83	17	66	
2010	180	13	167	

conduct inspections, and approve business plans and O & M Manuals, all in an effort to help ensure small groundwater public water systems acquire and maintain adequate technical, managerial and financial capacity.

During the period from July 1, 2007 to June 30, 2010 approximately 6,961 water system projects for new and expanding public water systems 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.

SYSTEMS WITH A HISTORY OF SIGNIFICANT NON-COMPLIANCE (SNC): In regards to capacity development, a water system with a history of Significant Non-Compliance (SNC) is defined as a community water system or a non-transient non-community water system which has been a SNC in at least three quarters during the last three years.

As seen in the table below, the majority of SNCs are due to monitoring and reporting violations. Very few of the SNCs are a result of Maximum Contaminant Level (MCL) violations, which pose an immediate threat to public health.

During this reporting period, a total of 384 systems have been identified as SNCs. Only 39 (10%) of the SNCs were due to MCL violations. The other 345 SNCs were mainly due to monitoring and reporting and CCR violations. As is the case nationally, very small public water systems accounted for a disproportionate number of the SNCs.

Each year, SNCs account for approximately 5% of the total inventory of public water systems. EPD's diligent efforts to assist public water systems in developing and maintaining technical, managerial and financial capacity is helping to minimize the number of SNCs.

In its capacity development strategy, Georgia utilizes compliance rates to establish a baseline and measure improvement in the technical, managerial and financial capacity of water systems. In addition to the data on historical SNCs, EPD tracks the total number of Total Coliform Rule (TCR) violations and the number of systems with these violations. TCR violations are often a

result of a failure to monitor or report, collect and have analyzed the correct number of samples, 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 TCR only, the compliance data will not be affected by new regulations and should be more indicative of improvements made towards helping water systems comply with the National Primary Drinking Water Regulations.

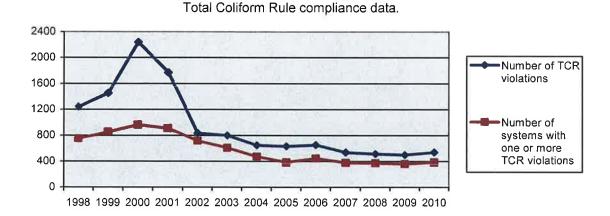
For the TCR, an MCL is exceeded if any of the following apply: more than one sample tests positive for total coliform (for systems collecting less than 40 routine samples per month); more than 5% of the samples test positive for total coliform (for systems collecting 40 or more routine samples per month); any repeat sample is positive for fecal coliform or *E. Coli*; or a routine sample which is positive for fecal coliform or *E. Coli* is followed by a positive total coliform sample. It is important to note that 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 MCL violations, although very serious, are generally brief in duration and quickly resolved by EPD and the water system.

The table below displays the compliance data for the TCR and indicates that, in any given year, an average of 588 water systems incurred an average of 955 TCR violations during the period from FY 1998 through FY 2010. The data is shown graphically on the next page. An average of 98 systems had an MCL exceedance.

	Num	ber of TCR v	violations	Number of Systems with One or More TCR Violations			
Fiscal Year	Total	MCL	Non-MCL	Total	MCL	Non-MCL	
1998	1247	228	1019	753	160	593	
1999	1461	151	1310	858	111	747	
2000	2242	197	2045	968	117	851	
2001	1775	155	1620	913	121	792	
2002	839	135	704	722	108	514	
2003	803	135	668	610	112	498	
2004	651	98	553	476	80	396	
2005	637	99	538	390	83	334	
2006	657	129	528	448	102	371	
2007	542	92	450	381	72	326	
2008	520	83	437	376	68	327	
2009	503	79	424	363	59	333	
2010	545	82	463	392	76	327	
Average	955	128	828	588	98	493	

The data show that significant achievement has been made in compliance with the Total Coliform Rule. The total number of systems with TCR violations has steadily decreased from a peak of 968 in FY2000 to 392 for FY2010. Likewise, the total number of violations due to MCL exceedances has also decreased from 197 to 82 during the same time period. This decrease can be attributed to the EPD's continued efforts in the capacity development and operator certification programs.

During the most recent year from July 1, 2009 to June 30, 2010, the data in the above table further indicates that 392 of the total 2,484 public water systems (15.8%) have one or more TCR violation(s). Only 76 water systems (3.1%) had a TCR violation resulting from an MCL exceedance. Most violations are non-MCL related violations.



EVALUATING PROGRAM SUCCESS: EPD will continue to evaluate program success by comparing the Safe Drinking Water Act compliance record of new public water systems 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 public water systems in need of acquiring and maintaining adequate technical, managerial and financial capacity.

Under Georgia's capacity development strategy, all public water systems in Georgia are being offered or provided assistance to help them acquire and maintain technical, managerial, and financial 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. EPD has fully implemented the strategy, which provides targeted, voluntary, and mandatory assistance to public water systems. Targeted assistance is directed at systems most in need of acquiring adequate technical, managerial and financial 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.

Targeted assistance is directed at systems most in need of acquiring adequate technical, managerial and financial 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. 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 technical, managerial and financial 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. EPD will continue to work with the District Offices, stakeholders and other organizations to improve in this area.

Voluntary assistance is available to all public water systems in Georgia to help them to acquire and maintain technical, managerial and financial capacity. Public water systems that voluntarily choose to improve their technical, managerial and financial capacity will be able to more consistently comply with all regulatory requirements. 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 the Georgia Rural Water Association (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 technical, managerial and financial 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 in order 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 beneficial enforcement and compliance mechanism used by EPD to assist public water systems in acquiring and maintaining adequate technical, managerial and financial capacity. The NOVs provide the water system personnel with official, written documentation of violations of the Safe Drinking Water Act and/or the Permit to Operate a Public Water System and offer the system an opportunity to return to compliance (in order to avoid further enforcement, including possible civil penalties).

In recent past, 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 in order 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 have been made available to any water systems that request them. All these additional efforts have contributed to the reduction in the number of federal monitoring and reporting violations, and the number of systems classified as SNCs.

EPD's capacity development strategy is dynamic and will change with the priorities established by EPD. In its efforts, EPD continues to utilize a large portion of the available Drinking Water State Revolving Fund set-asides to fund activities necessary to assist public water systems in acquiring and maintaining adequate technical, managerial and financial capacities. The following sections highlight a few of the on-going activities throughout the State of Georgia.

PLAN REVIEW/APPROVAL & "MINIMUM STANDARDS FOR PUBLIC WATER SYSTEMS":

Georgia has had a plan review requirement for public water systems since the State legislature enacted the Georgia Safe Drinking Water Act (GA SDWA). This requirement helps ensure that new and existing public water systems have the technical capacity to provide safe drinking water to their customers.

The Rules for Safe Drinking Water (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 public water system 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 public water systems. 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 for Public Water Systems" (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 public water systems and additions or extensions to existing systems must be designed in accordance with the latest edition of EPD's Minimum Standards.

During the period from July 1, 2007 to June 30, 2010 approximately 6,961 water system projects for new and expanding public water systems were reviewed and approved under EPD's regulatory authority, which includes the delegated authority. The approved 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. EPD environmental engineers also conducted inspections of public water systems, including those under construction, to help ensure these systems have adequate technical capacity.

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 Operations & Maintenance Plan (O & M Plan). EPD currently requires completion of a business plan and O & M Plan for new systems (prior to issuance of Permit to Operate a Public Water System) and for existing systems 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(7)(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 Division's Minimum Standards. The business plan is required be updated at intervals determined by the Director.

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 2010, a total of 694 business plans have been received from new and existing public water systems. During the current three-year reporting period from July 1, 2007 to June 30, 2010, a total of 130 business plans were received from 115 new and 15 existing public water systems. A business plan may be submitted by the owner of an existing water system for three reasons: 1) the owner recently acquired ownership of the water system and was required to submit the business plan, as per Section 391-3-5-.17 of the Rules for Safe Drinking Water; 2) the owner acquired ownership of another water system and submitted a business plan covering all systems under his/her ownership; or 3) formal enforcement action required the owner to submit the business plan.

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. As of June 30, 2010, a total of 58 surface water or GWUDI systems have submitted detailed O & M Plan.

SANITARY SURVEYS AND INSPECTIONS: EPD regularly conducts scheduled sanitary surveys of all public water systems in Georgia. 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 technical,

managerial and financial capacity of the water 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 operation; and operator and compliance with State requirements.

The sanitary survey system evaluation forms were revised January 2001 to include areas for the DWP 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 log books.

Between July 1, 2002 to June 30, 2003

Sanitary Surveys performed: 1,662 On-site Inspections conducted: 693

Between July 1, 2003 to June 30, 2004

Sanitary Surveys performed: 472 On-site Inspections conducted: 228

Between July 1, 2004 to June 30, 2005

Sanitary Surveys performed: 450 On-site Inspections conducted: 80

Between July 1, 2005 to June 30, 2006

Sanitary Surveys performed: 571 On-site Inspections conducted: 444

Between July 1, 2006 to June 30, 2007

Sanitary Surveys performed: 673 On-site Inspections conducted: 499

Between July 1, 2007 to June 30, 2008

Sanitary Surveys performed: 787
On-site Inspections conducted: 677

Between July 1, 2008 to June 30, 2009

Sanitary Surveys performed: 757 On-site Inspections conducted: 529

Between July 1, 2009 to June 30, 2010

Sanitary Surveys performed: 669 On-site Inspections conducted: 459 EPD expects the number and frequency of surveillance of the surface water systems to increase in the future. Currently DWPEP has the total of three surface water system inspectors.

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.

During the three-year period from July 1, 2007 to June 30, 2010, the Drinking Water Program conducted 121 sanitary surveys and 580 on-site inspections of water systems treating surface water or treating groundwater under the direct influence of surface water.

During the same period, the EPD District Offices performed 2,092 sanitary surveys and 1,085 on-site inspections of groundwater systems.

GROUND WATER UNDER THE DIRECT INFLUENCE OF SURFACE WATER PROGRAM:

The determination of groundwater under the direct influence of surface water process is an important way to monitor drinking water quality and the impact of development on the environment. The method for making these investigations and determinations in Georgia is based on documentation of source construction characteristics, geology, topography, site-specific measurements of biological water quality, and field evaluation.

Groundwater Under the Direct Influence of Surface 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, the Division decided that the focus for proof of GWUDI would be on the first part of the definition (biological indicators) and uses the second part (physical parameters) for additional evidence or as a priority red flag. If living surface water organisms are present in the source, it is concluded that the groundwater is contaminated. A microscopic analysis that concentrated on finding living biological surface water indicators is used for this determination. 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 (GWUDI).

All of the public groundwater sources that are deemed high priority are being monitored using microscopic analysis. Several factors were considered for risk assessment 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 (where water-soluble limestone is perforated by channels, caves, sinkholes, and underground caverns), springs without filtration, and old wells with broken sanitary seals, cracked concrete pads, faulty well casings, not grouted into the unweathered rock formation. In Georgia, the northwest and portions of the southwest and south central contain areas of karst topography.

During the period from July 1, 2002 to June 30, 2006, a total of 327 MPAs were performed on 214 drinking water sources. Of those 154 wells and 60 springs tested by EPD, only 30 wells and 21 springs were declared to be under the direct influence of surface waters. EPD worked

with each affected water system and provided technical assistance in identifying and correcting the deficiencies that were contributing to the contamination of the sources. This action assured these systems to maintain technical capacity to stay in compliance with the drinking water standards. Most of the springs were impacted due to faulty containment area and the wells were

GWUDI Activities	FY2003 - FY2006
Total number of PWS tested	130
Total MPAs Performed	327
Number of Wells Tested	154
Number of Wells UDI	30
Number of Springs Tested	60
Number of Springs UDI	21

impacted mainly because of bad casings. All of the affected springs were cleaned, repaired and tested before they were placed back into service. The wells were repaired, abandoned, or pumped to a surface water treatment plant for treatment.

To date, the targeted assistance under the GWUDI program has proven to be successful by minimizing or eliminating microbial risk from sources with questionable water quality.

The EPD Microbiological Laboratory began conducting the GWUDI related testing in fall of 2008. The Source Water Assessment Program collects samples and coordinate testing with the EPD Laboratory. EPD will continue to implement this program to ensure the safety of the drinking water supplies in the State.

AREA WIDE OPTIMIZATION PROGRAM: EPD discontinued participation in USEPA's multistate Area Wide Optimization Program (AWOP) in 2008. The goal of the program is to provide maximum protection against microbial contamination by optimizing the performance of existing surface water treatment plants. The program stresses the multiple barrier approach (source water, flocculation, sedimentation, filtration, and disinfection) and evaluates facilities with respect to more stringent optimization performance goals. In AWOP, the most resource-intensive evaluation tools, such as Comprehensive Performance Evaluations (CPEs) and Performance Based Training (PBT) are focused on the systems presenting the greatest risk to public health.

A Comprehensive Performance Evaluation is a thorough review and analysis of a facility's design capabilities and associated administrative, operational and maintenance practices as they relate to achieving optimum plant performance. Currently, three (3) engineers and one (1) inspector from the Drinking Water Permitting & Engineering Program are certified to conduct regulatory Comprehensive Performance Evaluations. Multi-state CPEs were conducted in Georgia as well as other facilities located in Kentucky, Alabama, South Carolina, and North Carolina.

While not an active participant, EPD continues to analyze and track plant performance for all surface water and GWUDI plants in Georgia. This is time-consuming, but allows EPD to

determine which plants meet optimization goals each year. An award program is planned in the future.

In past years, the DWP made significant progress and achievement in the AWOP program. From 2005 to 2008, the Georgia population served by facilities meeting optimization goals increased from approximately 702,000 people to over 1,564,000 people. This represents approximately 18.6 percent of the total 8.4 million people served by community water systems. This is very significant because it means that more public health protection is being provided to the citizens of Georgia. This positive impact is attributable to systems striving to meet the optimization goals. Award certificates and public praise from the DWP at past technical conferences provided incentives for water systems to work towards meeting optimization goals and the formal ranking scheme created competition among water systems in the State.

AWOP Activities	2005	2006	2007	2008
Total # Optimized Plants	19	27	34	32
Population Served Optimized Water	702,104	1,290,069	1,290,187	1,564,358
% CWS Population Served Optimized Water	7.7%	16.8%	15.7%	18.8%
# Plants Meeting Settled Goals	53	63	51	51
# Plants Meeting Filtered Goals	56	62	60	60
# Plants Meeting Settled and Filtered Goals	29	35	34	34

GEORGIA RURAL WATER ASSOCIATION (GRWA): During the three-year reporting period from July 1, 2007 to June 30, 2010, EPD used 2% and 15% set aside funds to contract with GRWA for small system technical assistance and operator training (refer to Attachment B).

During the period from July 1, 2007 to June 30, 2010, GRWA conducted a total of 1,519 face-to-face onsite technical assistance visits under the "Circuit-Rider Contract". 966 of these visits were to systems serving less than 3,300 people. As part of this contract, GRWA also collected a total of 923 SOC samples and delivered them to the EPD Laboratory for analysis.

In addition, GRWA conducted an additional 98 on-site face-to-face technical assistance visits to surface water systems under the "LT1ESWTR and Stage 1 DBPR Contract" in order to help them comply with the microbial and disinfection by-products rules. Under this same contract, GRWA also conducted a total of 15 workshops and trained approximately 409 water system personnel on the new LT2ESWTR and Stage 2 D/DBPR.

Finally, GRWA conducted 132 on-site technical assistance visits to small groundwater system owners and operators under the "Groundwater System Training and Technical Assistance Contract" in order to help them comply with the disinfection by-products rules and Ground Water Rule. Under this same contract, GRWA also conducted a total of 28 workshops and trained approximately 1,338 water system owners and operators on new regulatory issues applicable to ground water systems.

As part of their technical assistance, education and outreach efforts, GRWA also offers two educational conferences in Helen and Jekyll Island each year. During the past three years, over 6,552 water and wastewater personnel and laboratory analysts attended these events.

During the period from July 1, 2007 to June 30, 2010, GRWA provided a total of 213 Water classes to a total of 3,864 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 Mathematics used in water system operation.

GEORGIA ASSOCIATION OF WATER PROFESSIONALS (GAWP): Georgia Association of Water Professional's (GAWP) Drinking Water System Capacity Development Support Program continues to field technical support requests relative to the distribution of Georgia's Small System CCR guidance booklets and templates. GAWP handles technical support requests relative to the distribution of Georgia's Small System CCR guidance booklets, templates, and certification forms. 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 the Georgia EPD for dissemination of critical information to Georgia's drinking water systems.

GEORGIA WATER AND WASTEWATER INSTITUTE: The Georgia Water and Wastewater Institute (GWWI) was incorporated in 1993 and today provides the majority of water and wastewater training in the State of Georgia, operating with financial assistance provided through contracts with EPD and modest tuition fees. GWWI annually offers approximately 80 courses with a total attendance of over 1,200 students and is dedicated to education and dissemination of technical and scientific information (refer to Attachment B).

During the reporting period from July 1, 2007 to June 30, 2010, GWWI conducted a total of 266 courses related to water, wastewater and/or laboratory operations and successfully trained 3,114 operators.

In the training sessions and workshops that were conducted at the annual, fall, and spring conferences during the past three years, GWWl's Technical Assistance, Education and Outreach efforts reached over 7,166 water and wastewater treatment plant operators, maintenance personnel, laboratory analyst, design engineers, consultants, and other professionals concerned about Georgia 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 Federal Safe Drinking Water Act (SDWA) requires EPA to withhold 20 percent of the funds that a State is otherwise entitled to receive under the SDWA Section 1452 unless a State has adopted and is implementing a program that meets the requirements of EPA'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 and maintain a public 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 2 of the 6 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 public water system operators and laboratory analysts. Currently, there are 5,003 licensees who hold current certificates. Requirements for all categories include education, training, experience, and passage of a validated certification examination (ABC). The table below displays the number of certified operators by classification level for the reporting period 2001 - 2010. The data is also used to establish a baseline for EPD to measure progress in operator training and certification.

Operator License	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Class I	455	529	623	672	723	744	729	750	741	770
Class II	414	395	392	359	364	386	391	442	427	453
Class III	901	902	979	977	1015	971	925	984	929	971
Class IV	1067	874	977	872	932	922	817	913	794	878
Distribution	NA	640	739	805	923	1132	1190	1330	1304	1407
Laboratory	NA	419	462	454	482	515	494	592	507	524
Total	2837	3759	4172	4139	4439	4670	4546	5011	4702	5003

<u>Classification of Systems, Facilities and Operators</u>: EPD classifies public water systems (PWSs) in accordance with Section 10 of the Certification of Water and Wastewater Treatment Plant Operators and Laboratory Analysts Act. Systems are classified on the basis of 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 and Non-transient Non-community systems.

<u>Enforcement</u>: 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 obtains or returns to compliance. In most cases, this starts as a written notice of violation 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 to obtain compliance with the operator certification requirements.

During the three-year reporting period, EPD records of formal enforcement indicate that approximately 5% of all formal Consent Orders were issued to water systems without a certified operator or ORC.

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, the Board investigated several operators for falsification issues and other violations of the Rules. A number of cases were referred to the Attorney General's Office to pursue revocation and/or suspension of the license issued to an individual due to providing false information on the certificate application.

Training for all classes of water system operators and laboratory analysts continues to be provided by GRWA (at locations throughout the State) and GWWI (at a permanent facility). From 2002 through 2010, over 27,715 water system personnel attended approximately 1,347 training classes. The training covered all classification levels and all areas of water system operation and maintenance.

The GRWA and the Georgia Association of Water Professionals (GAWP) (formerly named the Georgia Water Pollution & Control Association) also conduct many meetings, seminars, workshops and conferences throughout the year. Operators regularly attend to obtain the necessary continuing education credits required for certification renewal. Operators can also obtain continuing education credits by other means such as attending AWWA, NRWA and other national conferences or completing online training. Training for continuing education credits must be acceptable to the Certification Board and applicable to the field in which the certification is issued. During the reporting period between 2002 and 2010, over 55,676 water system personnel attended conferences and training related to water system operation and maintenance.

OPERATOR EXPENSE REIMBURSEMENT GRANT: The State of Georgia Environmental Protection Division (EPD) submitted an application to the US EPD Region IV for grant funds reserved under Section 1419(d) of the Federal Safe Drinking Water Act (SDWA) for small system operator training and certification reimbursement Program. Georgia's initial allotment under EPA's proposed Program was \$2,015,584 with a potential total allotment of \$3,613,200. Under the original application, Georgia applied for and received notice of grant award May 6, 2003 in the amount of \$1,694,754 to be used to reimburse and/or otherwise defray the cost of training, certification and re-certification for operators of community or non-transient non-community water systems serving 3,300 persons or fewer. Georgia applied for and received notice of amendment grant award September 7, 2004 in the amount of \$1,758,144. Amendment #2 in the amount of \$160,300 was applied for and awarded on September 19, 2005 bringing Georgia's total award amount to \$3,613,198.

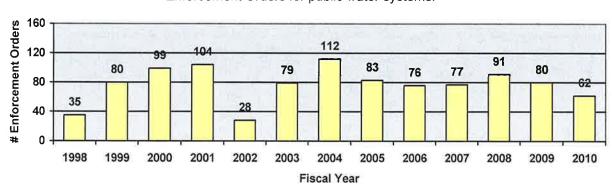
After receiving the initial grant award, Program implementation for the State of Georgia was delayed due to State budget issues that temporarily delayed the filling of the Grants Assistant position for this project (this position was filled on March 1, 2005). Reimbursements were begun with a start date of July 1, 2004, for those expenses for which qualified operators/systems were able to produce appropriate receipts and/or backing documentation.

The current grant expired on June 30, 2011, and EPD rolled the remaining funds into Georgia's Drinking Water State Revolving Fund program.

<u>COMPLIANCE AND ENFORCEMENT MECHANISMS:</u> EPD continues to utilize informal and formal enforcement actions, such as written Notices of Violations (NOVs), Consent Orders, and Administrative Orders to obtain compliance with the federal and State drinking water regulations. Enforcement is an important tool to deal with public water systems that lack adequate capacity. EPD's stringent 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. Please refer to the graphical representation of the number of enforcement orders issued for violations of the SDWA and/or the Permit to Operate a Public Water System during the past decade shown below.

During the annual reporting period from July 1, 2007 to June 30, 2010, a total of 310 enforcement orders were issued relating to SDWA or permit violations.



Enforcement Orders for public water systems.

<u>WATER SYSTEM CONSOLIDATIONS</u>: 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. These 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, 2010, a total of 379 privately owned and operated public water systems have consolidated with a nearby governmentally owned public water system or water authorities. The figure below displays the number of consolidations in Georgia each year since 1998 and indicates that in any one year approximately 29 water systems are successfully consolidated with a local governmentally owned public water system or water authority.

Consolidations

Consolidations with governmentally owned water systems or water authorities.

We are expecting the number of consolidations to increase in the future as a result of increased financial and managerial burdens associated with complying with the recently enacted regulations, specifically the Stage 1 Disinfection Byproducts Rule, Stage 2 Disinfection Byproducts Rule, Long-Term 2 Enhanced Surface Water Treatment Rule, Radionuclide Rule, and the recently enacted Ground Water Rule.

Fiscal Year

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.

Approximately 1,317 backflow prevention professionals have been certified since the beginning of the program.

INFORMATION MANAGEMENT: During FY 2010, EPD utilized the 10% set-aside for activities associated with the Information Management Program. The Information Management pilot project was created to improve the tracking and reporting of public water system data, automate the sample scheduling for public water systems' SDWA monitoring requirements, and automate compliance determinations. This program has enabled EPD to improve the accuracy of its data as well as the overall tracking system, which has lead to improved compliance by the water systems. E PD's Data Management Specialist assists in migration of laboratory data into the Division's SDWIS/State information management system. EPD continues to work on the following tasks:

1. The State Drinking Water Programs have been currently working in collaboration with the Department's Program Support Division, EPA, and DNR IT Department to upgrade

the current version of SDWIS/State (version 8) to the new web-release version SDWIS/State version 3.0. The Department should have the capability to run the new system on a test server in late 2010 / early 2011.

- 2. EPD has been involved in developing an application required under the federal CROMERR regulations. We have submitted the application by the January 2010 deadline. We are currently awaiting response back from EPA.
- 3. EPD continues to use the web-based surface water treatment plant monthly operating reporting system developed for data management. The project allows the surface water systems to enter their own data and EPD determines compliance based the official data submitted by the operator-in-responsible-charge. A groundwater version of the web-based monthly operating reporting system may be developed in the future to accommodate the new requirements of the Groundwater Rule (GWR) that went into effect in December 2009, as well as recent water conservation legislation in Georgia.

DRINKING WATER FEE SYSTEM: The drinking water fee system, established by EPD, makes compliance monitoring available to all public water systems at a very reasonable cost. Under an optional "Drinking Water Service Contract", EPD provides a water system with laboratory and related services that are consistent with the owner's need to comply with the National Primary Drinking Water Regulations 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, and limited vulnerability assessments. The drinking water service fee 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 federal Safe Drinking Water Act, the EPD found it necessary to implement a voluntary contract fee system 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 Drinking Water Service Contract Fee System 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, enforcement, etc. With the implementation of the drinking water fee system, EPD maintained primacy for drinking water regulations while providing a valuable service to the public water systems. Without the drinking water fee system, many small public water systems 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 system has been an invaluable to the public water system owners and operators in Georgia. Its success can be measured with the high percent of the water systems participating in the program as well as the amount of savings realized by the water systems since its inception in 1992.

During this reporting period ending June 30, 2010, approximately 2,423 out of 2,484 public water systems were contracted with EPD for the laboratory services. This indicates that 98% of all public water systems are benefiting from the services provided by drinking water fee system

at an average estimated annual savings of \$17.4 million to the water system owners and operators.

The EPD will continue to provide this very cost effective laboratory service in order to help public water systems 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 TTHMs and HAA5s tests required for IDSE under the Stage 2 DBPR and source water monitoring for *Cryptosporidium* and *E. Coli* tests required under the LT2ESWTR.

Recently, EPD has found it necessary to implement a new "Drinking Water Coliform Monitoring Contract" for the microbiological laboratory services provided by EPD Laboratory. This new program covers analytical services associated with the Total Coliform Rule, and the costs are based on the number of routine samples a public water system 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 Drinking Water Monitoring Contract Program offers high quality, efficient and cost-effective microbiological testing services to water systems and helps EPD assure Georgia's drinking water supply is among the safest in the nation.

SOURCE WATER ASSESSMENT AND DELINEATION: USEPA approved Georgia's Source Water Assessment and Protection Implementation Plan on May 1, 2000. Georgia's deadline for completion of surface water source water assessments (SWAPs) was November 1, 2003. Georgia's deadline for completion of ground water SWAPs was June 2005 for community systems, December 2005 for non-transient non-community systems, and December 2006 for transient non-community systems.

Efforts to fund regional surface water system SWAP initiatives using DWSRF 15% set-asides have been completed. Over \$2.5 million of contracts were negotiated with various entities to assist EPD with SWAP implementation. Ground water SWAPs are being completed utilizing inhouse staff.

Currently, the Georgia EPD is in the process of performing SWAPs on all privately owned groundwater systems. Approximately 2,156 total source water assessments have been prepared or updated from July 1, 2001 through June 30, 2011 for the privately owned ground water systems. Since the end of FY 2009, 256 SWAPs were completed for privately owned community ground water systems, 27 SWAPs for non-transient non-community ground water systems.

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 the initial response. 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 response according to established requirements. This program will be consistent with other statewide mutual aid and assistance programs and the National Incident Management System (NIMS).

GAWARN's steering committee board members consist of staff or personnel from Environmental Protection Division, public utilities, the Georgia Association of Water Professionals, and the Georgia Rural Water Association. The board meets approximately every sixty (60) days to discuss progress of the program. We already have several large and small water systems that have signed the Mutual Aid Agreement and became a 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. The GAWARN website has integrated the Resource Typing Manual, allowing each member to enter information specific to their utility about their resources including pumps, generators and others. 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 it was an excellent preparatory and learning opportunity to prove how important the GAWARN is to water and wastewater utilities. The GAWARN is a great tool to provide restoration to affected water and wastewater utilities through out the State of Georgia and outside the state for both natural and man-made disasters. With the current hurricane season, the GAWARN is taking a stand, reaching out to its members and utility staff to know their resources and be prepared to respond to utilities in the affected areas if needed.

CONSUMER CONFIDENCE REPORTS: EPD initially established a three-year contract with the Georgia Association of Water Professionals (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.

During this reporting period, the GAWP continued to field technical support requests relative to the distribution of Georgia's CCR guidance booklets and templates. GAWP held a number of CCR workshops at various locations across the State, which consisted of detailed presentation on the CCR Rule and gave the opportunity for water systems to receive direct technical support

while attending. The workshops are designed specifically to give direct technical and managerial assistance to systems with a population under 1,000. "Hands-on" report assistance is being provided at these meetings. Since 2004, evening classes are also being offered to target those full time employees who are also operating very small water systems and are unable to attend normally scheduled daytime classes. This "short course" training has been proven to be successful and additional evening classes are being incorporated into the future schedules.

The table below 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 vear. the initial compliance rate for water systems meeting the July 1 delivery deadline was less than 70% and for the 2003 reporting year, it was less than 63%. In order to obtain better compliance, both formal and informal enforcement actions were taken by EPD. As the table shows, as a result of increased enforcement and follow-up efforts, compliance rate with the CCR Rule had been high until 2003. Beginning July 1, 2003, this compliance rate began to decline mainly due to lack of resources by EPD to follow-up on the non-compliers. However, we have taken

Fiscal Year	CCRs Received	CCRs Required	Compliance Rate (%)
1999	1,591	1,597	99.6
2000	1,622	1,628	99.6
2001	1,569	1,584	99.1
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	1696	1747	97.1

steps to correct this. Recently, we hired a new associate to focus primarily on the CCR Rule in the Drinking Water Program's Enforcement Unit. As a result, compliance rates for the FY 2009 reporting period increased noticeably from 96.8% to 97.1%. In order to achieve a compliance rate of 97.1% in FY2010, EPD had issued 410 violations and 83 Consent or Administrative Orders.

<u>DRINKING WATER STATE REVOLVING FUND</u>: With the passage of the 1996 Amendments to the Safe Drinking Water Act (SDWA) (Pub. L. 104-182) the Administrator of the U.S. Environmental Protection Agency (EPA) was authorized to establish a Drinking Water State Revolving Fund (DWSRF) loan program to assist States in financing local public water system infrastructure needed to achieve or maintain compliance with SDWA requirements in order to protect public health.

The Georgia General Assembly created the Georgia Environmental Finance Authority (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 public water systems needing infrastructure improvements to achieve or maintain compliance with the Safe Drinking Water Act 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.

Since the inception of the DWSRF Program in FY 1997 through FY 2010, Georgia has received federal capitalization grants totaling \$279,203,350. The State of Georgia has matched that dollar figure with \$53,213,880 in funding from the sale of General Obligation (G.O.) Bonds.

The primary goal of the DWSRF Program is to protect public health. To accomplish this goal, the DWSRF Program directs funds toward the most pressing compliance and public health related needs. As of June 30 2010, \$26.8 million (10.5%) of the total \$253 million in loans has been to help non-compliant systems achieve compliance with drinking water standards. In addition, approximately \$223.2 million (88%) of the assistance has been to help utilities maintain compliance with drinking water regulations.

A secondary goal of the DWSRF Program is to support prevention programs to ensure continued compliance with drinking water standards. EPD attempts to utilize 100% of the DWSRF set-asides from each capitalization grant to accomplish this goal.

As stated in the Intended Use Plan, Georgia also tries to use at least 30% of DWSRF funds to assist systems serving less than 10,000 people. In FY 2010, for example, \$29.9 million (56.2%) of the total \$53.2 million in DWSRF assistance was awarded to systems serving less than 10,000 people.

DWSRF Assistance by Population Size	Annual Number of Projects Receiving Assistance											
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006		
Less than 500	0	0	1	5	0	3	5	4	4	2		
501 – 3,300	0	0	4	2	4	5	4	3	5	3		
3,3001 - 10,000	0	0	3	3	0	0	3	1	2	1		
10,001 - 100,000	0	0	1	0	2	1	0	5	0	3		
100,001 and Above	0	1	1	0	0	0	1	2	0	0		
Total Number of Agreements	Ö	1	10	10	6	9	13	15	11	9		
Cumulative Number of	Agreen	nents: 84	f (throug	h 2006)			*:					

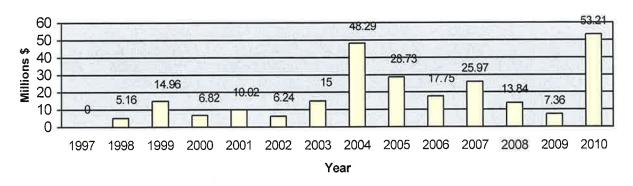
		Annual Number of Projects Receiving Assistance											
2007	2008	2009	2010	2011	2012	2013	2014	2015	2016				
2	2	1	3										
3	3	1	6										
2	0	0	7										
4	1	0	12										
0	0	2	0										
11	6	4	28										
	2 3 2 4 0 11	2 2 3 3 2 0 4 1 0 0	2 2 1 3 3 1 2 0 0 4 1 0 0 0 2 11 6 4	2 2 1 3 3 3 1 6 2 0 0 7 4 1 0 12 0 0 2 0 11 6 4 28	2 2 1 3 3 3 1 6 2 0 0 7 4 1 0 12 0 0 2 0	2 2 1 3 3 3 1 6 2 0 0 7 4 1 0 12 0 0 2 0 11 6 4 28	2 2 1 3 3 3 1 6 2 0 0 7 4 1 0 12 0 0 2 0 11 6 4 28	2 2 1 3 3 3 1 6 2 0 0 7 4 1 0 12 0 0 2 0 11 6 4 28	2 2 1 3 3 3 1 6 2 0 0 7 4 1 0 12 0 0 2 0 11 6 4 28				

Since inception of the DWSRF Program in 1997 until June 30, 2010, more than \$253,066,405 in

DWSRF project assistance has been awarded for 133 water system improvement projects. 97 of the total 133 projects assisted systems serving less than 10,000 persons.

For the three-year reporting period from July 1, 2007 to June 30, 2010, binding commitments were made to 28 communities, totaling more than \$53,208,219. 16 of these commitments were made to systems serving less than 10,000 people. The figure below displays the total dollar amount of DWSRF project assistance provided to water systems each year from FY 1997 through FY 2010 (in million \$).

DWSRF Program Project Assistance



The tables below display detailed statistics on DWSRF project assistance for the period from FY 1997 through FY 2010 by project category.

	Total	Yearly Assistance in Millions (1997 – 2005)										
Category	Projects	1997	1998	1999	2000	2001	2002	2003	2004	2005		
Treatment	39	0	0	7,5	0.54	0	0.106	2.7	18.3	14.2		
Distribution	122	0	0	5.2	3.3	8.2	2.8	6.1	22.8	10.3		
Source	59	0	5.16	1.8	1,11	0.93	0.73	1.4	1.06	1.6		
Storage	56	0	0	0.4	1.7	0.92	2.4	4.8	5.0	2.6		
Other	6	0	0	0.052	0.17	0	0.17	0	1,0	0.02		
Number of Proje	ects	0	1	23	22	12	26	31	24	34		
Cumulative Nun	nber Projects	0	1	24	46	58	84	115	139	173		
Cumulative Tota	al Dollar Amou	nt: \$135	,216,124	(through	2005)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,			¥		

	Total	Yearly Assistance in Millions (2006 – 2010)										
Category	Projects	2006	2007	2008	2009	2010	2011	2012	2013	2014		
Treatment	39	1.95	11.75	0.06	0	8.3						
Distribution	122	11.79	13.24	8.53	6.1	41.3						
Source	59	1.41	0.396	1.19	1.0	3.5						
Storage	56	2.32	0.572	4.06	0.1	3.5						
Other	6	0	0		0	0						
Number of Proje	ects	27	22	21	10	29						
Cumulative Number Projects		200	222	243	253	282						
Cumulative Total	al Dollar Amoui	nt: \$253,	066,405	(through	2010)							

Category	Number of Projects	Percent of Total Projects (%)	Loan Amount (Million \$)	Percent of Total Loan Amount (%)		
Treatment	39	13.8	65.6	25.9		
Distribution	122	43.3	139.9	55.3		
Source	59	20.9	21.2	8.4		
Storage	56	19.9	24.9	9.8		
Other	6	2,1	1.4	0.6		
TOTAL	282	100	100	100		

Many of the measures identified in the State-wide Water Management Plan are eligible activities within the DWSRF Program and GEFA's programs are referenced as a potential funding source.

Throughout this reporting period, GEFA continued to concentrate on strengthening 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 requirements of the DWSRF Program.

STATEWIDE WATER MANAGEMENT PLAN: In order to ensure the availability of high quality and reliable drinking water to the citizens of Georgia, EPD was required by a state law to develop and implement a Comprehensive State-wide Water Management Plan (Plan). The Plan is intended to help Georgia manage its water supply in a sustainable manner and protect public health and natural eco-systems. The plan helps public water systems address water supply and capacity development issues by providing guidance for a sustainable, reliable and safe supply of water for all users in Georgia.

Since June 2008, EPD has awarded approximately \$14,715,000 worth of contracts utilizing DWSRF set-asides (including ARRA) for various activities associated with Georgia's state water planning efforts. These efforts and activities have included the preparation of resource assessments for groundwater, surface water availability, and water quality and assimilative capacity determination. Other activities have involved water quantity modeling; population, land use and water use forecasting, and surface water monitoring. EPD has also contracted to assist with the preparation of technical guidance documents and water conservation implementation plan, and to provide assistance to regional water planning councils with the development of their regional water plans.

Water resource assessments were completed for major water resources in the State. These assessments utilized water resource models and water quality monitoring to estimate the quantity and quality of Georgia's surface and ground waters for public water supply. The resource assessments estimated the sustainable yield of water for human uses while protecting public health and natural systems. This information was provided to each regional water planning council for use in the development of their Regional Water Plans.

The Regional Water Plans incorporate the water resource assessments, demand forecast information, and other information provided by EPD. Specifically, EPD provided the Water Planning Councils with guidance documents to assist with the selection of best management practices for water demand management, water return practices, water supply practices, and others. The Water Planning Councils submitted Draft Regional Water Plans in May 2011. EPD

expects the Final Regional Water Plans to be submitted to the EPD Director in September 2011. Once adopted by the EPD, the Regional Water Plans will be used to guide decisions regarding state grants and loans to PWS, including DWSRF loans.

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 on going. EPD has established a program that provides a solid foundation for current and future activities to help insure all Georgians are provided safe, reliable drinking water. To date, significant progress has already been made towards improving the technical, managerial, and financial capacity of the public water systems in Georgia. New water 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 public water systems 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 public water systems in Georgia are being offered or provided assistance to help them acquire and maintain technical, managerial, and financial 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 public water systems. Targeted assistance is directed at systems most in need of acquiring adequate technical, managerial and financial 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.



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ATTACHMENT A

2010
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o June
2007
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from
Period
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PWSs
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Violation Date	5/28/2010 7/1/2008 7/1/2008 7/1/2008	7/1/2008	7/1/2008 7/1/2009 7/1/2008	1/1/2009
Contaminant	Lead & Copper Rule Lead & Copper Rule Lead & Copper Rule Lead & Copper Rule	Lead & Copper Rule	Lead & Copper Rule Lead & Copper Rule Lead & Copper Rule Lead & Copper Rule	Lead & Copper Rule Lead & Copper Rule
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SDWIS Begin Date SNC # of Violations 12/2/2008 N B/2/2008 N 11/16/2008 N 11/16/2008 N 11/16/2008 N 11/16/2009 N 11/16/2009 N 2/2/2/2008 N 2/2/2/2008 N 2/2/2/2008 N 2/2/2/2008 N 2/2/2/2008 N 2/2/2/2/2 N 2/2/2/2/2 N 2/2/2/2/2 N 2/2/2/2/	. Z > > Z > Z > Z > Z	2>zzzzzzzzzzzzzzzzzzzzzzz	:zz>z> >zzzzzzzzzzzzzz	5/82000 N 073/2008 N 12/3/2008 N 12/3/2008 N 2/2/2008 N 2/2/2008 N 11/4/2/2008 N 11/4/2/2009 N 18/19/2009 N 1
WS Type SDWI	0 0 0 0 0 0 0 0			0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
New PWSs During Period from July 1, 2007 to June 30, 2010 PWS Name PWS Name PWS Name PAG23002 PENFIELD CHRSTIAN HOME-SOUTH SA023002 SANDHILL SUBDIVISION SA025002 SATILLA PLANTATION/EGLE CREST SA025002 LAURE (RROVE DUNHAM MARSH THE SANCTUARY SUBDIVISION GA025009 THE SANCTUARY SUBDIVISION GA025009 HIDDEN (CREK GA025009 AMBERWOOD SIO GA032009 AMBERWOOD SIO GA031043 PEBBLESTONE SUBDIVISION	CAST HAMPTON AT MILL CREEK FOREST HEIGHTS CENTER WINDMILL PLANTATION SUBDIVISION WOODBRIGGE SUBDIVISION STILL WATER SUBDIVISION STONERROOK SUBDIVISION ALEXANDER FRANS SUBDIVISION ALEXANDER FRANS SUBDIVISION	PIERKEL MURES IMEN IN HUDDLE HOUSE CYPRESS CROSSING WATER SYSTEM PINEMOUNT SUBDIVISION BOGGS ACADEMY WESTERN ESTATES ALLEN & ANNER RV PARK DYSON RV PARK SANCTUARY COVE WATER SYSTEM CANDE LAKE ESTATES SID PULASKI WOODS HOUSTRIAL PARK CANDE LAKE ESTATES SID DEAN FOREST INDUSTRIAL PARK CANDOUNTY WATER SYSTEM CANDOUNTY WATER SYSTEM CROSSWINDS SUBDIVISION MILL BRANCH SUBDIVISION SHADOWOODS SUBDIVISION PACKER PARK LUMBERJACK CAMPING RESORT LUMBERJACK CAMPING RESORT WALNUT GROVE SUBDIVISION	MALLARD POINTEDBRAKE LANDING MELDRIM APRTMENTS MELDRIM APRTMENTS PENNINGTON ESTATES WATER SYSTEM JABEZ VILLAGE NEWTON'S POINTE SUBDIVISION PARK SHORES WATER SYSTEM HOA PINE-DER ROBE THE WOODLANDS SUBDIVISION SHEPHERDS RIDGE SUBDIVISION MOUNTAIN HIGH SUBDIVISION MOUNTAIN AFEA CHRISTINA ACADEMY DIAMOND LURE CAMPGROUND THE LAKES PALMETTO BLUFF GREEN COVE SUBDIVISION SAUTEE RESORT	KANGAROO STORE #3342 DNR-FD ROOSEVELT GROUP CAMP SPRING CARRAGE & HORRES, INC FREEDOM HEIGHTS SUBDIVISION PROVIDENCE POINT LANDING S/D YORK SHORES PARADISE PT-WAFFERRONT SUBDIVISION MILL POND PLANTATION PARMETTO PINES PLANTATION PLANTATION AT EVERGREEN
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	7/1/2008 1/1/2008	7/1/2008	1/1/2009	10/1/2008 11/1/2008 11/1/2008 11/1/2009 11/1/2009 10/1/2009 11/1/2009 12/1/2010 11/1/2010 11/1/2010 11/1/2010 11/1/2010 11/1/2010 11/1/2010 11/1/2010 11/1/2010 11/1/2010	902/1//
	Consumer Confidence Rule Lead & Copper Rule	Consumer Confidence Rule	Lead & Copper Rule	Lead & Copper Rule Coliform (TCR)	Consumer Confidence Rule
	CCR Complete Failure to Report Initial Tap Sampling for Pb and Cu	0 1 CCR Complete Failure to Report	0 0 1 Initial Tap Sampling for Pb and Cu		1 CCR Complete Failure to Report 0
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ATTACHMENT B

Georgia Rural Water Association Public Water System Capacity Development Activities July 1, 2007 through June 30, 2008

Technical Assistance, Education, Outreach Efforts:

GRWA :	Conferences:
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<u>Dates</u>	Location	Attendance
Oct. 28-30, 2007	Helen	354 water systems Total attendance > 900
May 18-20, 2008	Jekyll Island	

GRWA Water System Technical Assistance Contacts: (NOT DWSRF-funded)

<u>Dates</u>	On-site TA Contacts
7/1/07 to 6/30/08	2,122

Circuit-Rider Visits (funded by 2% DWSRF Set-aside)

2% Technical Assistance DWSRF Contract on-site contacts from 7/1/2007 to 6/30/2008:

Number of "circuit rider" type technical assistance (face-to-face contacts) visits made:

Y	ear	Total	Number	number of	Systems
		Number	of	Govt	serving
		of	Private	systems	<3,300
		systems	systems	visited	people
		visited	visited		
200	07 - 8				
1		518	112	406	134

In addition to the number of public water systems visited for technical assistance under this contract, <u>435</u> systems were also visited for the collection of SOC samples.

Capacity Development Activities supported by DWSRF 15% set-aside.

LT1 ESWTR and Stage 1 DBPR Contract:

Training:

13 workshops

attendance: 355

Technical Assistance:

39 public water systems

Ground Water System Training and Technical Assistance Contract:

Training:

_7_workshops

attendance: 237

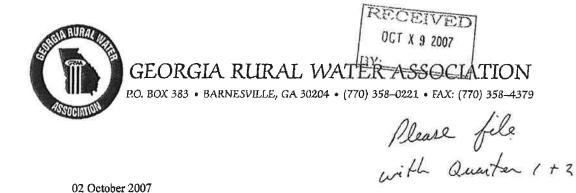
Technical Assistance:

43 public water systems

Other Training for Water System Operators and Personnel 7/1/2006 thru 6/30/2007.

YEAR	No. of Classes	No. of Operators	Class Topics
2007 - 8	70	1135	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; Basic and Applied Math;
			Pump; Safety; Confined Space Entry; O & M of Process Analyzers.

Legislature funded activities: The funding received from the State Legislature helps to support the entire State-wide water and wastewater programs of GRWA. The funding is used to help offset the costs associated with the day-to-day operations of delivering training and technical assistance to water and wastewater system operators, managers and other personnel located throughout Georgia.



02 October 2007

Kim Yawn 233 Peachtree St. NW Suite 900 Peachtree Center-Harris Tower Atlanta, GA 30303-1727

Kim,

Quarter 3

Enclosed is the quarterly report for July, August, and Sptember 2007.

There were 90 entry point's sampled during this quarter for SOC's. -Of the 90 SOC's, 75 were sampled at sites having less than 3,300 population.

-Of the 90 SOC's, 6 were sampled at a site having more than 3,300 population.

-Of the 90 SOC's, 28 sites were public systems and 53 sites were private systems.

*Please be aware that multiple samples were taken at some locations.

There were 125 SRF contacts made during this quarter.

-Of the 125 SRF's,100 were conducted with systems having less than 3,300 population.

-Of the 125 SRF's, 25 were conducted with systems having more than 3,300 population.

-116 contacts were made with public systems.

-9 contacts were made with private systems.

* Please be aware that assistance was provided on multiple water/waste-water systems at several locations listed.

TRAINING • TECHNICAL ASSISTANCE

03 January 2008

Kim Yawn 233 Peachtree St. NW Suite 900 Peachtree Center-Harris Tower Atlanta, GA 30303-1727

Kim,

Enclosed is the quarterly report for October, November, and December 2007.

There were 99 entry point's sampled during this quarter for SOC's.

-Of the 99 SOC's, 81 were sampled at sites having less than 3,300 population.

-Of the 29 SOC's, 3 were sampled at a site having more than 3,300 population.

-Of the $\overline{99}$ SOC's, $\overline{24}$ sites were public systems and $\underline{60}$ sites were private systems.

*Please be aware that multiple samples were taken at some locations.

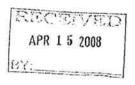
There were 125 SRF contacts made during this quarter.

- -Of the 125 SRF's,92 were conducted with systems having less than 3,300 population.
- -Of the 125 SRF's, 30 were conducted with systems having more than 3,300 population.
- -106 contacts were made with public systems.
- -96contacts were made with private systems.
- * Please be aware that assistance was provided on <u>multiple water/waste-water</u> systems at several locations listed.

TRAINING • TECHNICAL ASSISTANCE

06 April 2008

Kim Yawn 233 Peachtree St. NW Suite 900 Peachtree Center-Harris Tower Atlanta, GA 30303-1727



Kim,

Enclosed is the quarterly report for January, February, and March 2008. There were 93 entry point's sampled during this quarter for SOC's.

- -Of the 23 SOC's, 70 were sampled at sites having less than 3,300 population.
- -Of the 23 SOC's, 3 were sampled at a site having more than 3,300 population.
- -Of the $\underline{93}$ SOC's, $\underline{19}$ sites were public systems and $\underline{54}$ sites were private systems.
- *Please be aware that multiple samples were taken at some locations.

There were 126 SRF contacts made during this quarter.

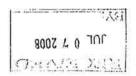
- -Of the 126 SRF's,100 were conducted with systems having less than 3,300 population.
- -Of the 126 SRF's, 26 were conducted with systems having more than 3,300 population.
- -99 contacts were made with public systems.
- -27 contacts were made with private systems.
- * Please be aware that assistance was provided on <u>multiple water/waste-water</u> systems at several locations listed.

TRAINING • TECHNICAL ASSISTANCE

JUL 0 7 2008

01 July 08

Kim Yawn 233 Peachtree Street NW, Suite 900 Peachtree Center-Harris Tower Atlanta, GA 30303-1727



Kim,

Enclosed is the quarterly report for April, May, and June 2008. There were 80 entry points sampled during this quarter for SOC's.

- -Of the 80 SOC's, 61 were sampled at sites having less than 3,300 population.
- -Of the 80 SOC's, 4 were sampled at sites having more than 3,300 population.
- -Of the 80 SOC's, 22 were public systems and 42 sites were private systems.
- *Please be aware that multiple samples were taken at some locations.

There were 125 SRF contacts made during this quarter.

- -Of the 125 SRF's, 88 were conducted with systems having less than 3,300 population.
- -Of the 125 SRF's, 35 were conducted with systems having more than 3,300 population.
- -83 contacts were made with public systems.
- -39 contacts were made with private systems.
- *Please be aware that assistance was provided on <u>multiple water/waste-water</u> systems at several locations listed.

TRAINING • TECHNICAL ASSISTANCE

Georgia Rural Water Association Public Water System Capacity Development Activities July 1, 2008 through June 30, 2009

Technical Assistance, Education, Outreach Efforts:

GRWA Conferences:

Dates

Location

Attendance

Oct. 26-28, 2008

Helen

464 water system personnel Total attendance > 900

May 17-19, 2009

Jekyll Island

592 water system personnel Total attendance > 1,480

GRWA Water System Technical Assistance Contacts: (NOT DWSRF-funded)

<u>On-site TA Contacts</u>

7/1/08 to 6/30/09

2,396

Circuit-Rider Visits (funded by 2% DWSRF Set-aside)

2% Technical Assistance DWSRF Contract on-site contacts from 7/1/2008 to 6/30/2009:

Number of "circuit rider" type technical assistance (face-to-face contacts) visits made:

Year	Total	Number	number of	Systems
	Number	of	Govt	serving
	of	Private	systems	<3,300
	systems	systems	visited	people
	visited	visited		
2008 - 9				
	501	184	299	407

In addition to the number of public water systems visited for technical assistance under this contract, <u>143</u> systems were also visited for the collection of SOC samples.

Capacity Development Activities supported by DWSRF 15% set-aside.

LT1 ESWTR and Stage 1 DBPR Contract:

Training: 2 workshops attendance: 54

Technical Assistance: 38 public water systems

Ground Water System Training and Technical Assistance Contract:

Training: 1 workshops attendance: 24
Technical Assistance: 41 public water systems

Other Training for Water System Operators and Personnel 7/1/2008 thru 6/30/2009.

YEAR	No. of Classes	No. of Operators	Class Topics
2008 - 9	76	1480	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; Basic and Applied Math; Pump; Safety; Confined Space Entry; O & M of Process Analyzers.

Legislature funded activities: The funding received from the State Legislature helps to support the entire State-wide water and wastewater programs of GRWA. The funding is used to help offset the costs associated with the day-to-day operations of delivering training and technical assistance to water and wastewater system operators, managers and other personnel located throughout Georgia.

Georgia Rural Water Association Public Water System Capacity Development Activities July 1, 2009 through June 30, 2010

Technical Assistance, Education, Outreach Efforts:

GRWA Conferences:

DatesLocationAttendanceOct. 25-27, 2009Helen344_ water system personnel
Total attendance 693May 16-18, 2010Jekyll Island523_ water system personnel
Total attendance 1,079

GRWA Water System Technical Assistance Contacts: (NOT DWSRF-funded)

<u>Dates</u> <u>On-site TA Contacts</u>

7/1/09 to 6/30/10 <u>3,254</u>

Circuit-Rider Visits (funded by 2% DWSRF Set-aside)

2% Technical Assistance DWSRF Contract on-site contacts from 7/1/2009 to 6/30/2010:

Number of "circuit rider" type technical assistance (face-to-face contacts) visits made:

Year	Total Number of systems visited	Number of Private systems visited	number of Govt systems visited	Systems serving <3,300 people
2009-10	500	251	249	425

In addition to the number of public water systems visited for technical assistance under this contract, <u>345</u> systems were also visited for the collection of SOC samples.

Capacity Development Activities supported by DWSRF 15% setaside.

LT1 ESWTR and Stage 1 DBPR Contract:

Training:

0 workshops

attendance:

Technical Assistance:

21 public water systems

Ground Water System Training and Technical Assistance Contract:

Training:

20 workshops

attendance: 1,077

Technical Assistance:

48 public water systems

Other Training for Water System Operators and Personnel 7/1/2009 thru 6/30/2010.

YEAR	No. of Classes	No. of Operators	Class Topics
2009-10	67	1249	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; Basic and Applied Math; Pump; Safety; Confined Space Entry; O & M of Process Analyzers.

Legislature funded activities: The funding received from the State Legislature helps to support the entire State-wide water and wastewater programs of GRWA. The funding is used to help offset the costs associated with the day-to-day operations of delivering training and technical assistance to water and wastewater system operators, managers and other personnel located throughout Georgia.



Georgia Water & Wastewater Institute, Inc.

A Subsidiary of the Georgia Association of Water Professionals

301 Ole Hickory Trail North Carrollton, Georgia 30117 (770) 214-0153 (770) 214-0219 - FAX

September 2, 2008

MEMORANDUM

To:

Onder Serefi, Georgia Environmental Protection Division

From:

Joel A. Peacock, Director of Operations Georgia Water & Wastewater Institute

RE:

Operator Training Program Update - Fiscal Year July 1, 2007 - June 30, 2008

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 105 courses, with a total attendance of over 1,100 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, 2007 - June 30, 2008

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

Relating to the Class IV Water Operator Training Program, GWWI completed the following during the 2008 fiscal period of July 1, 2007 - June 30, 2008:

- · Conducted 3 Class IV Water Training Courses
- Successfully trained 8 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.

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 2008 fiscal period of July 1, 2007 - June 30, 2008:

- Conducted 102 courses related to water, wastewater and/or laboratory operations.
- Successfully trained 1,111 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) 618-8690 ext. 17.

Thank you for your continued support of our efforts.

Sincerely,

Joel A. Peacock, Director of Operations

Tou A Pearack

Georgia Water & Wastewater Institute, Inc.



Georgia Water & Wastewater Institute, Inc.

A Subsidiary of the Georgia Association of Water Professionals

301 Ole Hickory Trail North Carrollton, Georgia 30117 (770) 214-0153 (770) 214-0219 - FAX

September 2, 2008

MEMORANDUM

To:

Onder Serefi, Georgia Environmental Protection Division

From:

Joel A. Peacock, Director of Operations Georgia Water & Wastewater Institute

RE:

Technical Assistance, Education & Outreach Update

Fiscal Year July 1, 2007 - June 30, 2008

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, 2007 – June 30, 2008.

- July 15 July 18, 2007 GAWP Annual Conference & Expo Savannah, GA
 - (1,203 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 13-14, 2007

Fall Conference & Expo

Athens, GA

 (555 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.

GAWP Reuse Workshop

St. Simons Island, GA

- (89 attendees) The Reuse Workshop was a specialty event held to promote water reuse programs around the state of Georgia. The conference, titled "Water Reuse in Georgia: Drivers, Trends and Technologies" provided everything you needed to know about state requirements, planning, operations, public education and many other topics related to reuse including case studies on other systems currently using reuse water.
- March 18-19, 2008

Industrial Conference & Expo

Callaway Gardens, GA

- (362 attendees) The Industrial Conference goes beyond just dealing with the water environment, and includes sessions on all aspects of industrial pollution control and prevention. This conference is targeted towards industrial environmental managers and operators, consulting engineers, regulatory personnel, equipment manufacturers and their representatives, and others concerned with industrial pollution control. Sessions addressed a broad array of topics, including regional water quality issues, air quality, remediation technology, data management, corrective action planning, wastewater evaluation technology, environmental management, site-assessment technology, environmental planning, Clean Water Act compliance, solid waste management.
- April 9-10, 2008

Small/Medium Systems Managers Forum Cartersville, GA

- (27 Utility Managers) Planning and networking forum for managers of Georgia's Small & Medium Water and Wastewater Systems around the state.
- April 22-23, 2008

Spring Conference & Expo

Columbus, GA

(456 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, 2007 - June 30, 2008 period, GWWl's Technical Assistance, Education & Outreach efforts reached over 2,692 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) 618-8690 ext. 17.

Thank you for your continued support of our efforts.

Sincerely.

Joel A. Peacock, Director of Operations

Jail A Pearack

Georgia Water & Wastewater Institute, Inc.



Georgia Water & Wastewater Institute, Inc.

A Subsidiary of the Georgia Association of Water Professionals

301 Ole Hickory Trail North Carrollton, Georgia 30117 (770) 214-0153 (770) 214-0219 - FAX

August 24, 2009

MEMORANDUM

To:

Linda MacGregor, Georgia Environmental Protection Division

From:

Joel A. Peacock, Director of Operations Georgia Water & Wastewater Institute

RE:

Operator Training Program Update - Fiscal Year July 1, 2008 - June 30, 2009

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 80 courses, with a total attendance of over 1,200 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, 2008 - June 30, 2009

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

Relating to the Class IV Water Operator Training Program, GWWI completed the following during the 2009 fiscal period of July 1, 2008 - June 30, 2009:

- Conducted 1 Class IV Water Training Course
- Successfully trained 14 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.

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 2009 fiscal period of July 1, 2008 - June 30, 2009:

- Conducted 82 courses related to water, wastewater and/or laboratory operations.
- Successfully trained 1207 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) 618-8690 ext. 17.

Thank you for your continued support of our efforts.

Sincerely,

Joel A. Peacock, Director of Operations

Joel A Pearock

Georgia Water & Wastewater Institute, Inc.

GWWI Annual Report for MBE/WBE Utilization

(Attachment B)

The Georgia Water & Wastewater Institute, in accordance with Section D13c of the contract has retained the services of Bay Springs Professional Cleaning Service; a minority owned janitorial service located in Carrollton, Georgia. Bay Springs Professional Cleaning Service was contracted in April of 2005 and is still being utilized at this time.

In addition, beginning in March of 2001, GWWI contracted with Thomas Lawn Care, a minority owned and operated lawn maintenance service located in Carrollton, Georgia. Mr. Thomas' services are still being utilized at the present time.



Georgia Water & Wastewater Institute, Inc.

A Subsidiary of the Georgia Association of Water Professionals

511 Stadium Drive Carrollton, Georgia 30117 (770) 214-0153 (770) 214-0219 - FAX

July 29, 2010

MEMORANDUM

To:

Ray Hashemi, Georgia Environmental Protection Division

From:

Joel A. Peacock, Director of Operations Georgia Water & Wastewater Institute

RE:

Operator Training Program Update - Fiscal Year July 1, 2009 - June 30, 2010

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 82 courses, with a total attendance of over 796 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.

2A

Reporting Period of July 1, 2009 – June 30, 2010

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

Relating to the Class IV Water Operator Training Program, GWWI completed the following during the 2010 fiscal period of July 1, 2009 - June 30, 2010:

- Offered1 Class IV Water Training Course
- Successfully trained 0 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 IV operators to the Class IV 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 IV 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 2010 fiscal period of July 1, 2009 - June 30, 2010:

- Conducted 82 courses related to water, wastewater and/or laboratory operations.
- Successfully trained 796 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) 618-8690 ext. 17.

Thank you for your continued support of our efforts.

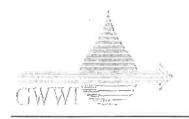
Sincerely,

Joel A. Peacock,

Director of Operations

Tout A Pearock

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 (770) 214-0219 - FAX

July 29, 2010

MEMORANDUM

To:

Ray Hashemi, Georgia Environmental Protection Division

From:

Joel A. Peacock, Director of Operations Georgia Water & Wastewater Institute

RE:

Technical Assistance, Education & Outreach Update

Fiscal Year July 1, 2009 - June 30, 2010

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, 2009 – June 30, 2010.

- August 9 August 12, 2009 GAWP Annual Conference & Expo Savannah, GA
 - (1,002 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 2-4, 2009

Fall Conference & Expo

Athens, GA

 (449 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. • March 15-17, 2010

Industrial Conference & Expo

Callaway Gardens, GA

- o (252 attendees) The Industrial Conference goes beyond just dealing with the water environment, and includes sessions on all aspects of industrial pollution control and prevention. This conference is targeted towards industrial environmental managers and operators, consulting engineers, regulatory personnel, equipment manufacturers and their representatives, and others concerned with industrial pollution control. Sessions addressed a broad array of topics, including regional water quality issues, air quality, remediation technology, data management, corrective action planning, wastewater evaluation technology, environmental management, site- assessment technology, environmental planning, Clean Water Act compliance, solid waste management.
- April 12-14, 2010

Spring Conference & Expo

Columbus, GA

 (371 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, 2009 – June 30, 2010 period, GWWl's Technical Assistance, Education & Outreach efforts reached over 2,074 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) 618-8690 ext. 17.

Thank you for your continued support of our efforts.

Sincerely.

Joel A. Peacock, Director of Operations

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Georgia Water & Wastewater Institute, Inc.



quirements of the National Primary Drinking Water Regulations in 40 CFR, Part 141 promulgated pursuant to Section 1412 of the Federal Act (42 U.S.C. 300g-1).

- (2) The Director may prescribe more stringent requirements than those specified by any other Section of these Safe Drinking Water Rules when necessary to:
 - (a) meet any requirements of the Federal Act and Regulations; or
- (b) safeguard the public health, safety and welfare.

 Authority O.C.G.A. Sec. 12-5-176 et seq. History. Original Rule entitled "Requirements for an Exemption" adopted. F. July 5, 1977; eff. July 26, 1977, as specified by Rule 391-3-5-47. Repealed: New Rule entitled "State Primacy Maintenance" adopted. F. May 12, 1989; eff. June 1, 1989.
- 391-3-5-.38 Effective Date. Amended. These rules shall become effective on July 26, 1977. Amendments shall become effective as provided by law.

 Authority O.C.G.A. Sec. 12-5-170 et seq. History. Original Rule entitled "Exemption Request" adopted. F. July 5, 1977; eff. July 26, 1977, as specified by Rule 391-3-5-47. Repealed: New Rule entitled "Effective Date" adopted. F. May 12, 1989; eff. June 1, 1989.
- 391-3-5-.39 Public Water System Classification. Amended. In accordance with Section 10 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 judgment of the Division. Any system or plant not fitting any of the following standard descriptions shall be classified individually according to the judgment 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 public water 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.

a public water system.

Authority O.C.G.A. Sec. 12-5-170 et seq. History. Original Rule entitled "Consideration of an Exemption Request" adopted. F. July 5, 1977; eff. 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. June 1, 1989. Amended: F. Sept. 26, 1997; eff. Oct. 18, 1997. Amended: F. Sept. 29, 2000; eff. Oct. 19, 2000.