IMPLEMENTATION OF GEORGIA'S CAPACITY DEVELOPMENT PROGRAM

2008 ANNUAL REPORT



Georgia Environmental Protection Division
Watershed Protection Branch
Drinking Water Program
September 2008

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. There are no known man-made contaminants in the treated public water supplies in Georgia that may affect public health. Compliance with the health-related drinking water standards remains high.

Currently, Georgia has approximately 2,485 active public water systems serving a population of approximately 8.4 million people. This means approximately 87% of the more than 9.4 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 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, as this report will show, continuous efforts are being made towards the education, training and certification of the owners and operators of these smaller water systems (refer to Figure 1). The Georgia Rural Water Association, Georgia Association of Water Professionals, and Georgia Environmental Facilities Authority partner with EPD in this widespread effort and play a very significant role. We are getting good results.

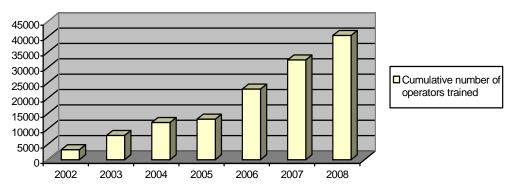


Figure 1. Cumulative number of operators trained by reporting year.

The U.S. Environmental Protection Agency (USEPA) approved Georgia's capacity development strategy program on September 21, 2000. Since then, significant progress has been made towards improving the technical, managerial, and financial capacity of the public water systems in Georgia. New systems are being designed and constructed to meet more stringent standards for quality and reliability, and new owners are required to demonstrate adequate managerial and financial capacity through 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, the SNC list forwarded by USEPA for the period from July 1, 2007 to June 30, 2007 did not contain any new water system approved or permitted during the last three years.

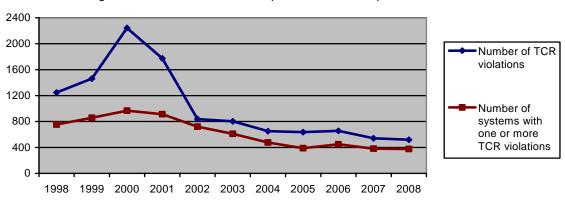


Figure 2. Total Coliform Rule compliance data for the past decade.

Since 2002, there has been significant improvement in the overall microbial quality of the drinking water being provided to the public. Available data indicate that Total Coliform Rule (TCR) compliance rates in Georgia have improved over the past decade as the total number of violations have decreased over time and remained fairly constant since 2004 (refer to Figure 2). We contribute 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 Facilities 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. As of June 2008, more than \$192.5 million in project assistance has been awarded to 101 water systems for various improvement projects, benefiting 2,058,559 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.

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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
CCR Consumer Confidence Report
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 Facilities 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
NTNCWS Non-Transient Non-Community Water System

PPG Performance Partnership Grant

PWS Public Water System

RDC Regional Development Center

SDWA Safe Drinking Water Act

SDWIS Safe Drinking Water Information System

SMP Scheduled Maintenance Plan SNC Significant Non-Compliance SOP Standard Operating Procedure **SWAP** Source Water Assessment Program **TMF** Technical, Managerial and Financial **TNCWS** 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

In the preparation of this <u>2008 Annual Report on Implementation of Georgia's Capacity Development Program</u>, we have followed 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, 2008; however, historical data was included, where appropriate, to establish baselines from which to measure success and better highlight the benefits of improving TMF capacity of public water systems.

This report summarizes the major objectives of the State's capacity development programs, describes how the program is being implemented, describes the successes that have been achieved thus far, and outlines plans to further improve the performances in the future. The objective is to promote public health protection and to assure new and existing public water systems can provide safe drinking water to the citizens of Georgia on a continuous basis. Collectively, along with other stakeholders and professional water associations in the State, Georgia EPD is putting tremendous effort towards achieving success. Partner organizations such as the Georgia Rural Water Association (GRWA), Georgia Association of Water Professionals (GAWP) and the Georgia Environmental Facilities Authority (GEFA) play a significant role in helping water system owners and operators achieve and maintain compliance by providing technical or financial assistance. One can see the result of these accomplishments by the steady decline in compliance failures (or steady improvement in compliance rates), especially with respect to drinking water standards that may pose an immediate threat to public health. The report discusses in detail the roles that cooperation, mutual aid agreements, partnerships are playing in assisting public water systems as they obtain and sustain capacity.

NEW SYSTEMS PROGRAM: Under the New Systems Program, this report shows that the State of Georgia continues to ensure that all new CWS and NTNCWS demonstrate the technical, managerial, and financial capacity with respect to each national primary drinking water regulation in effect, or likely to be in effect, prior to commencing operations. It addresses the following three specific concerns:

- 1. <u>Has Georgia's legal authority (statutes) to implement the New Systems Program changed within the previous reporting year?</u> The answer is NO. The State of Georgia retains the same authority it had before to implement the program. There have been no changes to the program or approaches, nor any modification to a statute or regulation that can affect the State's implementation of the New Systems Program within the previous year. Since there were no changes, specifically no statute changes that could affect the State's legal authority, no statement from the State's Attorney General or delegated department attorney is required at this time.
- 2. <u>Has there been any modification to Georgia's control points?</u> The answer is NO. The control points, which were previously integrated in the State's capacity development authority program, have not been changed. There are two major control points: (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.

These control points and others are discussed in detail in this report. The State of Georgia

uses these control points to ensure new systems demonstrate adequate TMF capacity before proving water to the public for human consumption.

3. <u>Listing of new systems (PWSID & Name) in Georgia within the past three years, and whether they were on any of the annual Significant Non-Complier (SNC) lists within the previous three years.</u> Compliance tracking is considered an indicator or measure of success or achievement for the New Systems Program. Tracking of new water systems is conducted in order to identify whether any patterns or problems exist in the first three years of a new system's operation. If we see certain persistent trends, then we intend reevaluate our current program or approach and make appropriate adjustments to the New Systems Program. At the end of this report, we have included a listing of all 50 new CWS and NTNCWS approved during the reporting period of July 1, 2007 to June 30, 2008 (see Attachment A). None of the systems were on the 2007 SNC list.

For the reporting period from July 1, 2005 to June 30, 2008, only 12 of the total 104 new CWS and NTNCWS (11.5%) were on any of the SNC lists during the last three years. These systems became SNCs due to failure to comply with the CCR requirements, lead and copper initial tap monitoring, TCR monitoring and MCLs, nitrate monitoring, and operator certification requirements. We contribute the low rate of new systems on the SNC lists to the increased training efforts. The available data suggests that the capacity development authority program is having a positive affect.

EXISTING SYSTEM STRATEGY: Under the Existing System Strategy, this report will show that the State of Georgia continues to implement a successful strategy to assist public water systems in acquiring and maintaining technical, managerial, and financial capacity. In addition to detailing many activities and successes being made in this effort, the report also addresses the following specific concerns:

1. <u>Under Georgia's approved existing systems strategy, which programs, tools and/or activities were used, and how did each assist existing public water systems in acquiring and maintaining Technical, Managerial, and Financial capacity?</u> Under Georgia's capacity development strategy, all public water systems in Georgia are being provided assistance to help them acquire and maintain technical, managerial, and financial capacity. The assistance includes, but is not limited to, the following: 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 TMF capacity. Systems are identified and prioritized based upon the knowledge gained by EPD staff through compliance records, sanitary surveys/inspections, complaints, and the potential impact of new regulations.

This report details a broad range of programs and activities employed in Georgia's existing system strategy program that were performed during the previous year (i.e. operator training programs, operator certification programs, area wide optimization program activities, sanitary surveys and inspections, plan reviews and approvals, business plans, operation and maintenance plans, technical assistance, education and outreach, compliance and enforcement

mechanisms, water system consolidations, drinking water fee system, peer review program, consumer confidence reports, circuit-rider visits, etc.) and analyzes the role each program played in building or maintaining capacity of various types of systems. The report includes explanations of each activity, offers statistical information and discusses how each program helped maintain capacity.

- 2. <u>Based on the existing systems strategy, how has Georgia continued to identify systems in need of capacity development assistance?</u> Georgia EPD is fully implementing 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 and inspections, complaints, and the potential impact of new regulations. These are discussed in detail in this report under the "New System Program" section.
- 3. During the reporting period, when statewide system capacity concerns or capacity development needs (TMF) were identified, what was Georgia's approach in offering and/or providing assistance? As stated above, water systems in need of assistance are normally 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. Those systems with capacity concerns are targeted for assistance and were individually provided on-site assistance and training. The appropriate technical assistance was provided either by EPD staff and/or by the GRWA "circuit-rider" technical assistance provider. For example, surface water treatment operators that needed assistance with the completion of electronic operating reports (MORs) and calculation of disinfection contact times (CTs) for Giardia and virus inactivation were provided on-site training by the EPD staff and/or the GRWA technical advisor. Furthermore, additional training on Stage 1 DBPR were provided to small water system operators, after it was determined based on the number of inquiries received, that operators were still confused about many components of that regulation, including monitoring plans, TTHM and HAA5 sample collection, compliance calculations and determinations, federal and State reporting requirements, and etc. During FY 2008, a total of twenty-one (21) classroom workshops were also provided on the Stage 2 DBPR and Initial Distribution System Evaluation (IDSE) to all Schedule 3 and Schedule 4 water systems in order to familiarize them with the early implementation requirements and help them meet the critical submittal deadlines. More than 590 water system operators and personnel attended these meetings.
- 4. If Georgia reviewed implementation of its existing systems strategy during the previous year, discuss the review and discuss how findings have been or may be addressed. As a primacy agency, Georgia EPD continuously reviews its program and activities to ensure that the best approach is being used in the implementation of its programs. The purpose of this review is to ensure that public water systems continue to achieve compliance with the NPDWRs and provide safe and reliable drinking water to the public. If necessary, adjustments are made to how the program is being implemented to deal with new challenges. Certain activities may be contracted to outside companies or associations in an effort to quickly to target assistance to a certain group. Priorities may be shifted to make better and more efficient use of available resources. New rules, regulations, or policies may be developed to help ensure compliance. This is an on-going process.
- 5. <u>Did Georgia make any modifications to its existing system strategy?</u> The answer is NO. The need to make modifications, wording, or approach to the existing system strategy program was not identified or required. At the present time, we continue to achieve our goals with the

existing strategy program. Overall, the quality of drinking water served to the citizens of Georgia is very good. There are no known man-made contaminants are present in the treated public water supplies that may affect public health. Compliance with the health related drinking water standards remains high.

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 2,485 PWSs in Georgia that serve approximately 8.4 million people. This category includes CWSs, NTNCWSs, and TNCWSs. Some of these PWSs are very small water systems. Approximately 75% 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 1,765 CWSs in Georgia that serve more than 8.3 million people.

Nationally, slightly more than 86% of community water systems are "very small" (serving fewer than 500 persons) or "small" (serving fewer than 3,300 persons). Although a significant majority of CWS, these systems serve just over 10% of the year-round service population. CWS can be privately owned or publicly owned. A substantial number of privately owned systems are "ancillary systems" they provide water as an ancillary function of their principal business. An example is mobile home parks, which provide water as an adjunct to their principal business. Nationally, approximately 53% of CWS serving between 25 and 100 persons are ancillary systems.

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 217 NTNCWSs that serve a total population of 64,717 people. Nationally, approximately 20,000 NTNCWSs

serve some 6 million people. In Georgia, approximately 98% of NTNCWSS use ground water as their primary source. 99% of NTNCWSs are "very small" or "small" and most are privately owned.

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 503 TNCWSs serving a total population of 78,392 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 adequacy of source water and the adequacy of treatment, storage, and distribution infrastructure. It also refers to the ability of system personnel to adequately operate and maintain the system and to otherwise implement requisite technical knowledge.

What is managerial capacity? Managerial capacity is the ability of a water system to conduct its affairs in a manner enabling the system to achieve and maintain compliance with 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, 2008, the State of Georgia had approximately 2,485 active PWS serving a population over 8.4 million people. Based on the latest census figures, this means 87% of the 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.

Specifically, there are 111 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 118 other communities for distribution. Together, these systems that depend upon surface water supplies provide drinking water to approximately 6.6 million of the State's population. The other 2,256 water systems mainly use groundwater sources (wells and springs) as their water supplies to serve approximately 1.7 million citizens.

Of the 2,485 public water systems, approximately 71% (1,765) 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. Of the 1,765 community water systems, 220 (13%) of them are supplied by surface water sources and the remaining 1,545 (87%) are served by groundwater sources.

In addition, there are 217 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 503 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 3 TNCWS that use surface water supplies, all of the NTNCWSs and the TNCWSs use primarily groundwater sources for their drinking water needs. Please refer to Figure 3 for a graphical representation of the public water systems in Georgia.

While some of the public water systems are large and provide water to millions of people, majority of them are small and serve water to very small communities. Of the total 2,485 public water systems, 1,846 (75%) serve populations of less than 500 people. Approximately 1,630 (65%) of all public water systems in the State are privately owned and 855 (35%) are publicly owned by local governments.

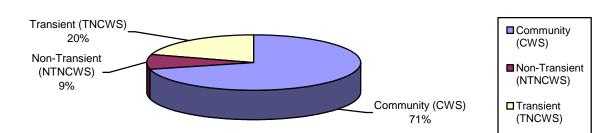


Figure 3. Breakdown of types of public water systems in Georgia.

CAPACITY DEVELOPMENT AUTHORITY

Georgia's capacity development authority program to ensure that all new CWSs and NTNCWSs demonstrate adequate TMF capacity for compliance with the NPDWRs began on October 1, 1999. There are two major control points included in the authority program. They are: (1) technical review and approval of proposed 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 in that jurisdiction. The main objective of these requirements is to assure that new CWS and NTNCWS have adequate TMF capacity to comply with all current and future drinking water regulations and provide safe, reliable service to their customers.

CONTROL POINTS: As stated above, EPD has two control points in ensuring that new CWSs and NTNCWSs demonstrate adequate TMF prior to commencing operation. The first control point is the requirement for any person to obtain EPD's approval before constructing a 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". Upon completion of review and approval of the projects, the District Offices send the relevant documents to the Drinking Water Permitting & Engineering Program in Atlanta for the permit issuance.

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.

During the reporting period from July 1, 2007 to June 30, 2008, a total of 50 new CWS and NTNCWS began operating as public water systems in Georgia. The data below indicate similar information for the period from July 1, 2003 through June 30, 2008.

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

EPD has successfully implemented all aspects of the new systems program. The following highlights a few of the ongoing efforts made by the State of Georgia to improve the technical, managerial, and financial capacity of both new and existing public water systems:

- As of June 30, 2007, a total of 612 business plans have been received from new and existing water systems.
- During the period from July 1, 2007 to June 30, 2008 a total of 48 business plans were received from 36 new public water systems and 12 from existing water systems.
- 12 new systems were required by compliance schedules to submit a business plan within 6 months from the initial issuance of the permit to operate a public water system.
- During the period from July 1, 2007 to June 30, 2008, the Drinking Water Permitting & Engineering Program and the EPD District Offices performed 787 sanitary surveys, conducted 677 on-site inspections; responded to 208 complaints, and completed 1,794 on-site technical assistance visits.
- As of June 30, 2008, 54 surface water or GWUDI systems have submitted detailed O&M Plans. Only two of these O&M Plans were submitted during this reporting period.
- During the period from July 1, 2007 to June 30, 2008 approximately 2,200 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. EPD's engineering staff approved roughly 600 of the 2,200 water related projects and the rest were approved under the EPD's delegated authority. 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.

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

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 13 engineering positions in the Albany, Athens, Augusta, Brunswick, Cartersville, Columbus, and Savannah District Offices. These engineers continue to review plans and specifications, provide and offer technical assistance, assist in the preparation of business plans, conduct inspections, including those under construction, in an effort to help ensure smaller groundwater public water systems have adequate technical capacity. We plan to increase the number of engineers at District Offices, as the resources become available, in order to improve efficiency and effectiveness of the current capacity development program activities. This will also enable us to provided better customer service.

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. From FY 1994 to FY 1996, the State of Georgia had 67 historical SNCs. From FY 1997 to FY 1999, the number of historical SNCs increased to 87. The increase in the number of SNCs was mainly due to complexity of the new federal monitoring requirements associated with the new drinking water regulations.

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 only, which pose an immediate threat to public health. In that respect, one can easily conclude that those public water systems that are considered significant non-compliers and that may pose adverse health effects are very low in the State. Nevertheless, continued efforts are being made by EPD to reduce the SNC numbers. Additional resources will be needed in the Drinking Water Compliance Program to improve the in-house information systems capability to better track water systems with poor monitoring and reporting histories. This will help the Program provide better technical assistance by identifying the needy ones better, which would ultimately result in improved monitoring and reporting compliance rates.

During this reporting period, a total of 121 systems have been identified as SNCs. Only 9 of the SNCs were due to MCL violations and the remaining 112 SNCs were mainly due to monitoring

and reporting violations. As is the case nationally, very small public water systems accounted for a disproportionate number of the SNCs. Very small systems are those defined as serving populations of 500 people or fewer. In Georgia, there are approximately 1,900 very small public water systems that serve less than 500 people. These very small systems comprise 74% of the total inventory of public systems but accounted for approximately 88% of

Fiscal Year	Number of SNCs	SNCs due to MCL	SNCs due to M/R	CWS and NTNCWS (500-3,300)
2001	139	9	130	12
2002	63	10	53	0
2003	128	3	125	20
2004	269	4	265	27
2005	62	6	56	11
2006	57	10	47	7
2007	128	8	120	14
2008	121	9	112	13

the SNCs (106 out of 121 SNCs) during the period from July 1, 2007 to June 30, 2008. Systems serving greater than 500 persons accounted for 13 SNCs and systems serving greater than 3,300 persons accounted for the remaining 2 SNCs.

In contrast, there are about 400 small public water systems in Georgia that serve a population between 500 to 3,300 persons. This group of systems comprises 17% of the total inventory of public systems, but accounted for only 11% of the SNCs during the reporting period of July 1, 2007 to June 30, 2008. Nine of the systems in this group were SNCs for failing to submit CCR reports, three systems were SNCs for a health based drinking water standard, and one system was SNC for monitoring and reporting violations.

There are only two systems serving populations greater than 3,300 persons categorized as SNCs during the period July 1, 2007 to June 30, 2008. These represent 2% of the total number of SNCs. One system was a SNC for failing to submit a CCR reports and the other was a SNC for a health based drinking water standard.

For the reporting period from July 1, 2007 to June 30, 2008, SNCs account for only 4.9% 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 lowering the number of SNCs.

In its capacity development strategy, Georgia is committed to utilize 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 has decided to track 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 to 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 are 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.

The table below displays the compliance data for the TCR and indicates that, in any given year, an average of 627 water systems incurred an average of 1,034 TCR violations during the period from FY 1998 through FY 2008. The data is shown graphically in Figure 4. An average of 103 systems (13%) had an MCL exceedance.

	Number of TCR violations				mber of Syst or More TCR	
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
Average	1034	137	897	627	103	523

The data show that significant achievement has been made in compliance with the Total Coliform Rule during the past four years. For the period from 2006 to 2008, the total number of systems with TCR violations has decreased from 657 to 520. Likewise, the total number of violations due to MCL exceedances has also decreased from 129 to 83 during the same time period. This decrease can be contributed to the EPD's continued emphasis in the operator certification program and other outreach efforts to raise awareness in public health protection. We believe, the better the operators are informed about the regulatory requirements and understand the importance and the benefits of operating a public water system in conformance with drinking water standards, the greater effort they will make to preserve and protect the quality of the water they supply to the public. We also recognize the reason we are not seeing more reduction in TCR violations is mainly due to systems' continued struggle to comply with

the disinfection by-products rule (D/DBPR) as they continue to make adjustments to their disinfection practices.

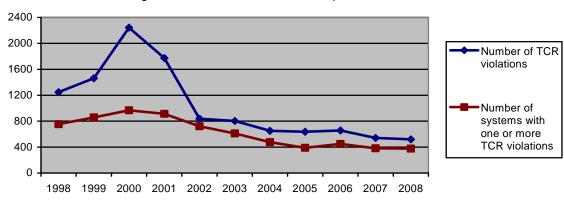


Figure 4. Total Coliform Rule compliance data.

For the reporting period from July 1, 2007 to June 30, 2008, the data in the above table further indicates that 376 of the total 2,485 public water systems (15%) have one or more TCR violation(s). 68 systems (less than 3%) had a TCR violation resulting from an MCL exceedance. Practically, 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 Compliance Program (DWCP) 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 REVIEWS/APPROVALS & THE "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.

This year approximately 2,200 water system projects for both new and expanding public water systems are being 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 2008, a total of 612 business plans have been received from new and existing public water systems. During the current reporting period from July 1, 2007 to June 30, 2008, a total of 48 business plans were received from 36 new public water systems and 12 from existing 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, 2008, a total of 54 surface water or GWUDI systems have submitted detailed O & M Plan. Two of these O & M Plans were received during this reporting period.

<u>SANITARY SURVEYS AND INSPECTIONS</u>: 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 systems. The sanitary survey report provides official, written documentation to the water system officials of the improvements that need to be made to protect public health and to improve the overall capacity of the water system.

EPD also performs inspections and provides onsite 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.

During the period from July 1, 2007 to June 30, 2008, the DWPEP conducted 41 sanitary surveys

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

and 146 on-site inspections of water systems treating surface water or treating groundwater under the direct influence of surface water. In addition, EPD District Offices performed 746 sanitary surveys and 531 on-site inspections of groundwater systems during the same time period.

These 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; locational data collection; cross-connection inspections or investigations; watershed evaluations; and public hearings. The sanitary surveys address eight sanitary survey components required by USEPA including the following: water source; treatment; distribution system; finished water storage; pumps, pump facilities and controls; monitoring and reporting and data verification; system management and operation; and operator compliance with State requirements.

The sanitary survey system evaluation forms were revised January 2001 to include areas for the DWPEP 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. EPD expects the number and frequency of surveillance of the surface water systems to increase in the future. The DWPEP brought the total number of surface water system inspectors to four at the end of 2007.

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. Those sources found to have evidence of GWUDI, appropriate action were taken to correct the problem. The action taken may include constructing a new source and abandoning the old one, connecting to another permitted public water system, or installing an approved treatment system.

From July 1, 2002 to June 30, 2005, a total of 327 MPAs were performed on 214 drinking water sources (154 wells and 60 springs) operated by 130 separate public water systems. Upon analysis, 30 wells and 21 springs were declared to be ground water 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 impacted mainly because of bad casings. All of the effected 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.

From July 1, 2005 through June 30, 2006, a total of 70 MPAs were performed on 52 drinking water sources (37 wells and 15 springs) operated by 30 separate public water systems. Only 9 wells and 5 springs were

GWUDI Activities	FY2003 - FY2005	FY2006
Total number of PWS tested	100	30
Total MPAs Performed	257	70
Number of Wells Tested	117	37
Number of Wells UDI	21	9
Number of Springs Tested	45	15
Number of Springs UDI	16	5

declared to be under the direct influence of surface waters. A very small number of the wells and the springs are currently under investigation for contamination. The other identified sources have either been abandoned or repaired and placed back into service.

The GWUDI program is a very important element in Georgia's capacity development strategy by providing targeted technical assistance to those public water systems in need of acquiring and maintaining adequate technical, managerial and financial capacity. As discussed above, the assistance includes, but is not limited to, technical engineering evaluation of the targeted water systems, direct on-site technical assistance, in depth inspections, proactive compliance and enforcement initiatives, low interest financing alternatives to correct deficiencies, and affordable monitoring and testing services. EPD is fully implementing this strategy. Systems are identified and prioritized based upon sources that are considered at risk of being under the influence of surface water.

To date, the targeted assistance under the GWUDI program has proven to be successful and 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 DWCP Source Water Assessment Program will collect 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 continues to actively participate in USEPA's multistate Area Wide Optimization Program (AWOP). Implementation of AWOP is an important part of EPD's Crypto Strategy. 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. There are plans to enroll eight (8) additional technical personnel in the certification program. Over the last five (5) years, multistate CPEs have been conducted in Georgia as well as other facilities located in Kentucky, Alabama, South Carolina, and North Carolina.

EPD has made significant progress in analyzing and tracking plant performance for all surface water and GWUDI plants in Georgia. This is time-consuming, but allows EPD to determine which plants meet optimized goals each year. Recently, an award program for systems meeting AWOP goals was implemented and certificates were presented to systems that met the AWOP goals for all of 2005 at the 2006 spring conferences of GAWP and GRWA. Presentations about AWOP were also made at other conferences to increase awareness and improve participation. Due to our efforts, a few more water systems have shown interest in the AWOP program.

The greatest improvement in the Georgia's AWOP program is the addition of five new engineering staff members to the DWPEP. The new engineers are excited about the opportunity to learn, work closely with other States and Region, and contribute to the future success of the program. The new staff must be trained to perform microbial CPEs and this emphasizes the need to coordinate and attend multi-State CPE events in order to receive certification from Region 4. Currently, Pete Zorbanos, Ray Hashemi, Samantha Luo, and Kirk Chase are certified to conduct regulatory CPEs in Georgia.

Georgia EPD has recently named five people to serve as Assistant Branch Chiefs for the Watershed Protection Branch. The effect of these positions on the AWOP program is unknown at this time, but little to no impact is expected. More recently, Pete Zorbanos of the Drinking Water Permitting & Engineering Program was named to replace Amy Kruse as the Georgia AWOP Coordinator and has been attending the USEPA Region 4 quarterly planning meetings.

There has always been great support for the AWOP program from upper management, supervisors, engineers, and inspectors in the Drinking Water Permitting & Engineering Program. However, an ever-increasing workload, combined with recent employee turnover, has caused a temporary setback in an otherwise very successful program. AWOP remains a top priority within the Drinking Water Permitting & Engineering Program

The DWPEP has made significant progress and achievement in the AWOP program during recent years. The percentage of the Georgia population served by permitted facilities that are being served optimized water almost doubled from approximately 702,000 to 1,290,000 people. This is very significant for the citizens of Georgia. This impact is attributable to more systems participating in AWOP and striving to meet the optimization goals. Award certificates and public praise from the Drinking Water Permitting & Engineering Program at technical conferences have provided incentives for systems to work towards meeting optimized goals and the formal ranking

scheme developed has even lead to some competition among water systems in the State.

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

TECHNICAL ASSISTANCE, EDUCATION, AND OUTREACH: During the period between July 1, 2005 and June 30, 2006, the Drinking Water Permitting & Engineering Program staff conducted ten (10) one-day workshops on the new federal drinking water regulations that impact all of the water systems. The new regulations include the Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR) and Stage 2 Disinfectants/Disinfection Byproduct Rule (Stage 2 D/DBPR) which were signed on December 15, 2005 and published in January 2006.

The Stage 2 DBPR training was mainly focused on those water systems classified as Schedule 1 and Schedule 2 water systems (serving greater than 50,000 people). These water systems were required to submit their Initial Distribution System Evaluation (IDSE) documents no later than October 1, 2006. The LT2ESWTR training was directed to all surface water production systems (Schedules 1, 2, 3 and 4 systems) with a focus on Schedule 1 water systems (those serving 100,000 or more people). The presentations also included discussions on the future drinking water regulations (GWR, TCR and DSR, UCMR2, Radon, etc.). More than 600 water operators attended to these 10 workshops.

Stage 2 DBPR Workshops (Schedule 1 and 2)

Date	Location
February 28, 2006	Gainesville Flat Creek Water Reclamation Facility
March 2, 2006	EPD Tradeport Conference Room in Atlanta
March 7, 2006	Douglasville-Douglas County WS Authority Board Room
March 8, 2006	Athens-Holiday Inn (E. Broad and Lumpkin Streets)
March 22, 2006	Cobb County Water System Laboratory Training Facility
March 28, 2006	Clayton County Water Authority Community Use Building

LT2ESWTR Workshops (Schedule 1-4)

Date	Location
April 18, 2006	Gainesville Flat Creek Water Reclamation Facility Training Room
April 19, 2006	Douglasville-Douglas County WS Authority Board Room
April 25, 2006	Athens-Holiday Inn (E. Broad and Lumpkin Streets)
May 9, 2006	City of Barnesville Civic Center

The workshops covered the following topics: a general overview of the new rules; developing a sample site plan for disinfection byproduct monitoring; Stage 1 DBPR review; Stage 2 DBPR overview; IDSE-Very Small System Waivers; IDSE-40/30 Certification; IDSE-Standard

Monitoring; IDSE-System Specific studies; IDSE Standard Plan preparation; IDSE Report; SWTR Review; LT2ESWTR Overview; Crypto, E. Coli and Turbidity Source Water Monitoring Schedules; Bin Classification; Microbial Toolbox; Disinfection Profiling and Benchmarking; Source Water Monitoring under LT2ESWTR; DCTS and IPMC database modules for tracking submissions and compliance status.

For the Schedule 3 water systems that serve 10,000 to 49,999 people, nine (9) additional workshops were conducted primarily by GRWA under contract with EPD. This group of water systems was required to submit their IDSE documents to EPD no later than October 1, 2007.

Stage 2 DBPR Workshops (Schedule 3)

Date	Location
July 31, 2007	City of Barnesville Civic Center
August 1, 2007	City of Braselton Municipal Building
August 2, 2007	City of Calhoun, The Depot
August 14, 2007	City of Tifton Utility Building
August 15, 2007	City of Dawson, Hooks Hanner Center
August 22, 2007	City of Waycross, SE Georgia RDC
August 23, 2007	City of Statesboro Wastewater Treatment Plant
September 6, 2007	Athens-Holiday Inn (E. Broad and Lumpkin Streets)
September 26, 2007 City of Barnesville Civic Center	

Identical workshops were conducted at twelve additional locations by GRWA for the Schedule 4 water systems that serve 10,000 to 49,999 people. This group of water systems was required to submit their IDSE documents to EPD no later than April 1, 2008.

Stage 2 DBPR Workshops (Schedule 4)

Date	Location
February 11, 2008	City of Barnesville Civic Center
February 13, 2008	City of Ellijay Municipal Building
February 14, 2008	City of Braselton Municipal Building
March 3, 2008	City of Dawson, Hooks Hanner Center
March 5, 2008	City of Helen Municipal Building
March 6, 2008	City of Calhoun, The Depot
March 10, 2008	City of Barnesville Civic Center
March 11, 2008	City of Waycross, SE Georgia RDC
March 12, 2008	City of Savannah
March 13, 2008	City of Braselton Municipal Building
March 25, 2008 City of Tifton Utility Building	
March 26, 2008	Athens-Holiday Inn (E. Broad and Lumpkin Streets)

In addition to the above scheduled seminars, similar presentations are being made at Spring and Annual Conferences held by GRWA and GAWP. Written training material, forms, and

instructions were distributed to all attendees to assist in compliance with these new regulations. Similar handout material are also made available at the EPD website.

GEORGIA RURAL WATER ASSOCIATION (GRWA): An EPD contract (DWSRF 15% set-aside) with the Georgia Rural Water Association enabled GRWA to develop and conduct workshops to assist public water systems understand and comply with the LT1ESWTR and Stage 1 DBPR, LT2ESWTR and Stage 2 DBPR, Sanitary Survey Requirements, and Monthly Electronic Operating Reports. Between July 1, 2007 and June 30, 2008, GRWA conducted a total of 21 workshops throughout the State of Georgia training approximately 592 operators and water system personnel. In addition, GRWA provided on-site technical assistance to 39 water systems to help them comply with the LT1ESWTR and Stage 1 DBPR. The workshops and technical assistance have been critical in helping water system owners and/or operators comply with the new State and Federal drinking water regulations. In addition to the above, under the same contract, the GRWA also provided technical assistance solely to 43 groundwater system operators to help them address challenges related to operation of small groundwater systems.

Between July 1, 2007 and June 30, 2008, as part of the technical assistance, education and outreach efforts, the Georgia Rural Water Association offered two (2) educational conferences at Helen (October 28-30, 2008) and Jekyll Island (May 18-20, 2008). Over 2,400 water and wastewater treatment plant operators, maintenance personnel, and laboratory analysts have attended to these events. These events encourage knowledge transfer and greatly benefit the public water system owners and operators in improving their technical, financial and managerial capacities to comply with the current and the future drinking water regulatory requirements by staying current.

<u>TECHNICAL ASSISTANCE</u>: As an important part of this joint effort is for GRWA to provide onsite technical assistance to affected water systems to assist them as they comply with the requirements of Stage 1 DBPR, LT1ESWTR, IDSE, LT2ESWTR and other State and Federal requirements. Technical assistance is available for any affected water system. During this reporting period, GRWA conducted more than 82 on-site field visits to provide technical assistance to Georgia's surface, ground and purchased water systems.

<u>TRAINING</u>: Between July 1, 2007 and June 30, 2008, GRWA provided 70 one-day classroom training sessions to a total of 1,135 water system operators and personnel 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.

CIRCUIT-RIDER VISITS (DWSRF 2% technical assistance set-aside funds): EPD has contracted with GWRA through GEFA to provide "circuit-rider" type technical assistance visits each year on an as needed or as requested basis. Under the provisions of the contract, GWRA is required to provide up to 10% of the visits within 48 hours of notification by EPD in order to quickly address problems posing an immediate threat to public health. Technical assistance provided by GRWA includes, but is not limited to, rate studies, water audits and leak detection surveys, pipe and valve location services, infrastructure assessments, source water protection, operation & maintenance programs, on-site operational assistance, troubleshooting and problem-solving, fluoridation equipment evaluations and inspections, and the identification of financing alternatives. For the contract period from July 1, 2007, to June 30, 2008, GRWA field technicians made a total of 518 face-to-face contacts: 334 visits to private water systems and 143 visits to governmentally owned systems. 165 of the total visits were made to systems serving less than 3,300 persons.

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

<u>RESULTS</u>: The training and technical assistance provided to date have been successful in helping water systems comply with the LT1ESWTR and Stage 1 DBPR, including:

- Many water systems have lowered their DBP levels by implementing recommendations discussed during the training and technical assistance visits. The recommendations include: ceasing/reducing pre-chlorination; increasing/improving distribution flushing; better management of finished water storage; and better management of raw water sources and reservoirs.
- A number of systems made changes to their water treatment and plant operation in order to better comply with DBP precursor removal requirements.
- Many systems were provided on-site technical assistance to assist with important monitoring and reporting requirements, including the new web-based MOR, DBP quarterly reports, TOC removal reports, daily *Giardia* log inactivations, and disinfection profiling and benchmarking requirements.
- A few systems significantly improved other important types of treatment, such as iron and manganese removal.

<u>FUTURE</u>: Through our continued partnership with GRWA, we look forward to continue our assistance to water systems in 2007 and beyond with LT1ESWTR and Stage 1 DBPR issues and the challenges posed by early implementation of the LT2ESWTR and Stage 2 DBPR.

GEORGIA ASSOCIATION OF WATER PROFESSIONALS (GAWP) AND GEORGIA WATER AND WASTEWATER INSTITUTE (GWWI): The Georgia Water and Wastewater Institute (GWWI) 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 its parent

organization, the Georgia Association of Water Professionals (GAWP). 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 the 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. GWWI annually offers approximately 105 courses with a total attendance of over 1,100 students and is dedicated to education and dissemination of technical and scientific information.

During the reporting period of July 1, 2007 – June 30, 2008, the following activities took place:

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

Relating to the Class IV Water Operator Training Program, GWWI completed the following during the 2007 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.

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 2007 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

Technical Assistance, Education and Outreach

During the period from July 1, 2007 through June 30, 2008:

- GWWI participated in the Annual Conference & Expo, Fall Conference & Expo, Reuse Workshop, Industrial Conference & Expo, Small/Medium Systems Managers Forum, and Spring Conference & Expo.
- These activities reached a total of 2,692 water and wastewater treatment plant operators, maintenance personnel, laboratory analysts, design engineers, consultants, and other professionals concerned about Georgia water issues.
- Training topics included sessions on traditional topics 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.

<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 Figure 5 below for a 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.

During the annual reporting period from July 1, 2007 to June 30, 2008, a total of 91 enforcement orders were issued relating to SDWA or permit violations.

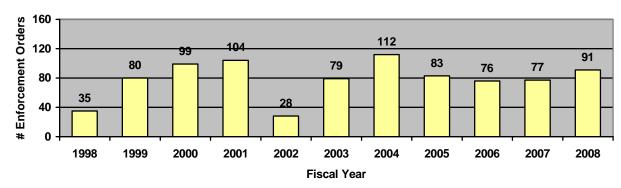


Figure 5. Enforcement Orders for public water systems.

<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, 2008, a total of 325 privately owned and operated public water systems have consolidated with a nearby governmentally owned public water system or water authorities. Figure 6 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.

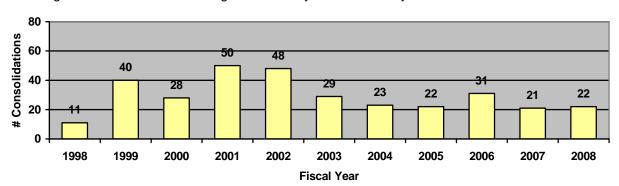


Figure 6. Consolidations with governmentally owned water systems or water authorities.

In addition to the 20 privately operated water systems that have connected to a governmentally owned water system, 17 privately owned water systems became inactive during FY 2008, mainly as a result of failure to maintain TMF capability to comply with the drinking water requirements.

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 By-products Rule, Stage 2 Disinfection By-products Rule, Long-Term 2 Enhanced Surface Water Treatment Rule, and the recently enacted Ground Water Rule.

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.

The voluntary "Drinking Water Laboratory Service Fee" program has been an invaluable and an economical alternative in providing laboratory services 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, 2008, approximately 2,300 out of 2,485 public water systems were contracted with EPD for the laboratory services. This indicates that 93% 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. More recent statistics were unavailable during writing of this report as the three-year contracts are currently being renewed and/or offered to all public water systems in the State.

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 Contract Fee System (DWCFS) 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 fee system, the Division 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 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 not with only the current drinking water regulations but also with the future regulations. Currently, all regulated chemical, physical, radiological and microbial tests are being performed under the 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.

OPERATOR TRAINING: Both GRWA and GWWI provide 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. These professional organizations conduct many meetings, seminars, workshops and conferences throughout the year. Operators regularly attend to these training sessions not only to obtain the necessary continuing education credits to renew their licenses, but to be informed about the latest technical developments in the water industry.

GRWA has conducted the following specific non-contracted training:

Year	Classes	Number Operators	Class Topics
2008	70	1,135	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

Training conducted DWSRF 15% set-aside funds: Through the use of DWSRF 15% set-aside funds, Georgia contracted separately with GWWI and GRWA to develop curriculum and training materials to prepare local water system personnel to successfully pass the new Class IV Water Operator exam. GWWI and GRWA each conducted a number of classes and provide each attendee with course material and a copy of the California State University, Sacramento's "Small Water System Operation & Maintenance Manual," or equal. List of course topics taught included: Class IV Operator Training; Security Training; Enhanced Surface Water Training; Surface Water Regulations; Ground Water Regulations; Georgia's groundwater sources; Types of aquifers and wells; Groundwater protection; Water treatment; the Safe Drinking Water Act; Water System Monitoring Requirements; Basic Mathematics; and, proper operation of a small water plant under state and federal guidelines.

<u>Training conducted under DWSRF 10% set-aside funds:</u> Through the use of DWSRF 10% set-aside funds, Georgia has also contracted with GWWI to provide training to all water and wastewater operators and laboratory analysts in a permanent facility dedicated for that purpose. The facility had to be capable of supporting a 12-month training program for approximately 2,000 students and/or 110 courses. Under the contract, funds were made available for renovation and modification of the existing training facilities in an effort to improve upon GWWI's training program.

The specific types of operator training courses offered by the GWWI are as follows: 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.

The table below shows the number of classes offered and the number of operators attended to these trainings that was provided by the GWWI under the 10% DWSRF set-aside funds.

Year	Classes	Number Operators	Class Topics
2008	102	1,111	Georgia's groundwater sources; Types of aquifers and wells; Groundwater protection; Water treatment; the Safe Drinking Water Act; Water System Monitoring Requirements; Basic Mathematics; and, proper operation of a small water plant under state and federal guidelines.

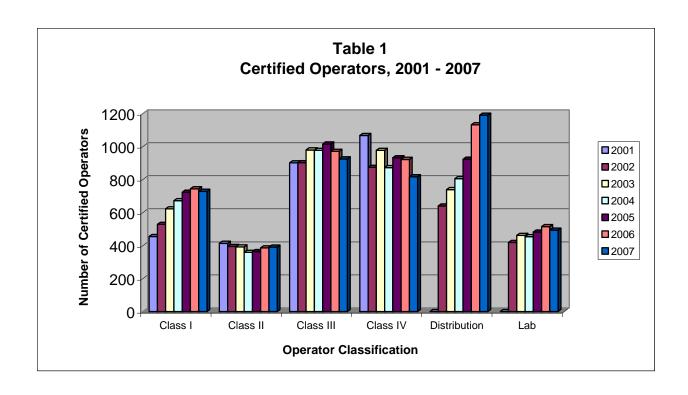
Training conducted under the funds received from the State Legislature: Georgia Rural Water Association (GRWA) has also conducted operator training targeting all classification levels and all areas of water system operation and maintenance. Funding for the training is allocated by the State legislature. The funding received from the State Legislature helps to support the entire statewide 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.

State of Georgia Operator Certification Program 2007 Annual Report

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.

Georgia's operator certification program was revised to include an exam for Class IV Water Operators in accordance with the federal guidelines. The exam requirement for prospective Class IV Water Operators helps ensure that these licensed operators will have the required knowledge and ability to successfully operate and maintain groundwater systems serving populations of 25 to 999 people. The exams for all operator classification levels are developed and validated by the Association of Boards of Certification (ABC). 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 PWS.

The following graphical representation in Table 1 shows the number of certified operators by classification level for the reporting period 2001 - 2007. The data is also used to establish a baseline for EPD to measure progress in operator training and certification.



EPD has also tracked the number of operators taking the various exams for each water system operator classification level and the corresponding passing percentages as part of the Capacity Development Strategy adopted to insure PWS have adequate technical, financial and managerial resources to comply with drinking water regulations (the Capacity Development Report to the Governor is currently available on the EPD Website). The information indicates how many new operators are attempting to obtain an initial Class IV, Class III, distribution, or laboratory analyst license and also indicates how many operators are attempting to increase their level of certification. Table 2 contains operator examination data for the reporting period 2001 thru 2007 that was obtained from the State Board of Examiners for Water and Wastewater Operators and Laboratory Analysts. The data indicates that a substantial number of individuals are receiving operator training (a prerequisite for the certification exams) and are attempting to become licensed water system operators or laboratory analysts. In the future, EPD will continue to look for ways to help improve the passing rates for the various certification exams.

Table 2: Operator Exam Data 2001 – 2007

	20	01	20	02	20	03	20	04	20	05	20	06	20	07
Operator Class	Number of Applicants	Passing (%)												
ClassI	158	59	172	55	141	53	161	32	144	15	135	26	138	7
ClassII	100	76	117	65	130	65	156	40	188	33	139	38	132	36
ClassIII	288	56	291	62	307	63	272	42	272	34	336	29	377	31
ClassIV	131	56	172	63	154	68	151	58	139	72	153	70	136	76
Distribution	275	36	296	39	285	39	308	50	271	49	373	49	343	53
Laboratory Analyst	38	82	56	71	60	73	50	76	60	67	46	72	45	67

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. During 2007, the Board met on January 25, March 15, May 22, July 26, August 16, and September 20.

The Board certifies six categories of licenses for public water system operators and laboratory analysts. Currently, there are 4,546 licensees who hold current certificates. Requirements for all categories include education, training, experience, and passage of a validated certification examination (ABC). Table 3 lists the number of water system operator licenses by certification or classification level for 2001 thru 2007.

Table 3: Number of Various Water Operator Licenses for 2001 – 2007

	Year								
License Type	2001	2002	2003	2004	2005	2006	2007		
Class I	455	529	623	672	723	744	729		
Class II	414	395	392	359	364	386	391		
Class III	901	902	979	977	1015	971	925		
Class IV	1067	874	977	872	932	922	817		
Distribution	X	640	739	805	923	1132	1190		
Lab	X	419	462	454	482	515	494		
Total	2837	3759	4172	4139	4439	4670	4546		

x = Not Available

<u>Authorization</u>: During this reporting period, the State of Georgia adopted no regulatory changes to the operator certification regulations.

<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 (see **Attachment "A"**). 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 Nontransient Noncommunity systems.

As of January 2008, the State of Georgia had a total of 2,472 active PWSs. Of these systems, there were 1,757 community water systems (CWS's), 217 non-transient non-community water systems (NTNCWSs), and 498 transient non-community water systems (TNCWSs).

Of the 1,757 CWSs, 104 systems obtain their water from a surface water source, 108 systems purchase treated surface water for distribution, and 1,545 systems obtain their water from groundwater, purchased groundwater, or groundwater under the direct influence of surface water. Further analysis of the CWSs and NTNCWS in Georgia indicates that in addition to the 104 systems that treat surface water sources and 108 systems that purchase treated surface water for distribution, there are 6 systems that treat ground water under the direct influence of surface water (GWUDI) sources, 6 system purchases treated ground water for distribution, and 1,533 systems treat ground water. Table 4 (for CWSs) and Table 5 (for NTNCWSs) show the required minimum operator certification or classification levels for different sources of public water supply. Table 6 displays the combined totals of each certification or classification level for all CWSs and NTNCWSs in Georgia.

Table 4: Community Water System Classification Levels by Source Type

Source Type	Class 1	Class 2	Class 3	Class 4	Distribution	Total
Surface Water	68	36	0	0	0	104
Purchased Surface Water	0	0	0	0	109	108
GWUDI	1	5	0	0	0	6
Groundwater	2	27	199	1305	0	1,533
Purchased Groundwater	0	0	0	0	6	6

Table 5: Non-Transient, Non-Community Water System Classification Levels by Source Type

		NTNCWS Classification Level						
Source Type	Class 1	Class 2	Class 3	Class 4	Distribution	Total		
Surface Water	1	1	0	0	0	2		
Purchased Surface Water	0	0	0	0	4	4		
Groundwater	0	0	11	200	0	211		

Table 6: Minimum Classification Levels for Community (CWSs) and Non-Transient, Non-Community Water System (NTNCWSs)

Classification Level	Number of Systems	% of Total
Class 1	72	4
Class 2	69	3
Class 3	210	11
Class 4	1505	76
Distribution	118	6

Although it is not a requirement of the Federal Safe Drinking Water Act, Georgia also classifies and requires certified operators for all Transient NCWSs (TNCWS). As of January 2008, there was a total of 498 TNCWSs in Georgia. Three systems purchase treated surface water and are classified as distribution systems; and, 495 systems obtain their raw water from ground water and are classified as Class 4 systems.

<u>Operator Qualifications</u>: The State of Georgia did not use the grand-parenting option in its operator certification program; therefore, this section does not apply.

Enforcement: EPD is the primary agency in Georgia for enforcing compliance with Georgia's Operator Certification Program. When EPD determines a PWS has violated Georgia's operator certification requirements, EPD takes whatever action is deemed necessary to ensure the PWS 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 2007, 5 out of a total of 568 site visits (0.9%) documented in SDWIS-State Version 8.0 listed the lack of a certified operator (OC1) as a significant deficiency. One site visit included a deficiency for the operator having an inadequate or improper level of certification (OC2). In this instance, written documentation was provided to the owner requiring corrective action to address the violation.

During the same period, EPD records of formal enforcement indicate that 5 out of a total of 91 formal consent or administrative orders (approximately 6%) were issued to water systems without a certified operator or ORC. Table 7 contains a list of these systems and the action that was taken by the Division. The other 86 enforcement orders were issued for various other State and federal violations, such as monitoring and reporting and violations (VOC, SOC, IOC, nitrate, coliform, lead and copper, radionuclide, and etc.), acute and non-acute MCL violations, CCR violations, pressure and flow problems, permit violations, and failure to comply with other State requirements. These were not specific violations of the operator certification program.

Table 7: Consent Orders Issued To Systems Without Certified Operators During 2007

WSID#	Water System Name	Type of Order	Action Taken	
GA0810006	Ricconnuck Knoll S/D	EPD-WS-2513 (C)	System given 30 days to obtain a Certified Operator.	Fined \$500
GA1330075	Durhamtown Plantation	EPD-WS-2517 (C)	System given 30 days to obtain a Certified Operator.	Fined \$600
GA0810006	Ricconnuck Knoll S/D	EPD-WS-2569 (C)	System given 15 days to obtain a Certifed Operator.	Fined \$2,250
GA1990005	City of Woodbury	EPD-WS-2580 (C)	System shall have certified operator on duty at all times.	Fined \$400
GA1110050	Forge Mills Corners	EPD-WS-2586 (C)	System given 30 days to obtain a Certified Operator.	Fined \$500

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 2007, the Board investigated several operators for falsification issues and other violations of the Rules. Two cases were referred to the Attorney General's Office to pursue revocation and/or suspension of the licenses issued to an individual due to providing false information on the certificate application.

<u>Certification Renewal and Training</u>: During this reporting period, EPD contracted with the Georgia Water & Wastewater Institute (GWWI) and the Georgia Rural Water Association (GRWA) to provide training on security and vulnerability, backflow prevention, as well as the new Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR) and Stage 2 Disinfectants/Disinfection Byproduct Rule (Stage 2 D/DBPR). Although not directly related to operator certification, these training opportunities were very valuable and helped many water system personnel complete their vulnerability assessments, implement backflow prevention programs, and comply with critical deadlines and requirements for LT2ESWTR and Stage 2 D/DBPR.

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). During the 2002 thru 2007 reporting period, over 18,240 water system personnel attended approximately 1,197 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 2007, over 21,490 water system personnel attended approximately 33 water related conferences to obtain continuing education credits required for the certification renewals.

A summary of training related activities for the reporting period is provided in Table 8. Certification training classes are those which prepare the operator to take the certification licensing exam – class 1, 2, 3, 4, Distribution, or Lab Analyst. The one-day trainings are special classes related to new regulations, or other special topics. Conferences include GRWA Spring and Fall Conferences and the GAWP Spring, Annual and Fall Conferences.

Table 8: Training Summary for Reporting Period

	# of Training Events	# Participants
Conferences	5	5300
Certification Training Classes	40	827
One Day Training Classes	38	931
Manager/Elected Official Classes	1	27
Total	84	7085

<u>Peer Review Program:</u> An update on the status of Georgia's Peer Review Program is included as **Attachment "C"**.

Operator Expense Reimbursement Grant: Recently, EPD has received grant funds reserved under Section 1419(d) of the Federal SDWA from EPA for small system operator training and certification reimbursement programs. Under the proposed expense reimbursement program, EPD will use the funds to reimburse and/or otherwise defray the cost of training, certification and recertification for operators of CWSs or NTNCWSs serving ≤ 3300 people. The Georgia Operator Expense Reimbursement Grant Program Annual Report for FY05, FY06 & FY07 are included herein as a separate section in this report. Attachment "D" includes Fact Sheets and Reimbursement Forms that have been developed to implement the Program as well as various promotional materials developed to publicize the program.

<u>Compliance Tracking</u>: EPD determines actual compliance with operator certification requirements during sanitary surveys and field. Tracking ORC compliance is accomplished by using the Site Visit Maintenance module to record all significant deficiencies identified during a sanitary survey in the Deficiency Maintenance List, including the lack of a certified operator (OC1) and/or an improper level of certification (OC2).

The Drinking Water Permitting & Engineering Program (DWPEP) in Atlanta is responsible for performing sanitary surveys and inspections of all PWSs that treat surface water (108 PWSs) or treat GWUDI (6 PWSs). Based on the most recent sanitary surveys and/or inspections, the rate of compliance with the ORC requirements for this group of 114 PWSs is 99.1% (113 systems are in compliance with the operator certification and classification requirements). The DWPEP has taken the necessary steps to ensure compliance in the near future.

The EPD District and Regional Offices are responsible for performing sanitary surveys and inspections of all PWSs using ground water or purchasing treated water for distribution. Based on the information contained in the Site Visit module of SDWIS-State Version 8.0, the ORC compliance rate is approximately 99.1% (refer to Enforcement section of this report, which indicates 0.9% non-compliance).

During this reporting period, EPD continued to enter ORC information in SDWIS-State Version 8.0 each time a sanitary surveyor or inspection was completed or the water system inventory was updated with new information. The ORC for each PWS in Georgia is designated in the Points of Contact Maintenance List. The professional license information for each operator in the State is entered in the Legal Entity Maintenance List. The license classification is stored in the Professional Qualification field and the license number is stored in the Employee ID No. field. SDWIS-State currently contains records for 1,974 active CWSs or NTNCWSs. Approximately 1,973 or 99.9% of these have a designated operator; 1,595 or 81% have a designated ORC; and 1,553 or 77% have a designated ORC with the certification class and license number listed in the appropriate fields.

Resources Needed to Implement the Program: The resources needed to implement the program remain adequate. The Certification Board has significantly improved customer service and has developed a very helpful web page (http://www.sos.state.ga.us/plb/water). EPD, with its commitment to SDWIS-State, is continuing to build the information system that will be the tool to track PWSs compliance with operator certification and other SDWA requirements.

<u>Stakeholder Involvement</u>: The Certification Board meets six times per year to conduct its business. The meetings are open to the public and are regularly attended by representatives of

GRWA, GAWP, and other stakeholders. To increase the opportunity for stakeholder involvement, the Board holds its May meeting at the GRWA annual training conference held on Jekyll Island and its November meeting is held at the GAWP Fall Conference. Hundreds of operators and other water and wastewater industry professionals attend these two meetings and have an opportunity to observe the Board in action and provide their input.

Some stakeholder items that have been discussed by the Board during 2007 include increasing the amount of continuing education credit required for certificate renewal and actions that can be taken to improve the exam passing percentages. Table 9 displays the number of applicants taking each exam during the reporting period (2003 through 2007) and the corresponding passing rates for each. During 2007, EPD also conducted a comprehensive external review of the operator certification program, which provided for additional stakeholder participation in the operator certification program (see program review below).

Table 9: Water Operator Examination Information for 2003 – 2007

	2003		2004		2005		2006		2007	
Operator Class	Number of Applicants	Passing (%)								
Class I	141	53	161	32	144	15	135	26	138	7
Class II	130	65	156	40	188	33	139	38	132	36
Class III	307	63	272	42	272	34	336	29	377	31
Class IV	154	68	151	58	139	72	153	70	136	76
Distribution	285	39	308	50	271	49	373	49	343	53
Laboratory Analyst	60	73	50	76	60	67	46	72	45	67

Due to the especially poor passing rates for operators taking the Class 3, Class 2, and Class 1 exams, the Board continues to consider requiring more training before a candidate can take these exams. In addition, the Board has tabled a proposal to separate lab analyst training into two separate sessions (classroom and laboratory training) until more information becomes available.

Program Review: In 2004, the Board completed a formal Internal Review Procedure for conducting an internal review of the operator certification program. A copy of the Internal Review Procedure and other documentation was included in the 2004 Operator Certification Report as attachment "B". In the internal review, the Board reviewed the following items: "Certification of Water and Wastewater Treatment Plant Operators and Laboratory Analysts Act," OCGA 43-51; the "Rules of State Board of Examiners for the Certification of Water and Wastewater Treatment Plant Operators and Laboratory Analysts," Chapter 750; training course approval process; training needs (based on exam performance); the budget; the staffing level; the data management system; the examinations; enforcement procedures; compliance with the certification program; and the endorsement procedure. The internal review determined program resources were adequate for current level of activities. The Division will request a second Internal Review beginning in late 2008.

During 2007, EPD conducted a formal external review of Georgia's Operator Certification Program. The external review was administered by the Georgia Association of Water Professionals (GAWP) in accordance with an approved work plan. The purpose of the external review was to assess the status and efficacy of Georgia's Operator Certification Program via an

in-depth survey process that included both online and written survey completion. Both certified operators and licensed professional education providers were solicited to participate in this critical feedback opportunity. The items evaluated during the review included: the testing and examination process; training course relevancy and availability, enforcement of operator certification, PWS compliance rates, etc. The data obtained from the online and written surveys were reviewed and compiled by GAWP and a final report was submitted to EPD on March 4, 2008. A copy of the work plan, online survey and final report for Georgia's Operator Certification Program External Review are included as attachments. When the External Review is completed, the Division plans to present the results to the Certification Board in order to further identify potential changes or improvements to enhance the current certification program.

State of Georgia EPD Operator Certification Expense Reimbursement Grant FY-05 Annual Report – April 30, 2005

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. Georgia's total award amount is currently \$3,452,898. EPA previously approved Georgia's Operator Certification Program on May 1, 2001.

Since receiving the initial grant award, Program implementation for the State of Georgia was delayed due to State budget issues that temporarily delayed the hiring of new employees including the Grants Assistant position to administer funds reimbursements and proposed contracts under this project. This position was previously advertised in January 2004 (over 400 applications were received); however, no interviews were conducted due to the hold that was placed on the position. The Grants Assistant position was re-advertised in the August 2004 DNR Job Outlook and was filled on March 1, 2005. As such, reimbursements are being allowed beginning July 1, 2004 for those expenses for which qualified operators are able to produce appropriate receipts and/or backing documentation.

As outlined in the FY-04 Annual Report, the current Program work plan will adhere to the following parameters:

- 1. All reimbursement requests will be submitted directly to EPD upon completion of approved training, certification and re-certification requirements in accordance with Georgia's approved operator certification Program. No contracts will be issued with training, testing or certification providers.
- 2. Reimbursements will be made to operators for mileage and per diem for training and recertification training as provided for under the federal notice.
- 3. Since the implementation was delayed for a year, the grant Program has been extended for one (1) additional year to cover one full certification renewal cycle (all certifications must be renewed by June 30 of odd number years). Therefore, in order to end the Program on ad odd numbered year, the amended grant proposal now covers the period July 1, 2004 June 30, 2011.

Georgia's current work plan further describes the State's intention to begin dispensing reimbursements beginning July 1, 2004. However, the Grants Assistant position remained unfilled until March 1, 2005. Upon placement of the Grants Assistant, Program parameters for implementation began including the following:

- a) Discovery and definition of Program
- b) Review of pertinent materials: EPA, GA Sec. of State, and GA EPD certification guidelines
- c) Conduct planning with Training Agencies
- d) Develop Advertising/Promotion for Program
- e) Identify and address pertinent Reimbursement issues
- f) Creation of Program Templates
- g) Creation of Program Tracking system
- h) Identification of other Program needs

As the Georgia Program is still in its' beginning stages, no numbers are yet tallied for the total reimbursement amount, the number of courses eligible for reimbursement, nor the number of operators eligible to receive reimbursement beginning July 1, 2004. Notification of Program implementation has been distributed via mass mailing to qualified systems and operators, via the GA EPD website, and via a booth at the Georgia Water & Pollution Control Association's 2005 Spring Conference and Expo held April 12–13, 2005. Response to the notification has begun and it is anticipated that reimbursements will begin to be dispersed during May 2005. Expenses drawn against the Program currently total \$3,425.30 for personnel services and equipment.

Upcoming plans for increasing Program awareness include operating a booth at the Georgia Rural Water Association Annual Conference to be held May 21-24, 2005, and at the Georgia Water & Pollution Control Association's 2005 Annual Conference and Expo to be held July 17-20, 2005. (GA ERG forms are attached)

FY-05 Year to Date Program Summary for Operator Expense Reimbursement Grant

Initial Grant Allotment Total Grant Allotment	. ,	15,584.00 13,200.00
Initial Grant Awarded Amendment #1 Total Awarded as of 4/30/05	\$1,7	94,754.00 58,144.00 52,898.00
FY-05 Expenditures	\$	3,425.30
Total Remaining as of 4/30/05 Monthly Budget Report	\$3,44	49,472.70

Amendment #2 will be devised and submitted to request allocation of all remaining funds (currently \$160,302) for the further implementation and expansion of the Georgia Program.

Rebecca Mason, Grants Assistant GA EPD Operator Certification Reimbursement Program rebecca mason@dnr.state.ga.us

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State of Georgia EPD Operator Certification Expense Reimbursement Grant FY-06 Annual Report – April 30, 2006

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. Georgia's total award amount is currently \$3,452,898. EPA previously approved Georgia's Operator Certification Program on May 1, 2001.

Since 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. As such, 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.

As stated in the FY-05 Annual Report, the Program work plan adheres to the following parameters:

- 4. All reimbursement requests are submitted directly to EPD upon completion of approved training, certification and re-certification requirements in accordance with Georgia's approved operator certification Program. No contracts will be issued with training, testing or certification providers.
- 5. Reimbursements are made to operators/systems for mileage and per diem for training and re-certification training as provided for under the federal notice.
- 6. As implementation was delayed for a year, the Program has been extended to cover one full certification renewal cycle (all certifications must be renewed by June 30 of odd number years). Therefore, the Program will reach its' close on an odd numbered year, covering the period July 1, 2004 June 30, 2011.

Georgia's current work plan will continue to move forward in Program implementation as stated. Continued efforts will be made to:

- a) Define and redefine Program as needed to meet the goals of the Program
- b) Promote continued team effort with Georgia's training agencies
- c) Develop various means of Advertising/Promotion for Program
- d) Address pertinent Reimbursement issues

The Georgia Program has been in operation for one year. Notification of Program implementation has been distributed via mass mailing to qualified systems and operators, via the GA EPD website, and via Georgia Rural Water Association and Georgia Association of Water Professionals conferences. Responses to the Program and requests for expense reimbursement are being received slowly but fairly steadily, generally peaking right after training class/conference attendance.

Upcoming plans for increasing Program awareness include operating a booth at the Georgia Rural Water Association Annual Conference to be held May 21-24, 2006, and at the Georgia Association of Water Professional's 2006 Annual Conference and Expo to be held July 17-20, 2006.

FY-06 Year to Date Program Summary for Operator Expense Reimbursement Grant

Initial Grant Allotment Total Grant Allotment	\$2,015,584.00 \$3,613,240.00
Initial Grant Awarded	\$1,694,754.00
Amendment #1	<u>\$1,758,144.00</u>
Total Awarded as of 4/30/06	\$3,452,898.00

Georgia's ERG Program is slated to cover operator expense reimbursements beginning July 1, 2004 through June 30, 2011. Since implementation of the Program on 3/1/05 to date, approximately \$84,284.80 in grant money has been spent on Program needs, with \$19,604.09 being expended as reimbursement to eligible operators and systems according to Program guidelines with a current total of 78 reimbursements made.

Approximate current breakdown of Program expenses follows:

Personnel	\$42,500.00
Computer	\$ 1,481.00
Supplies	\$ 4,542.00
Travel	\$ 2,330.00
Vehicle purchase	\$13,827.00

Operator Reim . \$19,604.00

TOTAL \$84,284.00 (approximate)

A breakdown of the various categorical operator expenses is currently as follows:

Mileage	\$	4,740.94
Meals	\$	71.89
Lodging	\$	473.31
Training	\$	5,563.95
Conferences	\$	4,675.00
License appl. fee	\$	350.00
License renewal	\$	2,730.00
License exam	\$	924.00
Wall cert.	\$	75.00
TOTAL	\$1	19.604.09

As of April 30, 2006, approximately \$3,368,613 remains for continued implementation of Georgia's ERG Program. (Various Program promotion documents and expense charts are attached.)

Continued efforts to promote Program awareness and participation consist of:

- Training class presentations
- Mass mailouts
- Program website containing information and forms
- Program on GA Sec. of State's website to inform licensees of Program
- Conference attendance with Program information booth and 30 minute auditorium presentation
- Program flyer included in responses to all new permit request letters
- Program notification in GRWA and GWWI magazine / newsletter / website
- Upcoming outsert advertisement in Water Stewards magazine
- Upcoming site visits to eligible systems
- Upcoming site visits to regional EPD offices to promote Program awareness and team strategy
- Upcoming postcard mailout

Amendment #2 is being processed and will be submitted to request allocation of all remaining funds (currently \$160,300) for the further implementation and expansion of the Georgia Program.

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State of Georgia EPD Operator Certification Expense Reimbursement Grant FY-07 Annual Report – April 30, 2007

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. Georgia's total award amount is currently \$3,613,198. EPA previously approved Georgia's Operator Certification Program on May 1, 2001.

Since 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. As such, 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.

As stated in the FY-06 Annual Report, the Program work plan adheres to the following parameters:

- 7. All reimbursement requests are submitted directly to EPD upon completion of approved training, certification and re-certification requirements in accordance with Georgia's approved operator certification Program. No contracts will be issued with training, testing or certification providers.
- 8. Reimbursements are made to operators/systems for mileage and per diem for training and re-certification training as provided for under the federal notice.
- As implementation was delayed for a year, the Program has been extended to cover one full certification renewal cycle (all certifications must be renewed by June 30 of odd number years). Therefore, the Program will reach its' close on an odd numbered year, covering the period July 1, 2004 – June 30, 2011.

Georgia's current work plan will continue to move forward in Program implementation as stated. Continued efforts will be made to:

- a) Define and redefine Program as needed to meet the goals of the Program
- b) Promote continued team effort with Georgia's training agencies
- c) Develop various means of Advertising/Promotion for Program
- d) Address pertinent Reimbursement issues

The Georgia Program has been in operation for two years. Notification of Program implementation has been distributed via mass mailing to qualified systems and operators, via the GA EPD website, and via Georgia Rural Water Association and Georgia Association of Water Professionals conferences. Responses to the Program and requests for expense reimbursement are being received slowly but fairly steadily, generally peaking right after training class/conference attendance.

Upcoming plans for increasing Program awareness include operating a booth at the Georgia Rural Water Association Annual Conference to be held May 19-22, 2007, and at the Georgia Association of Water Professional's 2006 Annual Conference and Expo to be held July 15-18, 2007.

FY-07 Year to Date Program Summary for Operator Expense Reimbursement <u>Grant</u>

Initial Grant Allotment	\$2,015,584.00
Total Grant Allotment	\$3,613,240.00
Initial Grant Awarded	\$1,694,754.00
Amendment #1	\$1,758,144.00
Amendment #2	<u>\$ 160,300.00</u>
Total Awarded as of 4/30/07	\$3,613,198.00

Georgia's ERG Program is slated to cover operator expense reimbursements beginning July 1, 2004 through June 30, 2011. As of January 31, 2007, approximately \$3,310,982.00 remains for continued implementation of Georgia's ERG Program, \$37,191.48 being expended as reimbursement to eligible operators and systems according to Program guidelines with a current total of 130 reimbursements made. (Various Program promotion documents and expense charts are attached.)

A breakdown of the various categorical operator expenses is currently as follows:

TOTAL	\$37,191.48
Wall cert.	<u>\$ 100.00</u>
License exam	\$ 1,780.00
License renewal	\$ 3,777.00
License appl. fee	\$ 550.00
Conferences	\$ 7,079.00
Training	\$13,139.40
Lodging	\$ 1,008.70
Meals	\$ 95.77
Mileage	\$ 7,661.61

Continued efforts to promote Program awareness and participation consist of:

- Training class presentations
- Mass mailouts
- Program website containing information and forms
- Program on GA Sec. of State's website to inform licensees of Program
- Conference attendance with Program information booth
- Program flyer included in responses to all new permit request letters
- Program notification in GRWA and GWWI magazine / newsletter / website
- Upcoming outsert advertisement in Water Stewards magazine
- Upcoming site visits to eligible systems
- Upcoming site visits to regional EPD offices to promote Program awareness and team strategy
- Upcoming postcard mailout

Rebecca Mason, Grants Assistant GA EPD Operator Certification Reimbursement Program rebecca_mason@dnr.state.ga.us

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State of Georgia EPD Operator Certification Expense Reimbursement Grant 2007 Annual Report – April 30, 2008

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. Georgia's total award amount is currently \$3,613,198. EPA previously approved Georgia's Operator Certification Program on May 1, 2001.

Since 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. As such, 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.

As stated in the 2006 Annual Report, the Program work plan adheres to the following parameters:

- 10. All reimbursement requests are submitted directly to EPD upon completion of approved training, certification and re-certification requirements in accordance with Georgia's approved operator certification Program. No contracts will be issued with training, testing or certification providers.
- 11. Reimbursements are made to operators/systems for mileage and per diem for training and re-certification training as provided for under the federal notice.
- 12. As implementation was delayed for a year, the Program has been extended to cover one full certification renewal cycle (all certifications must be renewed by June 30 of odd number years). Therefore, the Program will reach its' close on an odd numbered year, covering the period **July 1**, **2004 June 30**, **2011**.

Georgia's current work plan will continue to move forward in Program implementation as stated. Continued efforts will be made to:

- a) Define and redefine Program as needed to meet the goals of the Program
- b) Promote continued team effort with Georgia's training agencies
- c) Develop various means of Advertising/Promotion for Program
- d) Address pertinent Reimbursement issues

The Georgia Program has been in operation for three years. Notification of Program implementation has been distributed via mass mailing to qualified systems and operators, via the GA EPD website, and via Georgia Rural Water Association and Georgia Association of Water Professionals conferences. Responses to the Program and requests for expense reimbursement are being received slowly but fairly steadily, generally peaking right after training class/conference attendance.

Upcoming plans for increasing Program awareness include operating a booth at the Georgia Rural Water Association Annual Conference to be held May 17-20, 2008, and at the Georgia Association of Water Professional's 2008 Annual Conference and Expo to be held July 2008.

2007 Year to Date Program Summary for Operator Expense Reimbursement Grant

Initial Grant Allotment	\$2,015,584.00
Total Grant Allotment	\$3,613,240.00
Initial Grant Awarded	\$1,694,754.00
Amendment #1 Amendment #2 Total Awarded as of 4/30/08	\$1,758,144.00 <u>\$ 160,300.00</u> \$3,613,198.00

Georgia's ERG Program is slated to cover operator expense reimbursements beginning July 1, 2004 through June 30, 2011. As of January 31, 2008, approximately \$3,281,940.00 remains for continued implementation of Georgia's ERG Program, \$50,426.33 being expended as reimbursement to eligible operators and systems according to Program guidelines with a current total of 173 reimbursements made. (Various Program promotion documents and expense charts are attached.)

A breakdown of the various categorical operator expenses is currently as follows (as of 12/07):

Mileage	\$10,480.47
Meals	\$ 167.19
Lodging	\$ 1,615.42
Training	\$15,451.25
Conferences	\$13,699.00
License appl. fee	\$ 625.00
License renewal	\$ 5,857.00
License exam	\$ 2,331.00
Wall cert.	\$ 200.00
TOTAL	\$50,426.33

Continued efforts to promote Program awareness and participation consist of:

- Training class presentations
- Mass mailouts
- Program website containing information and forms
- Program on GA Sec. of State's website to inform licensees of Program
- Conference attendance with Program information booth
- Program flyer included in responses to all new permit request letters
- Program notification in GRWA and GWWI magazine / newsletter / website
- Upcoming outsert advertisement in Water Stewards magazine
- Upcoming site visits to eligible systems
- Upcoming site visits to regional EPD offices to promote Program awareness and team strategy
- Upcoming postcard mailout

Rebecca Mason, Grants Assistant GA EPD Operator Certification Reimbursement Program rebecca mason@dnr.state.ga.us

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Attachment A

GEORGIA STATE BOARD OF EXAMINERS FOR CERTIFICATION OF WATER AND WASTEWATER TREATMENT PLANT OPERATORS AND LABORATORY ANALYSTS

NOTICE OF INTENT TO ADOPT PROPOSED AMENDMENTS TO THE RULES OF GEORGIA STATE BOARD OF EXAMINERS FOR CERTIFICATION OF WATER AND WASTEWATER TREATMENT PLANT OPERATORS AND LABORATORY ANALYSTS

Rule 750-6-.02 "Renewal of a Certificate"; Rule 750-6-.03 "Renewal of More Than One Certificate"; Rule 750-6-.04 "Basic, Advanced, and Continuing Education Courses"

<u>AND</u>

NOTICE OF PUBLIC HEARING TO

ALL INTERESTED PERSONS AND PARTIES:

Notice is herby given that pursuant to the authority set forth below, Georgia State Board of Examiners for Certification of Water and Wastewater Treatment Plant Operators and Laboratory Analysts (hereinafter "Board") proposes Amendments to its rules (hereinafter "Proposed rules amendments"). The proposed rules amendments include revisions to Rules 750-6-.02, 750-6-.03, and 750-6-.04.

The proposed rule amendments include: (1) clarifying renewal requirements; (2) clarifying renewal of more than one certificate requirement; and (3) change course approval expiration date.

This notice, together with an exact copy of the proposed rules amendments and a synopsis of the proposed rules amendments, is being mailed to all persons who have requested, in writing, that they be placed on a mailing list. A copy of this notice, an exact copy of the proposed rules amendments, and a synopsis of the proposed rules amendments may be reviewed during normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday, except official State holidays, at the Office of the Secretary of State, Professional Licensing Boards Division, 237 Coliseum Drive, Macon, Georgia 31217. These documents will also be available for review on the Georgia State Board of Examiners for Certification of Water and Wastewater **Operators** Treatment Plant and Laboratory Analysts' http://www.sos.state.ga.us/plb/water/. Copies may also be requested by contacting the Georgia State Board of Examiners for Certification of Water and Wastewater Treatment Plant Operators and Laboratory Analysts' office at 478.207.1460.

A public hearing will be held at 10:30 am on May 19, 2005, in the Office of the Secretary of State, Professional Licensing Boards Division, Room 102, located at 237 Coliseum Drive, Macon, Georgia 31217 to provide the public an opportunity to comment upon and provide input into the proposed rules amendments. At the public hearing anyone may present data,

make a statement, comment, or offer a viewpoint or argument whether orally or in writing. Lengthy statements or statements of a considerable technical or economic nature, as well as previously recorded messages, must be submitted for the official record.

Oral statements should be concise and will be limited to 5 minutes per person. Additional comments should be presented in writing.

Written comments are welcome. To ensure their consideration, written comments should be received on or before May 12, 2005. Written comments should be addressed to Mollie L. Fleeman, Division Director, Professional Licensing Boards Division, Georgia State Board of Architects and Interior Designers, 237 Coliseum Drive, Macon, Georgia 31217. Fax: 478.207.1410.

The proposed rules amendments will be considered for adoption by the Georgia State Board of Architects and Interior Designers at its meeting between 10:45 am and 5:00 pm on May 19, 2005, in Room 102, 237 Coliseum Drive, Macon, Georgia 31217. The proposed rules amendments are proposed for adoption pursuant to authority contained in O.C.G.A. Sections 43-1-19, 43-1-24, 43-1-25, 43-51-5 and 43-51-6.

It is not legal or feasible to meet the objectives of O.C.G.A. Sections 43-1-3, 43-1-4, 43-1-7, 43-1-19, 43-4-9, and 43-4-12 to adopt or implement differing actions for business as listed at O.C.G.A. Section 50-13-4(a)(3)(A)(B)(C) & (D). The formulation and adoption of these rules will impact every licensee in the same manner and each licensee is independently licensed, owned, and operated and dominant in the fields of registered architects and registered interior designers.

For further information, contact the Board office at 478.207.1460.

This notice is given in compliance Procedures Act (O.C.G.A. Section	with Section $4(a)(1)$ of the Georgia Administrative 50-13-4).
Thisday of	, 2005.
	Mollie L. Fleeman Division
	Director
Posted:	

SYNOPSIS OF PROPOSED REVISIONS TO THE GEORGIA STATE BOARD OF EXAMINERS FOR CERTIFICATION OF WATER AND WASTEWATER TREATMENT PLANT OPERATORS AND LABORATORY ANALYSTS RULES

Rule 750-6-.02 Renewal of a Certificate

Rule 750-6-.02 Renewal of a Certificate, is hereby proposed for amendment and adoption as amended. Exemption from continuing education requirement is clarified for the first renewal period after initial issuance of the certificate and to clarify if more then one continuing education course is needed for renewal that the same course cannot be attended more then once in the same renewal period.

Purpose: The purpose of the rule is to describe the exemption from the continuing education requirement for the first renewal period after initial issuance of the certificate and to clarify if more then one continuing education course is needed for renewal that the same course cannot be attended more then once in the same renewal period.

<u>Main Features:</u> The rule clarifies the exemption from the continuing education requirement for the first renewal period after passage of the examination and to clarify if more then one continuing education course is needed for renewal that the same course cannot be attended more then once in the same renewal period.

DIFFERENCES BETWEEN THE EXISTING RULE AND THE PROPOSED AMENDMENTS TO THE GEORGIA STATE BOARD OF EXAMINERS FOR CERTIFICATION OF WATER AND WASTEWATER TREATMENT PLANT OPERATORS AND LABORATORY ANALYSTS RULES, CHAPTER 750-6

Rule 750-6-.02 Renewal of a Certificate

[Note: underlined text is proposed to be added; lined through text is proposed to be deleted.]

Rule 750-6-.02 Renewal of a Certificate, is hereby proposed for amendment and adoption as amended to read as follows:

Rule 750-6-.02 Renewal of a Certificate. Amended.

- (3) An individual who passes an examination required by the Board for certification is exempt from all continuing education requirements for <u>that certificate</u> for the first renewal period after passage <u>of the exam. initial issuance of the certificate.</u>
- (4) If more then one continuing education course is needed to equal the required continuing education points to be eligible for a renewal, then the same course cannot be attended more than once to equal the required continuing education points in the same renewal

period. However, the same continuing education course can be attended during a different renewal period.

Authority O.C.G.A. §§43-1-19, 43-1-24, 43-1-25, 43-51-5, and 43-51-6
SYNOPSIS OF PROPOSED REVISIONS TO THE
GEORGIA STATE BOARD OF EXAMINERS FOR CERTIFICATION OF WATER AND
WASTEWATER TREATMENT PLANT OPERATORS AND
LABORATORY ANALYSTS RULES

Rule 750-6-.03 Renewal of More Than One Certificate

Rule 750-6-.03 Renewal of More Than One Certificate, is hereby proposed for amendment and adoption as amended. Exemption from the continuing education requirement for the first renewal period after initial issuance of the certificate is clarified for renewal of more than one certificate.

Purpose: The purpose of the rule is to describe the exemption from the continuing education requirement for the first renewal period after initial issuance of the certificate is clarified for renewal of more than one certificate.

<u>Main Features:</u> The rule clarifies the exemption from the continuing education requirement for the first renewal period after initial issuance of the certificate is clarified for renewal of more than one certificate.

DIFFERENCES BETWEEN THE EXISTING RULE AND THE PROPOSED AMENDMENTS TO THE GEORGIA STATE BOARD OF EXAMINERS FOR CERTIFICATION OF WATER AND WASTEWATER TREATMENT PLANT OPERATORS AND LABORATORY ANALYSTS RULES, CHAPTER 750-6

Rule 750-6-.03 Renewal of More Than One Certificate

[Note: underlined text is proposed to be added; lined through text is proposed to be deleted.]

Rule 750-6-.03 Renewal of More Than One Certificate, is hereby proposed for amendment and adoption as amended to read as follows:

(c) Attestation of the highest number of continuing education points which are required to renew any of the Operator's or Laboratory Analyst's certificates (i.e., 18, 12, or 6). A

maximum of 18 points total could be required.

(i) Training course work required to be eligible for an exam, which has also been approved by the Board for a specified number of recertification points, may be used for renewal of currently held certificates. If the currently held certifications require a higher number of continuing education points for renewal than the course work

54

was approved for, then additional continuing education points must be acquired to fulfill the full amount of continuing education points required for renewal of currently held certifications.

Authority O.C.G.A. §§43-1-19, 43-1-24, 43-1-25, 43-51-5, and 43-51-6

SYNOPSIS OF PROPOSED REVISIONS TO THE GEORGIA STATE BOARD OF EXAMINERS FOR CERTIFICATION OF WATER AND

WASTEWATER TREATMENT PLANT OPERATORS AND LABORATORY ANALYSTS RULES

Rule 750-6-.04 Basic, Advanced, and Continuing Education Courses

Rule 750-6-.04 Basic, Advanced, and Continuing Education Courses, is hereby proposed for amendment and adoption as amended. Revise course approval expiration date.

Purpose: The purpose of the rule is to revise course approval expiration

date. **Main Features:** The rule changes the course approval expiration

date.

DIFFERENCES BETWEEN THE EXISTING RULE AND THE PROPOSED AMENDMENTS TO THE GEORGIA STATE BOARD OF EXAMINERS FOR CERTIFICATION OF WATER AND WASTEWATER TREATMENT PLANT OPERATORS AND LABORATORY ANALYSTS RULES, CHAPTER 750-6

Rule 750-6-.04 Basic, Advanced, and Continuing Education Courses.

[Note: underlined text is proposed to be added; lined through text is proposed to be deleted.]

Rule 750-6-.04 Basic, Advanced, and Continuing Education Courses, is hereby proposed for amendment and adoption as amended to read as follows:

Rule 750-6-.04 Basic, Advanced, and Continuing Education Courses.

Authority O.C.G.A. §§43-1-19, 43-1-24, 43-1-25, 43-51-5, and 43-51-6

Attachment A

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

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

Public Water System Classification for Community and Nontransient Noncommunity Systems							
System Type	Class I	Class 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 <u>.</u>			
Distribution Systems	Certification is required for the operator of <u>public water</u> distribution systems.						

- (2) All Transient Noncommunity water systems with groundwater sources must have at least a Class 4 operator certification.
- (3) Certification of Transient Noncommunity water systems with surface water will be specified in their permit to operate a public water system.
- (4) When the complexity of water treatment warrants it, a higher classification may be required and specified in the permit to operate a public water system.

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

Attachment B

Peer Review Program

Georgia's Small System Peer Review Program was initiated in 1996 by a collaboration of The Georgia Water and Pollution Control Association, The Georgia Rural Water Association, The Association of County Commissioners of Georgia, The Georgia Municipal Association, The Georgia Environmental Protection Division, The U. S. E.P.A. Region 4, Georgia Environmental Facilities Authority, and Department of Community Affairs.

EPD supported the Peer Review Program through the training of peer review team volunteers and its involvement with GWWI. The responsibility for implementation of the Peer Review Program was transferred to GWWI in 2000. In 2001, GWWI implemented a massive advertising campaign aimed at increasing local government officials' awareness of the benefits of the Peer Review Program. Mailers and post cards were developed and distributed to over 1,000 local officials. In addition, GWWI developed an exhibit and displayed it the GWPCA Spring Conference in Columbus; the ACCG Annual Conference in Jekyll Island; and the GMA Annual Conference in Savannah. In December 2001, GWPCA hosted a workshop with their national partners to discuss Peer Review Programs in other States and the Tribes. The workshop included an exchange of ideas on the common problems and challenges faced by the Peer Review Program

Training was provided on well water sources, water treatment, distribution, storage, pumps and pumping facilities, solids handling, monitoring and reporting, management and operations, and related items. This program consisted of comprehensive evaluations of small systems throughout Georgia, both public and private; to determine strengths and weaknesses these systems may have regarding financial, managerial, and technical issues. The program is administered by the Georgia Water and Pollution Control Association and makes use of volunteers to participate in review of systems that request assistance.

The main goal of the Peer Review Program was to help small water systems comply with current federal and State regulations, including the Safe Drinking Water Act. These benefits are achieved by having a participating water system complete a comprehensive self-assessment of their water system in order to identify existing problems and deficiencies. A peer review team then conducts an on-site evaluation of the system. The team is made up of trained volunteers from surrounding communities (local cities and counties within each respective District) that are able to provide a wide range of expertise in water system management and operations. Upon completion of the in depth evaluation, the peer review team presents their results to the management of the participating system, along with recommendations for improved operations. One of the attractive features of the Peer Review Program is that all activities and written reports are held in the strictest confidence between the peer review team and the participating system. The Peer Review Program is geared towards small, rural communities, but it is not limited by size or function.

Since the program's initiation, well over 100 volunteers were trained by EPD staff, as well as other professional trainers, and have successfully conducted reviews of well over 100 small water systems throughout Georgia. The result of these reviews has been improved management techniques, as well as overall improvement in compliance to drinking water

regulations; resulting in safe drinking water for thousands of Georgians. The program's goal is to continue an active volunteer reviewer-training program in Georgia, and to increase the visibility and accessibility of these volunteer evaluators to small systems throughout the state.

In order to continue and expand this vital evaluation program, it was imperative that an active network of peer review evaluators be developed and maintained. Many volunteer evaluators have dropped out of the program because of retirement and must be replaced. In addition, the training of the evaluators must be enhanced to include updates on new regulations and issues such as the Consumer Confidence Report and Capacity Development.

Since inception of the program, there have been many changes in the management and ownership of particular water systems, and these new owners and managers may not be aware that the Peer Review Program is available to them and their systems. To effectively reach this potential clientele, an up-to-date Peer Review Program information flyer with all pertinent details regarding the benefits of the program, was developed and mass mailed to all water systems. With the development and implementation of the Consumer Confidence Reporting requirements, there was an increased awareness of water quality issues in the general public, as well as within small water systems. To address these concerns, additional water quality training was developed for evaluators. Further, water quality training materials and field guides to address water quality issues were developed to accompany the training.

The following tasks were completed:

- Developed and produced an up-to-date process for systems in need of assistance to call and receive technical and/or operational assistance. This project was called **Operation** P.E.A.K. (Providing Education, Assistance and Knowledge to Georgia Operators)
- 2. Developed a comprehensive mailing, which was sent to all small water systems in Georgia, to inform them of the availability and benefits of the Peer Review Program.
- 3. Enhanced training and training materials that were available to the Peer Review Evaluators, so as to increase their knowledge of Water Quality Issues, as well as any other new developments in the water and wastewater industries.
- 4. Developed marketing materials and trade show type display to advertise the Peer Review Program at venues such as the GW&PCA, ACCG, GMA and other conventions throughout the state of Georgia.
- 5. Worked in conjunction with the Georgia Water & Pollution Control Association's Small Systems Utility Forum to further the outreach and enhance the knowledge of the small systems managers of the Peer Review Program. The Small Systems Utility Forum is dedicated to the small system managers around the State.
- 6. Revised Peer Review work plan to have additional staff reach local utilities, which may be in need of assistance and increase the awareness of the Peer Review Program in Georgia.
- 7. In an effort to revitalize the Peer Review Program and assist in the implementation of Operation PEAK, an entirely new program was developed which replaced the 3, 1 ½ day training sessions, as noted in the contract. Previously, workshop sessions were developed to train ALL Peer Review evaluators on how to deal with ALL issues that may surface

when participating in the Peer Review Program. A more efficient program was developed and a Peer Review "Headquarters" was established to better serve the program. Instead of publishing a printed manual with many evaluators and many phone numbers, the Peer Review Program "Headquarters" phone number was published with 1 (one) central point of contact. A database was also created and evaluators around the state were polled on their respective areas of expertise. This data was input into an evaluator database and available only to the program administrator. When a support need was brought to the attention of the Peer Review Program, the main point of contact then researched the evaluator database and located an evaluator that was in close proximity to the system in need, and who also had the knowledge and expertise to assist the system. This procedure proved to be successful in several cases and also cut down on the administrative duties of the volunteers, which were brought about by the previous assistance techniques. In the past, a system requiring support was required to call numerous evaluators, leave several messages and play endless games of "phone tag" in an attempt to gain assistance, which eventually could have lead up to the point of "giving up". The updated method of the Peer Review Headquarters assured the system in need of prompt, professional and knowledgeable water and/or wastewater assistance.

In 2002, only two water systems requested assistance from the Peer Review Program. One system needed assistance in developing a Request for Proposal (RFP) for Geographic Information Systems (GIS) work. The second system needed assistance in developing an intergovernmental agreement to provide water to another jurisdiction.

Recently, GAWP has expanded the use of the internet to provide technical assistance by developing a bulletin board where water systems can ask questions and disseminate information requested by others: http://gawponline.org/board/. The forums listed provide for discussion in specific areas such as maintenance, security, etc. The GAWP has also created a new water treatment committee to facilitate enhanced networking and outreach among water treatment operators, consultants, utility managers and regulators.

Attachment C

FACT SHEET

State of Georgia
Operator Certification Reimbursement Program

Georgia Class IV & Class III certification for current Georgia operators of CWS or NTNCWS systems serving 3,300 persons or fewer

GA Department of Natural Resources - Environmental Protection Division Water Resources Branch - Drinking Water Program

PURPOSE OF THE PROGRAM

The purpose of the Program is to reimburse the costs of training, including an appropriate per diem for unsalaried operators, and certification for persons operating community and nontransient noncommunity public water systems (drinking water) serving 3,300 persons or fewer that are required to undergo training in accordance with section 1419(d) of the Safe Drinking Water Act. For information concerning the Safe Drinking Water Act, please visit www.epa.gov/safewater/opcert/opcert.htm

Requests for reimbursement must be submitted within the two-year certification/re-certification time frame (as dictated by the Georgia Secretary of State certification definitions) to be considered for reimbursement.

Priority will be given first to current, properly completed requests for reimbursements. Those requests requiring research as to their validity or hinge on the submittal of further documentation will take secondary priority. NO GUARANTEE of reimbursement is given, expressed, or implied. All requests subject to approval/verification. Money will be dispersed on a first-come, first-served basis. It is in your best interest to keep a file with receipts, forms and any materials that may be necessary to aid in timely reimbursement for your certification expenses. Obtain the necessary training; pass your Certification examination; apply for certification; and upon receipt of certification by the GA Secretary of State's office, complete your reimbursement forms, and submit your request for reimbursement immediately in order to ensure the best chance for reimbursement. Reimbursements will no longer be available when the money allotted to the Program has been expended.

TRAINING

Board Approved Georgia Operator Training Facilities are listed on the Georgia Secretary of State website at: www.sos.state.ga.us/plb/water.

Training provides the information and knowledge necessary to pass the Secretary of State Board Examination. Reimbursement will be made ONLY for examinations resulting in a passing score. (Reimbursements will not be made for failed attempts.)

Your Course Trainer must sign the Course Verification form at the completion of your training for you to receive reimbursement.

You must be currently serving as a Georgia operator for a CWS or NTNCWS serving 3,300 persons or less to be eligible for reimbursement.

Certification levels applicable for reimbursement must be equal to the certification level required by the operating system (according to population served) or to the certification level required by the Georgia Environmental Protection Division Operator Certification Program.

More information and Program forms can be accessed at the Environmental Protection Division website at: www.gaepd.org/Documents/op_cert.html. To review Georgia Operating Rules under "Definitions", visit the Georgia Secretary of State's website at: www.sos.state.ga.us/plb/water

Rebecca Mason, Grants Assistant
GA Environmental Protection Division; Operator Certification Reimbursement Program
2 Martin Luther King, Jr. Dr. SE, Suite 1362-E
Atlanta, Georgia 30334-9000
P: 404.657.7665; F: 404.651.9590

Email: rebecca_mason@dnr.state.ga.us

WHO'S ELIGIBLE

Are you currently serving as an operator for a CWS or NTNCWS system serving 3,300 persons or fewer? If so, then you may be eligible to receive reimbursement for certain operator certification expenses. The Program will reimburse the costs of training and examination costs, including an appropriate per diem for unsalaried operators. Salaried persons operating community and nontransient noncommunity public water systems serving 3,300 persons or fewer that are required to undergo training in accordance with section 1419(d) of the Safe Drinking Water Act will receive reimbursement for training and examination costs, excluding per diem.

DEFINITIONS

The difference between Georgia "unsalaried" operators and "salaried" operators of CWS or NTNCWS systems serving 3,300 persons or fewer is as follows: You are "unsalaried" if you perform volunteer services when operating the water system and do not receive compensation from the system owner for these services; if this is your situation you will receive reimbursement for training costs, exam costs, mileage, and per diem (lodging, meals) in accordance with the State of Georgia Statewide Travel Regulations www.audits.state.ga.us/internet/nalgad/trvlpg.html. You are "salaried" if you receive compensation from the system owner; if this is your situation you will receive reimbursement for training and exam costs, and mileage, but not for lodging and meals.

REIMBURSEMENT PROCESS

When you'll receive expense reimbursement

Qualified operators will be reimbursed upon completion of required courses, after receiving successful examination results, and issuance of License in accordance with the GA Secretary of State guidelines for Class IV or Class III operator certification www.sos.state.ga.us/plb/water. All required documentation and expense receipts must be submitted to GA EPD to ensure timely reimbursement.

What you must submit to GA EPD, Rebecca Mason, for reimbursement:

Operator Request for Reimbursement form

Copy of Course Certification form signed by Trainer

System Director Reference letter - unsalaried operators

Experience Verification letter - salaried operators

Operator Per Diem/Mileage Reports (out-of-state travel requires Pre-approval)

Operator Course/Exam/Expense Report (**Training/Conferences/Continuing Education** – **subject to a CAP**)

Copy of current license

All applicable receipts to support expense claims

How to achieve Certification:

You must successfully pass an examination proctored by the Georgia Secretary of State to be eligible for Operator Certification

Completion of minimum of high school diploma or GED certificate prior to exam Appropriate level of experience associated with Certificate sought Completion of water courses at required for class of system being operated Upon passing the examination, a qualified applicant may apply for certificate Certification Examination information:

An applicant must pass a written examination in order to apply for a certificate. These examinations are conducted periodically at locations such as Atlanta, Albany, Macon, and Savannah. For complete details including dates, locations, and fees for examination, examination forms and more, visit the Secretary of State website at www.sos.state.ga.us/plb/water.

Rebecca Mason, Grants Assistant
GA Environmental Protection Division; Operator Certification Reimbursement Program
2 Martin Luther King, Jr. Dr. SE, Suite 1362-E
Atlanta, Georgia 30334-9000
P: 404.657.7665; F: 404.651.9590

Email: rebecca_mason@dnr.state.ga.us

< COMPANY LETTERHEAD >

< SAMPLE >

EMPLOYMENT VERIFICATION LETTER

Date:					
Rebecca Mason, Grants Assistant rebecca_mason@dnr.state.ga.us GA EPD Drinking Water Program Operator Certification Reimbursement Program 2 Martin Luther King, Jr. Drive, SE Suite 1362-E Atlanta, Georgia 30334-9000					
Re: Experience Verification Letter verifying "s	salaried" position.				
Applicant's Name:	FEI #				
License #:	-				
Current Class:					
The person named above has worked as a <u>salaried</u> NTNCWS system operator, or operator-in-training less, for the times and dates listed below.	g for a system serving 3,300 persons or				
Date Started:					
Months/Years experience:	——— Hours worked per wk:———				
"I do solemnly swear, under criminal penalty of a punishment by fine of not more than \$1,000 or by more than five years, that the above information is EPD Operator Certification Reimbursement Progr	imprisonment for not less than one nor s true and in accordance with the GA				
Supervisor's Signature:	Date:				
Print Name (Supervisor):	Title:				
Facility Name:	WSID #:				
Daytime Phone # ()					

Acceptable Signatures are those from Supervisors or System Directors/Owners ONLY

Instructions for filling out forms for the

GA EPD Operator Certification Reimbursement Program

Course Certificate:

Submit signed copy

Form OCR-F2, *Request for Reimbursement form:*

Complete all form blanks

Ensure that all backing documents have been gathered

Submit with backing documents

Form OCR-F4, *Operator Expense Report:*

Complete business/personal information

Complete Applicable information on any expenses incurred pertaining to:

Certification Courses (Class IV or Class III only)

Board Approved Conferences or Continuing Education

Examination or Re-examination Fees

Post Certification expenses

Unsalaried Operators complete information for lodging and meals

Provide all receipts for lodging and meals

Unsalaried and Salaried Operators complete mileage information

Other Fees (subject to approval by GA EPD)

SIGN and **DATE** form verifying truth in expense claims

(Do not write in the Accounting Use Only area)

Form OCR-L3, System Director Reference Letter:

Unsalaried Operators Only

Complete all form blanks

Obtain **SIGNATURE** from **SYSTEM DIRECTOR** to verify your status as an unsalaried operator

Form OCR-L4, *Experience Verification Letter:*

Salaried Operators Only

Complete all form blanks

Obtain **SIGNATURE** from **SYSTEM DIRECTOR** to verify your status as an experienced salaried operator

Submit the following documents to GA EPD for reimbursement:

Course Certification copy signed by Trainer

System Director Reference letter - unsalaried operators

Experience Verification letter - salaried operators

Operator Expense Report

Copy of current license

All applicable receipts to support expense claims

Operator Expense Report (OCR-F7)
GA EPD Operator Certification Reimbursement Program

Signature

Submit to: Rebecca Mason, Grants Asst. GA EPD Operator Certification Reimbursement Program

2 Martin Luther King, Jr., SE Suite 1362-E Atlanta, Georgia 30334-9000
rebecca_mason@dnr.state.ga.us; 404-657-7665

Date

YOU	MUST BE (VING 3,300 PERS			ELIGIBLE FOR	
NAME	REIMBURSEMENT UNDER THIS PROGRAM / Backing documentation must but the LICENSE #				WSID #								
SOC SEC #/	Fed ID#		PHONE #			FAX#							
RESIDENCE	(Street)				(County)				de)				
	, ,			UNS	ALARIED AND	SALARIE	D OPERAT	ORS - THIS	PORTION				_
COURSE N	IAME (Lin	nited to a	Cap - Out-of-S	State train	ning requires	Pre-App	oroval)						
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DATE 7/1/2005		CONT. E			FACILITY			ATION	DESCRI ex: Securit		PTS 6	AMOUNT	
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	to 456 DEF St. Macon 31202				,				EN			ex: 45193	
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	Depart	Arrival	BREAKFA	AST	LUNG	CH	DII	NNER				LODGING	_
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Attachment D



Professional Licensing Boards Division 237 Coliseum Drive

Macon, Georgia 31217-3858 (478) 207-1300

Cathy Cox

Mollie L. Fleeman
DIVISION DIRECTOR

SECRETARY OF STATE

Professional Licensing Boards Division

www.sos.state.ga.us

State of Georgia Certification Program Audit Policy

The Georgia State Board of Examiners for the Certification of Water and Wastewater Treatment Plant Operators and Laboratory Analysts (the Board) shall conduct an internal audit of its certification program by December 31 of every third year, beginning with the year 2004. The following items will be reviewed: "Certification of Water and Wastewater Treatment Plant Operators and Laboratory Analysts Act," OCGA 43-51; the "Rules of State Board of Examiners for the Certification of Water and Wastewater Treatment Plant Operators and Laboratory Analysts," Chapter 750; training course approval process; training needs (based on exam performance); the budget; the staffing level; the data management system; the examinations; enforcement procedures; compliance with the certification program; and the endorsement procedure. Each review shall be documented and kept on file in the Board office. Procedures for conducting the components of the audit are attached.

Overview of Conducting an Internal Certification Program Audit

- 1. At the March Board meeting, the Executive Director advises the Board that an internal audit of its certification program must be conducted.
- 2. At the March Board meeting, the Board forms the following committees:
 - a. Board Law Review Committee
 - b. Board Rules Review Committee
 - c. Board Training Course Approval Process Review Committee
 - d. Board Operator Certification Training Needs Review Committee
 - e. Board Enforcement Procedures Review Committee
- 3. Each Committee will complete its assignment and submit a report to the Executive Director by June 30.

- 4. The Executive Director is responsible for the review of the following certification program components:
 - a. Budget
 - b. Staffing level
 - c. Data Management System
- 5. The Executive Director will put the Board Committee reports and his office's reports together in an Internal Certification Program Review Interim Report.
- 6. The Internal Certification Program Review Interim Report will be distributed to each Board member at the July Board meeting.
- 7. At the September Board meeting, Board members will discuss the Internal Certification Program Review Interim Report to determine if any changes need to be made to any component of the certification program. At the September Board meeting, the Board will initiate procedures necessary to accomplish any required changes.
- 8. The Executive Director will draft an Internal Certification Program Review Report for [YEAR] based on the Interim Report and the actions taken at the September Board meeting. The final report will be presented to the Board at the November Board meeting for its approval.
- 9. One copy of the approved report will be kept at the Board office. A carbon copy of the final report will be sent to the EPD.

Procedure for Initiating the Internal Audit

At the March Board meeting of every third year, the Board's Executive Director will advise the Board that an internal review of its certification program needs to be conducted in accordance with the "Final Guidelines for the Certification and Recertification of the Operators of Community and Nontransient Noncommunity Public Water Systems" as published in the Federal Register on February 5, 1999. (In 2004, this will be done at the May Board meeting.) At that time, the Board will determine who will be responsible for reviewing the various aspects of the certification program, and make assignments accordingly. The Board will set milestones for the completion of each procedure.

Procedure for Reviewing the "Certification of Water and Wastewater Treatment Plant Operators and Laboratory Analysts Act"

At the March Board meeting of the year in which the internal review of the certification program is scheduled to be conducted, the Board will form a committee of at least two of its members, called the Board Law Review Committee, to conduct a review of the current certification program legislation. This Committee will evaluate the current "Certification of Water and Wastewater Treatment Plant Operators and Laboratory Analysts Act" to determine if it is in compliance with other State and Federal regulations. After the Committee has conducted its review, it shall draft a report of its review by June 30, which shall be included in the Internal Certification Program Review Interim Report.

Procedure for Reviewing the "Rules of State Board of Examiners for the Certification of Water and Wastewater Treatment Plant Operators and Laboratory Analysts"

At the March Board meeting of the year in which the internal review of the certification program is scheduled to be conducted, the Board will form a committee of at least two of its members, called the Board Rules Review Committee, to conduct a review of the current certification program legislation. This Committee will evaluate the "Rules of State Board of Examiners for the Certification of Water and Wastewater Treatment Plant Operators and Laboratory Analysts," to determine if they are in compliance with State and Federal regulations and adequately accomplish the provisions of the "Certification of Water and Wastewater Treatment Plant Operators and Laboratory Analysts Act." After the Committee has conducted its review, it shall draft a report of its review by June 30, which shall be included in the Internal Certification Program Review Interim Report.

Procedure for Reviewing the Training Course Approval Process

At the March Board meeting of the year in which the internal review of the certification program is scheduled to be conducted, the Board will form a committee of at least two of its members, called the Board Training Course Approval Process Review Committee, to conduct a review of the current Training Course Approval Process. This Committee will evaluate the Training Course Approval Process to determine if it is meeting the needs of operator and analyst certification training. After the Committee has conducted its review, it shall draft a report of its review by June 30, which shall be included in the Internal Certification Program Review Interim Report.

Procedure for Reviewing Operator Certification Training Needs

At the March Board meeting of the year in which the internal review of the certification program is scheduled to be conducted, the Board will form a committee of at least two of its members, called the Board Operator Certification Training Needs Review Committee, to conduct a review of the current operator certification training needs. This Committee will use the report of exam performances generated by examination contractor to determine if current training programs are adequately preparing operators for certification exams. If the Committee discovers and area

with poor performance, it will publish these findings on the Board's website so training providers can revise their training curriculums. After the Committee has conducted its review, it shall draft a report of its review by June 30, which shall be included in the Internal Certification Program Review Interim Report.

Procedure for Reviewing the Operator Certification Program's Budget

The Professional Licensing Boards Division of the Office of Secretary of State reviews the budget requirements for each licensing board in preparation for each upcoming fiscal year. Analysis is performed by the Division to ensure that the current license fees charged by the Board are sufficient to recover the expenses associated with the Board. Board members are informed of the budget analysis each year.

Procedure for Reviewing the Operator Certification Program's Staffing Level

Staffing level for the Board is adequate for the operations of the Board. Review of application review timelines guides the Division in determining appropriate staffing needs.

Procedure for Reviewing the Operator Certification Program's Data Management System

The Division's data system, License2000, allows tracking of applications for licensure and complaints against licensees from the initial data entry of the application or complaint to the completion of the process. Once licenses are issued, the information is readily available from the data system. The license information is also made available in real time from the Secretary of State website. The Division is able to manage both initial applications for licensure and renewals of licenses, with one data management system.

Procedure for Reviewing the Operator Certification Examinations

The examinations offered by the Board are developed by the Association of Boards of Certification (ABC) in Ames, Iowa. ABC uses the following process to develop and validate its exams: First, the appropriate Validation and Examination (V&E) Committee identifies important job tasks performed by operators or analysts. The Committee then identifies the knowledge, skills and abilities an operator or analyst needs to perform the job tasks. From this information, a

job task survey is put together. Next, operators or analysts are asked to complete the job task survey. The results of the job survey are compiled, and a needs-to-know task list is put together. Then the V&E Committee prioritizes the needs-to-know and decides the percentages of question to be asked on each level of exam for each topic. The next task is to have subject matter experts (SMEs) write the appropriate questions. These questions are reviewed by a different group of SMEs. Questions deemed acceptable by the SMEs are entered into an item bank. The V&E Committee composes a set of exams for each level using questions in the item bank.

ABC employs a psychometrician to conduct ongoing reviews and statistical analyses of each examination. It is ABC's policy to review 20% of the items in each item bank each year. ABC redevelops its standardized exams every 2-3 years.

Procedure for Reviewing Enforcement Procedures

At the March Board meeting of the year in which the internal review of the certification program is scheduled to be conducted, the Board will form a committee of at least two of its members, called the Board Enforcement Procedures Review Committee, to conduct a review of the current Enforcement Procedure. This Committee will evaluate the current Enforcement Procedure to determine if it is meeting the needs of the certification program. After the Committee has conducted its review, it shall draft a report of its review by June 30, which shall be included in the Internal Certification Program Review Interim Report.

Procedure for Finalizing the Internal Audit

After the Executive Director and the Board Committees have reviewed the various aspects of the certification program, the Executive Director will assemble all of the reports in an Internal Certification Program Review Interim Report document. The Internal Certification Program Review Interim Report will be distributed to each Board member at the July Board meeting. At the September Board meeting, Board members will discuss the Internal Certification Program Review Interim Report to determine if any changes need to be made to any component of the certification program. At the September Board meeting, the Board will initiate procedures necessary to accomplish any required changes. The Executive Director will draft an Internal Certification Program Review Report for [YEAR] based on the Interim Report and the actions taken at the September Board meeting. The final report will be presented to the Board at the

November Board meeting for its approval. One copy of the final approved report will be kept at the Board office. A carbon copy of the final approved report will be sent to the EPD.

Attachment E

Proposal for External Review of Operator Certification Program: Certification and Recertification of the Operators of Community and Nontransient Noncommunity Public Water Systems in Georgia

The Georgia Association of Water Professionals (GAWP) proposes to administer a formal external review of Georgia's certification and recertification program for operators of Community and Nontransient Noncommunity Public Water Systems. GAWP proposes to assess the status and efficacy of this program via an in-depth survey process that includes both online and written survey completion. Both certified operators and licensed professional education providers will be solicited to participate in this critical feedback opportunity. A hard copy of this survey vehicle will be provided to each licensed operator currently holding a Class I, II, III, and/or IV groundwater and/or surface water license in Georgia. In addition, GAWP will use its comprehensive email database of over 4,500 water professionals and other stakeholders to encourage electronic participation in this process. In addition, all licensed and approved professional trainers currently certified by the Georgia Secretary of State's Office will be solicited to participate in this program. The results of this survey along with personal interviews and research conducted by GAWP will ensure a comprehensive information database from which conclusive statements can be formulated.

Comprehensive Survey tool will include assessment of the following key certification issues in Georgia:

<u>Public Health Objectives</u>: The evaluation of Georgia's State operator certification program will include an analysis of public health protection afforded by community, nontransient, and noncommunity water systems in Georgia.

Operator Testing/Exams: A full evaluation of the testing and examination process as it is currently administered will be conducted. Pass/Fail ratios will be analyzed for each license designation and/or professional instruction provider (if information if available). Relevance of exam guestions and ease of course relevancy will also be reviewed.

<u>Operator Training</u>: The frequency, quality, and overall effectiveness of Georgia's professional operator training will be evaluated in this review process. An evaluation of course relevancy and convenience in obtaining professional training will be included.

<u>Classifications (Operators, Systems, and Facilities)</u>: The current classifications of Georgia Certified Operators will be reviewed for consistency with the current EPA framework and State regulatory efficiency (these include: Class I, II, III, and IV Operators). In addition, the groundwater and surface water license delineations will be assessed for any underlying issues and/or undue complexities they produce on a State level.

Renewal Period: The current license renewal period of two years will be assessed for several issues to include: maintaining an up-to-date knowledge base for safe operation of Georgia's drinking water system, financial/time burden to operators, and any other issues.

External Review of Program Efficacy and Statutory Compliance

<u>Proposed Timeline and Milestone Deliverables *:</u>

Final State Workplan delivered to Region IV EPA	5/01/06
Initial certification/recertification survey tool development	7/01/06
Focus groups identified Interview candidates identified (State and Federal) Database of licensed operators obtained Sample question pool created	9/01/06
Question pool approved	1/31/07
Online survey tool(s) reviewed	2/01/07
Online survey tool created	2/19/07
Online survey tool tested	2/28/07
Online survey tool released for open participation Electronic solicitation to complete survey provided Paper solicitation to complete online survey provided	3/01/07
Survey closed for participation	3/31/07
Analysis of results	4/13/07
Final report of findings and results	8/31/07

^{*} Dates to be revised and resubmitted once finalized

Georgia's Operator Certification Program Survey

GA EPD is conducting a formal review of Georgia's Operator Certification Program and we need your assistance! All certified operators holding active licenses in the field(s) of water treatment, wastewater treatment, laboratory, distribution, and/or collections are encouraged to complete a short online survey in order to assess Georgia's Operator Certification Program. Participation in this survey will be entirely anonymous, and the results will be provided to the **Georgia Environmental Protection Division** and the **Georgia Secretary of State's Office** (in summary form only). This information will serve as a basis on which to increase the effectiveness and efficiency of Georgia's certification program. The results from this comprehensive survey will be compiled and the final documentation will be provided in an upcoming edition of *The Georgia Operator* and posted here online at www.gawp.org

If you have any additional questions that you believe would be pertinent to this program, please send them to bwagoner@gawp.org. This program will only be effective if we acquire the correct information on Georgia's Operator Certification Program. Thank you in advance for your time and efforts on behalf of GAWP and GA EPD!

If you have contacted the Water & Wastewater Certification Board or State Board offices in the last 3 years, please rate your experience.

- a. Excellent
- b. Satisfactory
- c. Unsatisfactory
- d. Open dialogue for comments

If you have taken any Georgia certification exams in the last 3 years, please rate how appropriate you feel the questions were for the category and level of the exam you took.

- a. Very appropriate
- b. Somewhat appropriate
- c. Not appropriate
- d. Have not take any exams in the last 3 years

If you have taken any Georgia certification exams in the last 3 years, please rate how difficult you feel the questions were for the category and level of the exam you took.

- a. Too difficult
- b. Appropriate
- c. Not difficult enough
- d. Have not taken any exams in the last 3 years

If you have taken any certification exams in the last 3 years, please rate the ease of the exam registration process itself.

- a. Very easy
- b. Easy
- c. Somewhat difficult
- d. Very difficult

The current required recertification hours for renewing a license are:

a. Appropriate

- b. Too long
- c. Too short

What is the main reason that you take additional continuing education training, <u>beyond</u> that which is required for certification?

- a. Additional recertification points
- b. Required by employer
- c. Voluntary professional development

Which of the following do you feel best prepared you for the certification exam(s)?

- a. Formal (Classroom) Training
- b. On the Job Training
- c. Self-Study

Do you feel that the required certification process has made you better at what you do?

- a. Yes
- b. No

If your licensed certification is a "Lab Analyst", do you feel that there should be multiple levels of this certification, similar to operators?

- a. Yes
- b. No

Are there any other certifications you would like to see endorsed / required by the Georgia Certification Board?

a. (open dialogue box)

What is the most important factor for you in choosing to attend professional training?

- a. Closeness to home / work
- b. Night class offerings
- c. Course content (classroom instruction vs. on the job training)

Are you aware of Georgia's reimbursement program for operators of small water systems?

- a. Yes
- b. No

What changes or improvements would you suggest to better prepare operators to obtain initial or advanced levels of certification?

Open dialogue box

How would you rate the overall quality of training you received to prepare for your most recent certification exam?

- a. Excellent
- b. Satisfactory
- c. Unsatisfactory

GEORGIA'S OPERATOR CERTIFICATION PROGRAM COMPREHENSIVE EXTERNAL REVIEW

FINAL FINDINGS

Submitted to:

Georgia Department of Natural Resources Environmental Protection Division

March 4, 2008

Submitted by:

Georgia Association of Water Professionals





GEORGIA'S OPERATOR CERTIFICATION PROGRAM COMPREHENSIVE EXTERNAL REVIEW

Final Findings

- GAWP administered a formal external review of Georgia's certification and recertification program for operators of Community and Non-transient Noncommunity Public Water Systems.
- GAWP administered an online survey for this project and provided hard copy surveys by request.
- GAWP purchased the full database of all water operators of Community and Nontransient Non-community Public Water Systems license holders in Georgia from the Secretary of States' office. A direct mail campaign was performed that advertised this program and strongly encouraged participation.
- GAWP used its comprehensive communication database of over 5,000 water professionals (and other stakeholders) to encourage electronic/and hard copy participation in this process.
- GAWP reviewed and compiled data from the electronic survey returned from multiple solicitation methods. This final findings document describes results and provides conclusions and suggestions relative to Georgia's Operator Certification Program.
- A total of 615 license holders participate in this survey (Approx 6,000 potential respondents Approx, 1% return).

Milestone Deliverables Achieved

Database of licensed operators (Community and Non-transient Non-community Public Water Systems) purchased from Secretary of State's office – over 6,000 records compiled.

Focus groups identified (GAWP District Directors, GAWP Committee Chairs, solicited questions from GA EPD staff and key Association members, GWWI instructors, among others).

Sample question pool created from focus group input and suggestion (sample questions attached).

Question pool approved by GA EPD staff and focus group members (final questions attached).

Online survey tool created – utilized industry standard "Survey Monkey" web-based survey tool.

Online survey tool tested for ease of use and time constraints (15 questions maximum).

Survey tool released for open participation.

Electronic solicitation to complete survey – all means available via GAWP communication avenues, ENews, News and Notes, GA Operator, direct email, GWWI announcements, conference announcement, etc.

Paper solicitation to complete online survey provided – hard copy postcards mailed to full database of licensed operators.

Survey closed for participation after two month "open-period".

Several reminder notices provided as "last-chance" effort for participation.

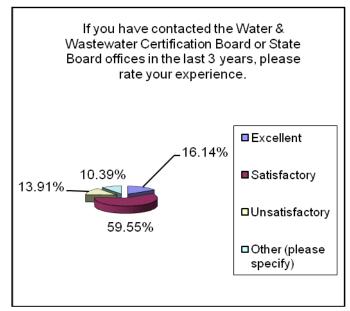
Analysis of results – fourteen questions total with open-dialogue opportunity.

Final report of findings and results (attached).

Question #1.

If you have contacted the Water & Wastewater Certification Board or State Board offices in the last 3 years, please rate your experience.

answer options	Response Percent	Response Count
Excellent	16.14%	87
Satisfactory	59.55%	321
Unsatisfactory	13.91%	75
Other (please specify)	10.39%	56
ans	swered question	539
s	kipped question	74



Other Respondent Comments:

Sometimes you deal with people knowledgeable and wanting to help other times it seems that you are bothering some of the employees and their not able or willing to help with your problem or even a question.

Robots that can't function without programming

Unprofessional

Excellent if you get the right person

I get voice mail most of the time

No response by phone or web site, had to go through Sec. of State

Both Satisfactory and Unsatisfactory. Some are good and some not so good.

I have had both positive and negative experiences when contacting the board.

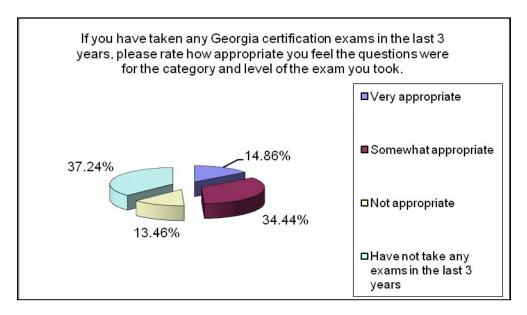
Very slow in response. Once satisfactory and once not.

- Over seventy five percent excellent or satisfactory experience with Certification Board. This is a very good rating but certainly leaves room for improvement.
- Twenty four percent unsatisfactory or "qualified" their answer.

Question #2.

If you have taken any Georgia certification exams in the last 3 years, please rate how appropriate you feel the questions were for the category and level of the exam you took.

answer options	Response Percent	Response Count
Very appropriate	14.86%	85
Somewhat appropriate	34.44%	197
Not appropriate	13.46%	77
Have not take any exams in the last 3 years	37.24%	213
ans	swered question	572
s	kipped question	41

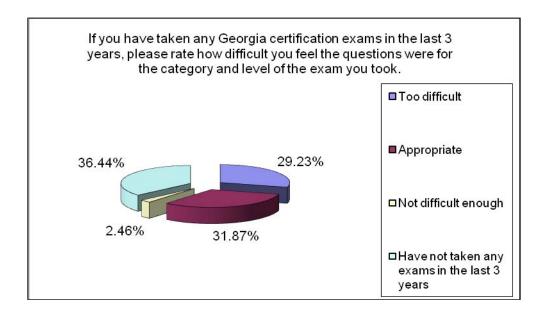


- Fifty percent feel questions are appropriate.
- Fifteen percent feel questions are not appropriate
- However, almost forty percent didn't take the exam in last three years.
- Difficult to make a statement with any confidence because of the high percentage that haven't taken the exam recently.

Question #3.

If you have taken any Georgia certification exams in the last 3 years, please rate how difficult you feel the questions were for the category and level of the exam you took.

answer options	Response Percent	Response Count
Too difficult	29.23%	166
Appropriate	31.87%	181
Not difficult enough	2.46%	14
Have not taken any exams in the last 3 years	36.44%	207
ans	swered question	568
s	kipped question	45

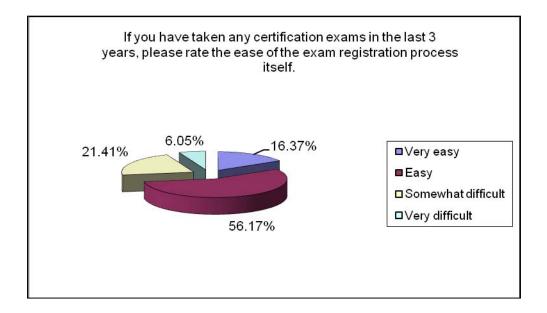


- Thirty percent feel questions are too difficult.
- Thirty percent feel questions are appropriate.
- Thirty seven percent have not taken exam in past three years.
- Again, difficult to make a statement with any confidence because of the high percentage that haven't taken the exam recently.
- Removing the thirty-six percent that have not taken recent exam provides 50/50 split on difficulty. This percentage is cause for concern or additional action.

Question #4.

If you have taken any certification exams in the last 3 years, please rate the ease of the exam registration process itself.

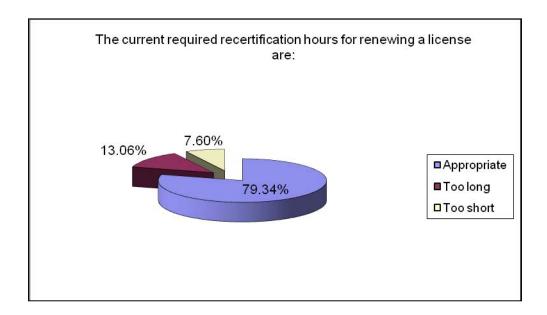
answer options	Response Percent	Response Count
Very easy	16.37%	65
Easy	56.17%	223
Somewhat difficult	21.41%	85
Very difficult	6.05%	24
ans	swered question	397



- Exam process is easy or very easy to over seventy two percent.
- This is a very good percentage; however, twenty five percent (difficult or worse) certainly leave room for improvement.

Question #5.

The current required recertification hours for renewing a license are:		
answer options	Response Percent	Response Count
Appropriate	79.34%	480
Too long	13.06%	79
Too short	7.60%	46
answered question		605
S	kipped question	8

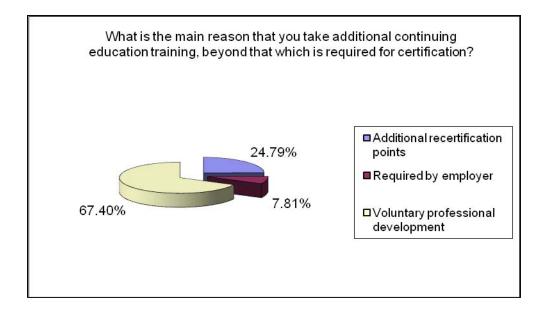


- Eight percent feel recertification hours are appropriate.
- This requirement is adequate in the mind of most license holders.

Question #6.

What is the main reason that you take additional continuing education training, beyond that which is required for certification?		
answer options	Response Percent	Response Count
Additional recertification points	24.79%	146
Required by employer	7.81%	46
Voluntary professional development	67.40%	397
an	swered question	589

skipped question

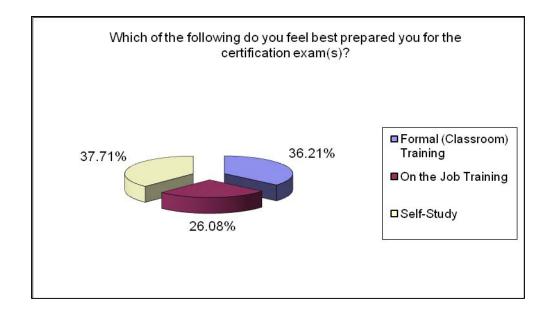


Reviewers Comments:

• Majority take additional continuing education training for voluntary professional development and not for points or as a requirement from employer.

Question #7.

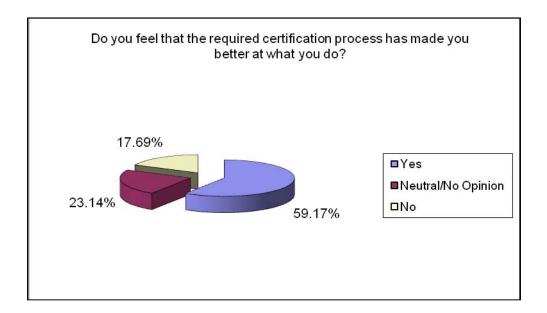
Which of the following do you feel best prepared you for the certification exam(s)?		
answer options	Response Percent	Response Count
Formal (Classroom) Training	36.21%	218
On the Job Training	26.08%	157
Self-Study	37.71%	227
answered question 6		602
sk	ipped question	11



- Statistically, one third of each available answer best prepares the license holder to take certification exams.
- Equal value is placed on formal classroom training, on the job education, and self study outside of either.

Question #8.

Do you feel that the required certification process has made you better at what you do?		
answer options	Response Percent	Response Count
Yes	59.17%	358
Neutral/No Opinion	23.14%	140
No	17.69%	107
answered question		605
s	kipped question	8

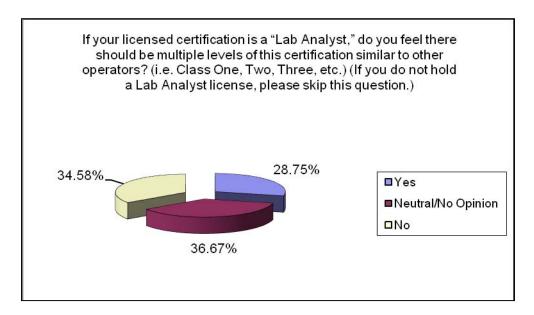


- Only sixty percent of the respondents feel the certification process made them a better operator.
- Forty percent had no opinion or said the process did not help their job duties.
- Overall this is a fairly poor number which leaves room for improvement and modification to the certification process.

Question #9.

If your licensed certification is a "Lab Analyst," do you feel there should be multiple levels of this certification similar to other operators? (i.e. Class One, Two, Three, etc.) (If you do not hold a Lab Analyst license, please skip this question.)

answer options	Response Percent	Response Count
Yes	28.75%	69
Neutral/No Opinion	36.67%	88
No	34.58%	83
ans	swered question	240
s	kipped question	373

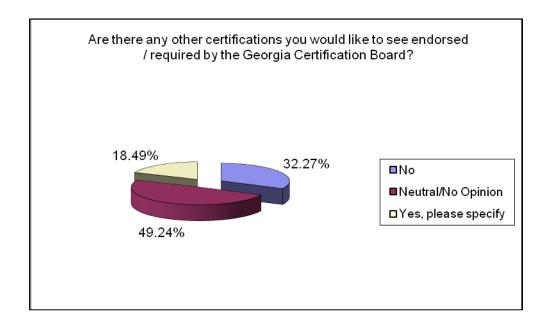


Reviewers Comments:

• Statistically even allotment of answers for a desire to split "Lab Analyst" certifications into three different levels.

Question #10.

Are there any other certifications you would like to see endorsed / required by the Georgia Certification Board?		
answer options	Response Percent	Response Count
No	32.27%	192
Neutral/No Opinion	49.24%	293
Yes, please specify	18.49%	110
answered question 59		595
s	kipped question	18



Reviewers Comments:

- Only eighteen percent indicated a desire for additional certifications in the water/wastewater field.
- A significant number of those eighteen percent indicated maintenance as a viable and needed area in need of formal certification.

<u>Individual answers provided below – unaltered in any way:</u>

Membrane Operations

Mastery license for Water and Wastewater utility- Should be geared toward plant/infrastructure management, alternative treatment techniques, supervision of people, construction and funding of upgrades and new structures. Should not be a requirement but should be endorsed by board and supersede class one of each.

Field sampling and analysis

Plant **Maintenance**

Pretreatment Coordinator

Stormwater Program Coordinator

A management level certification with a focus on running treatment facilities correctly.

Somewhat similar to what POST requires a separate certification for police chiefs.

Maintenance

Maintenance Tech

Instrumentation Tech

Environmental Management Certificate and Industrial Pretreatment

Certification for treatment of reuse wastewater or distribution of reuse wastewater

Water/Wastewater **Mechanic**, Backflow Repair, HAZWASTE Technician, HAZWASTE Management

Management Certification - Have a certification for plant/system management. This allows operators to operate and take an exam that is for operation and the best to become managers

Maintenance, Mapping-GIS, meter reading, inspections.

I agree with the three levels of certification but do not feel that everything should be geared to plant operation because we do not all work in a plant environment. Some operators have only a distribution system or combination distribution/groundwater system/purchased water system. There are similar differences in wastewater treatment systems as well. I would like to see the type of test required be geared to the permit. Those of us who do not work in the treatment plant systems are at a distinct disadvantage when it comes to knowledge gained through work experience but we must know plant operation principles as well as the operation of the specific where work. I don't feel that one should be denied taking the existing tests if so desired but feel the requirement should again be geared to the system.

Plant maintenance operator certification

Maintenance

Backflow

More than one level of certification for Distribution System and/or Collection System personnel.

Water/Wastewater Mechanic Certification

Maintenance certifications

Maintenance certification

Belt Filter press and centrifuge operation

Equipment **repair** and troubleshooting

Something in the Public Works area; dealing with storm water management, heavy equipment operations, State laws concerning public highways, etc.

Pretreatment related -- inspector, plant performance evaluation, etc.

Ground water and surface water

Environmental and Safety

Possibly some type of maintenance certification

Water Mechanic

Wastewater Mechanic

At least two levels for each

Water/Wastewater Mechanical **Maintenance** certification. Lots of good, reliable **mechanics** cannot pass the water/wastewater exams. They should rank above common laborers, but as it stands, that's their rank.

Maintenance Repair of certain plant equipment.

Water/Wastewater **Mechanics**. Electricians and Electronic Techs.

Erosion and Sediment Control

Electrical/Mechanical

Separate the surface and ground water licenses, at least for Class 3, as the materials required to study and know for a surface water certification is far too difficult for those learning to operate a groundwater system.

Maintenance and Electrical specific to water/wastewater plants.

"Maintenance technician

Instrumentation technician"

I think the Industrial Wastewater Operator license should be separated into the sub-categories. You have to know too much of other industries that are not needed for instance if you operate a DAF you should only have to test for a DAF operators license, If you do heavy metal precipitation you should only have to test out for that as well, and so on.

Maintenance & Deriving Electrician; Operator Certification for the Type of plant you are employed at.

Pretreatment Inspector/Coordinator- Seems many wastewater facilities have a Lab Analyst or Operator that works fool time inspecting and working with industries that discharge wastewater into the municipality's collection system, and the industries have to be inspected and monitored regularly. A formal training program would allow Pretreatment Inspectors/Coordinators wiser in working with industries.

"water and wastewater supervisor certification exam, education or points.

there are too many bad supervisors on charge."

Mechanic

Backflow Prevention

"A lot of class 1 operators usually move into some form of management.

Why not some form of something relating to water/wastewater management. Something a little beyond class 1 exam. maybe a class 1A or something."

"This does not pertain to water or wastewater but I would like the state of Georgia to have some type of certification for natural gas operators at this time Georgia does not have any thing under the Georgia public commission and almost all cities and towns and industries use natural gas in daily operations and they are inspected by the public service commission but there is no certification for standards like water and wastewater operators. Water and wastewater classes also tell what size systems you can operate in natural gas there are no controls for system size any operator can work anywhere."

Water Superintendant, Utility Directors, Plant Managers, EPD Inspectors

Classes created for preparation for class 1 exam.

"CPR-First Aid

Confined Space entry/rescue"

levels of maintenance

Water Maintenance Mechanic and Wastewater Maintenance Mechanic

"Certification for City Public Managers to obtain knowledge about work involved by water and waste water operators.

Require certification for City Mayors.

Require certification or courses or training for commissioners and political electors in city government.

Public awareness initiatives should be developed to inform public about water works.

Newspaper articles, informative public announcements."

Distribution system operator

"Wastewater Collection Systems

Water and Wastewater Maintenance"

UPC needs to have good training on locating to protect utilities and lives

Maintenance

MAINTENACE, MANEGEMENT, AND IF THEY'RE ENGINEER'S OR MANAGEMENT OR AT AUTHORITY LEVELS HAVE RULES IN PLACE THAT THEY ACTUALLY WORK IN THEIR FAUCILITIES TO GET CERTIFICATIONS JUST AS THE NORMAL EMPLOYEES HAVE TO DO.IT'S RIDICULOUS TO HAVE MANEGEMENT PLAYING WITH WATER AND WASTEWATER SYSTEMS WITH NO RESPECT FOR THE CUSTOMERS, THE EPA, EPD AND ANY OTHER AUTHORITIES AND THE VERY LEAST ON THESE KIND OF PEOPLE IS THEIR EMPLOYEES. I'VE SEEN THIS WHOLE STATE'S EPD DIVISION ALL BUT DISAPEAR SINCE MR. HAROLD REHESIS (NOT SURE IF LAST NAME IS SPELLED CORRECTLY) RETIREMENT! WHAT A SAD DAY WHEN WE LOSE LEADERS LIKE HIM TO WHAT WE HAVE NOW! IT'S A DISGRACE TO SEE OPERATIONS GO FROM TOP IN THE WHOLE U.S. TO ALMOST OBSOLETE. GETTING OFF MY SOAP BOX HURTS.

I think to have **mechanics**, both electrical and **mechanical** certified at a minimum of class 111 would help a great deal. I think that certifying the people in charge of the utilities, i.e.: board members, directors etc, would help more than anything. It would be difficult to persuade people who believe they don't need to know more than they do, but it would keep things headed in the correct direction.

Underground Wells

Maintenance/Repair

I believe that all persons working in the field should be certified. Maybe have a certified well **mechanic**.

Pretreatment Inspections

Certification for managers, supervisors or department heads of municipal water and wastewater systems. There are a lot of top level managers that have no knowledge of basic water and wastewater regulations.

Ground Water for Plants that are Ground Water.

"I think lab analysts should be divided into fields of specialty - drinking water vs. wastewater and into levels such as other certifications.

add Hazardous Waste Operations"

Certification for plant maintenance mechanics.

I would like to see Groundwater Treatment and Surface Water Treatment separated into two different certifications.

STORM WATER RUNOFF.

I would like to see a class certification for groundwater operators only due to the fact that we are not associated with surface water treatment processes/controls and treatment. most groundwater operators are long term employees and not much change in processes. groundwater operators are at a disadvantage when taking a class 1 or 2 exam due to the fact that we are not in that source or field of water treatment processes everyday as compared to a surface water operator.

Maintenance

I would like to see the counties do the certification for water/wastewater

I would like to see a certificate requirement prior to the Class 3 certificate that permits a person to operate a treatment plant alone. Like a class 4 that would go over vary basic operations and mostly safety concerns with operations.

Plant **Maintenance**

I don't agree that lab analysts should have different levels. I have reviewed that testing program and have taken the classes and there just isn't enough variability within different municipal systems to warrant the expense of a whole new series of certifications for lab analysts.

Water Superintendents and Utility Managers

Retired Status for retired holders of licenses. Many of these operators have had these certifications and taken pride in achieving them for half their lives or more. When they retire, they must either continue to bear the expense of recertification training and license renewal, or else allow the license to lapse.

Instead, a small fee to move the license to a retired status, where it would remain on file with the possibility of re-activation for another fee should the operator come out of retirement."

A SPECIAL LEARNER PERMIT WITH REQUIREMNTS TO BE TRAINED BY A LIC EMPLOYEE AT THE SITE HE/SHE WILL WORK.....EVERY SITE IS DIFFERENT AND NO CLASS OR TEST CAN COVER ALL THE THINGS PERTAINING TO THAT SITE. ie SOME SITES USE CHLORINE GAS, OTHERS POWDER AND THEY REQUIRE DIFFERENT SAFETY PROCEDURES BY THE CIT, TOWN ETC...

Stormwater and Mechanical

Reinstate Class II analyst

Something for plumbers to help weed out the ones that overcharge and give customers false information about their service provider. They also need to be stopped from blaming the service provider with problems that they cannot or will not solve themselves only for the service provider to find that the problem actually was the customers after all but just because the plumber told them different, the customer believed them.

A formal certification for **Maintenance** personnel should be developed and implemented including appropriate maintenance course work thru GWWI and GRWA

I would like to see a certification for utility managers/directors.

Plant **Maintenance**

Public Utility Customer Service

Backflow prevention device tester.

Also if operators are licensed to do lab analysis, why is the reciprocal not true?"

Maintenance tech

Land Application Systems, Maintenance, Computer courses

Maintenance and instrumentation

Electrical and panel preventative maintenance and trouble-shooting (440, 120, 24volt circuits.

Plant and/or Systems Management

Maintenance Technicians or a combination Operator/Maintenance Technician

Wastewater Maintenance/Mechanic

Pressure Boiler operator

Pulpwood haulers

F.O.G. inspector

Industrial/ Chemical treatment certification

Backflow Testing License should be issued by the State not a contractor; it should be like my operator's license. Also you should take the exam one time and be required to get continuing education points for renewal. Over the last ten years I have taken the exam 3 times and have never let my license expire

Backflow Repair Devices should be repaired by certified individuals not just plumbers. Just because you have a plumbers license does not mean you know backflow and or the devices that are in the field.

Water Distribution

Waste Water Maintenance

I think that the Collection License and a Wastewater License, you should be able to hold both when you pass the test.

Not necessarily certification, but some maintenance for operators, pumps, basic electricity, controls, etc.

Manager certification.

Maintenance

Bring back the oral test for Class I operators!

Maintenance and instrumentation

Developers and Contractors should be required to be certified in knowledge of endangered species, including plants and animals.

mechanical certifications for those that specifically work on booster and lift stations Boiler Room Operators

Storm water BMP structure inspector

Maintenance certification, for water and wastewater facilities.

Maintenance

Stormwater

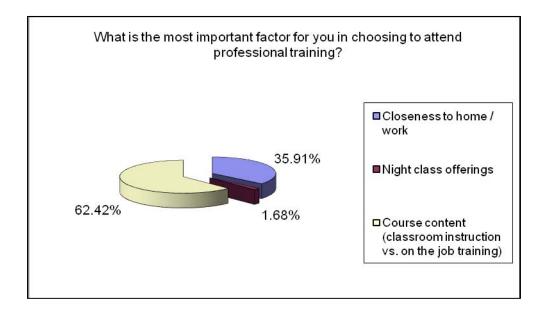
Wastewater Maintenance Technicians, Wastewater Facility Administrators

Surface Water

Ground Water

Question #11.

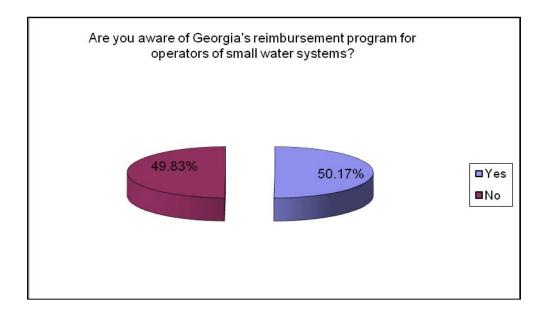
What is the most important factor for you in choosing to attend professional training?		
answer options	Response Percent	Response Count
Closeness to home / work	35.91%	214
Night class offerings	1.68%	10
Course content (classroom instruction vs. on the job training)	62.42%	372
answered question 596		
skipped question		17



- Sixty three percent allow course content to dictate which class they attend regardless of other external factors.
- Thirty-six percent use proximity to work as deciding factor.

Question #12.

Are you aware of Georgia's reimbursement program for operators of small water systems?		
answer options	Response Percent	Response Count
Yes	50.17%	302
No	49.83%	300
answered question		602
skipped question		11



- Unfortunately only half of the current licensed operators know about the Reimbursement Program.
- This is even with GAWP and GRWA advertisements, exhibits, emails, etc.
- Possibly identify additional methods of soliciting participation in this program direct mail, etc.

Question #13.

What changes or improvements would you suggest to better prepare operators to obtain initial or advanced levels of certification?		
answer options	Response Count	
	356	
answered question	356	
skipped question	257	

Reviewers Comments:

Over 300 individual comments relative to changes and/or improvements were received from this survey. All are included below – unedited.

These comments and previous questions identify that changes are indeed warranted to targeted aspects of the certification program can be improved upon.

Specialized training in different environments.

Sort of like the activated sludge workshops of years past.

Entire classes dedicated to particular areas."

"I believe that there is not enough classroom time.

It's very hard to get what is needed in a 40 hour

class. Then it makes it much harder when you have

so many different tests. If I was that smart I don't' know that I would be doing this for a career. But it would be in the wastewater field."

Technical courses taught at colleges recognized as experience for initial license.

I have been doing this for 19 years and still see that the exams rarely match the training given and are always excessively difficult and tricky. I, myself, have never failed an exam, and hold multiple certifications, but see many people who understand their jobs well, but can't pass.

Teach operators how to answer questions that are totally out of the scope of their job.

Publish and distribute a valid and relevant needs-to-know for each class of certification Internet based GWWI training beyond the course work required for the certification test. Make the questions on the exam at least somewhat match the study material. Off the wall questions should be removed from the test, or, added to the study materials. The scope of material required for study should be minimized. My employees who are currently studying say they could study till dooms day and never cover it all and that the test is off-the-wall.

Training to focus on just what is in the exams. Not the extra stuff you may never see or use.

More required hours for advanced certification

Make them go through the Sacramento manuals rather than going to Carrolton for a one week cram session

One day exam reviews on the day before the exam

Make the tests more relevant to the treatment techniques used in Georgia.

encourage professional training and certification testing in State of Georgia vocational/trade/technical schools with HOPE support.

Have the test questions relevant to the operator level and experience.

"PAY ATTENTION TO INSTRUCTOR DURING CLASS / COURES.

APPLY SKILLS / EXPERIENCE TO CERTIFICATION EXAMS."

The failure rate at all levels is much too high; therefore, I recommend that classes be coordinated with the content of exams. Not actual questions of course.

Not have all the information pertain to conventional water plants and hve some more on the Package Plant (micro-floc)

less people in a class.

The tests' contents need to pertain to water treatment plants. I've had too many questions that I don't even deal with those topics.

There needs to be more advertisement for classes being given around the state. I cannot count how many times I have to answer the question, Where do I go to get my education points? When are classes being held?; There needs to be a centralized site to look up classes being given at GWWI, technical schools, and other venues. This would enable operators and potential operators the chance to attend classes that may be closer to home.

I think this a personal issue. The candidate must be willing to put forth the needed effort to prepare for certification. I think that the state could offer courses of study in the various technical schools around the state to train students in the treatment of water and wastewater. Seems that some of the study materials are not available and/or not listed for some of the higher class exams, Class I's

don't make test so difficult that is what books and manuals are for, if you have a problem look it up, normal operations test or sampling you should know, but the material on the test is a little much I realize in the water world you are dealing with lives, but anyone wanting to be an operator knows this and takes great caution

Video / audio training aids available to perspective operators

none that I can think of at this time.

More training classes some class in the southern part of the state.

closer to home and in depth training.

the questions on the exam for drinking water class 1 there were waste water lab questions and bacteria questions pertaining to waste water that were not in the material for fresh water treatment

Make the exams relevant to the job requirements for entry level positions, save theory and management to advance certifications.

There is too much material now for new employees to absorb. Material needs to be more condensed.

need to separate water treatment for well supply and surface water supply

More on the job training that pertains to their plant.

Make the test a little easier to pass, or grade on a curve. Operators who fail tend to get frustrated and leave the profession. I missed my Water III by one point and that was enough to make some just leave the profession.

GWWI does an excellent job of preparing applicants for certification exams. It could be beneficial to supplement classroom training with guest presentations by managers/staff from utilities.

A STRONG IN HOUSE TRAINING PROGRAM

Longer classroom instructions combined with hands on training.

No opinion

More training classes in south gag

Encourage self-discipline with studying.

Institute a groundwater operator's certification

To insure that water treatment operators are given adequate lab time and instruction. I didn't step foot in a lab at my lab course for my class II exam.

Maybe longer class hour requirements. It is worth the cost for lab and operation knowledge basics and advanced levels.

Change the more difficult questions on the test.

the materials and training is okay but you have so much to cover to be prepared for an exam an the exam is hard to pass just check the success rate

More on the job training and class room presentations of different situations that might occur in the treatment process and how to overcome them. More math and chemistry classes.

More study questions to the related level.

nothing

In a regular school, one is given specific studying material for specific grades ie. Freshman, sophomore etc... Here the material is given haphazardly and if you study it all you might pass the exam. There is definitely a problem when we have excellent teachers at the G.W.W.I, and an 80% failure rate for the class III exam. (I've been a class one since 1993).

More in class instruction.

The development of a college level Water & Damp; Wastewater courses in the State of GA All trainers (in or out of house) should be given the correct info to train for the test. Not all operators work at the same type of plant. The tests should closely pertain to the type of plant you work at.

Make a State approved study guide and give a specific list of manuals to study as well as make classroom instruction more oriented towards passing the certification exam.

Online study guides and/or practice questions with answers available. Preferably printable and about the length of a normal test to give those operators who have been out of school for extended periods of time not only an idea of the wording and content of the questions, but practice taking tests in general.

Specific courses for test

a detailed list of good sources where info can be obtained to study for the certification exams more formal educational classes around the state instead of the majority of the classes at the GWWI especially when it concerns Backflow certification.

More available training state wide on a regular basis, the board should allow more on-line training ASAP.

More natural treatment courses and seminars etc.

More classroom training in the basics of operating a treatment plant and understanding how to interpret the tests they are required to run.

I feel that on the job training g- plus major access to exam topics-Plus the entry level exam should ask questions that are indeed entry level .

simpler testing that deals with us and not the US Govt

more opportunities for online training and a list of review materials printed not online list Internship/Experience network opportunities among municipalities to provide varieties of plant experience. You tend to learn how to run your one plant which is not always typical of the general plant; questions asked on certification tests. Supposedly, employees are trained to be interchangeable from plant to plant, but that's not always the case. The certification program is a good thing as far as it goes, but further standardization of plant employees would get us more respect (and pay) as industry professionals.

Exam questions should relate more to the typical job function of the person with that level certification.

There is a sincere lack of communication among operators and potential operators. We desperately need a central site that will help list classes being given and where they're being given in order to help candidates obtain the necessary education to take the exams. Some people can't afford to go way out of town to get their education points, so having a site to reference would enable them to find something closer to home and more convenient.

Books that are simpler to understand.

Maybe a class from GWWI that teaches people how to actually study. I noticed that is a problem a lot of people have. They don't know how to study.

I think that a training course for Class I WWTP would have helped me progress from Class II easier. There is just so much to be aware of in all the varied treatment processes out there and you only usually have on the job experience with one of them.

Longer hands on or on the job training before being able to take a test. Or before you are able to go to a class, this helps the instructor as well as the student. In the early days this was the it was done, there is a lot to said about the way it use to be done. Thanks

more class's around the state, more online training. both GWPA AND GRWA have the market more trainers are needed.

Questions that are straight forward and are more job related.

They have to read the California Manuals

More employer support

Y'all should get a clue about how little the test questions have to do with the job. Y'all are wasting a lot of people's time and energy including your own.

ANY

Increase required classroom instruction from 27 hours to forty hours.

if there was a question bank that we could practice with.

more of an hands on type of training so that the process can be explained more in-depth on why things are done the way they are and not just what a book say's to do. And the class needs to be longer so you don't have to cram it all in a week.

I think the State test is too easy, every tom dick and harry can get one.

People preparing for the exam do not really know what to study. We are get the list of recommended study material, but there are always several questions that seem to come out of nowhere;. There should one standard list of study material, no matter how large, and take questions from the study material. There was a question on an exam concerning security that I have yet to find in any study material, manual, SOP, or anything. It was about the distance of exterior fencing. These kinds of questions reduce people to guessing. Whether or not a person can be lucky enough to guess correctly is not a good indicator of one's operating skills. more available classes to prepare for certification exams

You test on equipment or tools that are out dated.

classroom material needs to be more relevant to exams or vice versa

separate your test for certification. we at Fulton county do not work in or operate sewer plants, lift stations. therefore we have no knowledge of and cannot obtain knowledge of their workings. a test should be designed around the plants and another test for those who are sewer workers only. each could be given a different license to operate only what the license is good for. realize that a lot of the questions on the exams will not be something that they use in their everyday work. Must attend as much training as possible.

Alleviate their fear of the math portions of the exams. I saw many in a panic about the basic math - they can pass the exam without answering the math questions. But, keep teaching the math; they will need it.

Hire more intelligent people.

"better needs to know criteria

more specific exam prep resources cited

longer work experience requirements"

HAVE EXAMS BASED ON THE CERTIFICATION YOU ARE SEEKING. WHY SO MUCH LAB IN WATER DIST. AND /OR WASTEWATER COLLECTION OPER.? INSTRUCTORS NEED TO TEACH WHAT'S ON EXAMS, NOT GIVE A COURSE CONSISTING OF 50% MATH.

Better testing schedules. Why can't I make an appointment then come to the Georgia Certification Board Office when I'm ready to test, pay the fees and take the test? Changes must be made to the tests themselves!! The tests do not truly represent the operator's ability or inability to operate his/her plant. It is a guessing game and the Board is well aware of this. We need a testing system that evaluates the person's knowledge and ability to properly operate their facility (and others). Increase the OJT for a Class 3 back to 6 months. to make the test more understandable. Every plant is unique and of course not all processes are applied. Reading about them and answering questions does not give you hands on experience. Better knowledge of what really happens in the field

Change the test. Who are the people who write that thing. They probably do not have a license to treat water or anything else.

Class training

Flouride.

Let them know the questions they missed so they could study on that part

Classroom instruction

Provide appropriate training.

"More emphasis on legal responsibilities of public

health and SDWA."

Online training courses for certification and online training for recertification points. Increased class time so that a more thorough study of material can be done. The one week training program for the class III programs is NOT enough to thoroughly train Operators...and operators can easily be discouraged studying own their own because of the large amount of material they have to cover individually. The high failure rates for State exams in my opinion is not due to lack of intelligence amoung people taking the exam, but due to a divide between the material they know verses the vast content of material needed to be known for the exam. Simply state, people do not study things that they do not know is on the exam. Also, I have seen questions on the Wastewater exams that could only apply to Drinking water...i.e. questions about

"A clear indication of which chapters or material an operator need to study for each different level of certification exams. In my case, I spent (wasted)time studying the grown material. Is hard to keep too much unnecessary information to memorize. Guessing shouldn't be an option." "Better classroom training that actually pertains to what you might be testing for.

Providing actual formulas that will be needed on the test being taken and not generic equations and measures."

Moore classroom instruction

I think the required classroom hours should be increased to give the new trainees a better understanding of water treatment.

Double training hour requirements (Example: 27 hour lab required for class II exam should be around twice as many hours)

Setup a one or two semester course with some of the colleges to help operators and particularly groundwater operators to gain the needed knowledge and experience in order to be successful in their certification efforts.

PAY ATTENTION TO INSTRUCTORS WHILE ATTENDING CLASSES!!!!!!!

"1)Take lab questions off the class 2 exam.(30 of 130).Lab analyst is a separate field.(the old way)

2)Include class 4 as part of advancement system."

Points for each licensed

Answers to the questions on the exam. The few questions on the exam that I missed, some I still do not have the answers for, and cannot find in a book yet.

Advancement also by continuing education points

Some of my coworkers just took the certification exams for operator and lab. They went to school and had on the job training, studied hard yet failed. They said nothing they studied was on the exam. There should be some sort of class or training that really teach the subject and better prepare students for the exams. i am not saying teach the exam, but teach the subject. All aspects of the field. My coworkers said they had not seen or heard of about half of the stuff on the exam. Maybe the training needs to be longer and more involved, like plant tours of different processes to expose students all aspects of the field. most of us work in small plants and don't see all the types of water and wastewater treatment.

The EXAMS need to be CHANGED! They are extremely to HARD! I recently took a class 2 ww operator exam on July 10 and I have never even seen half the things on the exam. I left the exam wondering why did I even study, because nothing could have prepare me for that exam. The test seems like they are a money making scam for AMP. Because if you fail, you are going to pay another 78 dollars to take it again. I am VERY UNHAPPY with the exams along with several of my co-workers. Something needs to be DONE about them or please tell me where to go, to prepare me for the exams. Please email me if I'm not the only one who feels this way. tryawn@msn.com

"Test questions that pertain to an operator's job.

The current testing procedure seems to be designed for failure.

The State should take testing and test makeup back over.

Using a private, for profit, company tends to

lead to test and procedures designed to require

multiple failures."

More educational classes offered more frequently than 2 to 3 times per year.

Self courses offered on the internet

For small water system operators, subjects offered for CE are not applicable. Too technical! As a one man operator of a single system I do not need to know how to operate a large system! More hands on during the classes where it would apply.

Need better materials to study for exams. A lot of questions on the exams are not in the books. Narrow the books to two or three for each test. as it stands now the results of a test show the questions come from too many places. Short school only gives the very basic training and people need to know a whole lot more to pass these test.

recommended study material more closely related to actual test questions.

Incentives

A standardized curriculum for required training for advancement. The Board for certification should develop it and then let others teach the courses after they have proven their ability. Offer more classroom instruction.

There shouldn't be such a variety of study manuals for all the test. There should be 1 manual to study for each test.

"MORE CLASS ROOM TRAINING.AND A BETTER SECLECTION

WHO'S TEACHING THE COURSE, AND FACILITIES."

none that I can think of.

More classes and better study material.

I feel that there needs to be 1 certification study guide that includes at least 75% of the information needed to pass the certification test. Presently when you go to take a test, it seems that the questions were taken from some foreign material.

Better study programs that are put together by the same people that make the cert. tests that we have to take just so we will know more about what will/will not be on the test.

Online courses or DVD

Recommendation students be familiarized with more various types of treatment plants; provide a list of different types available and locations with contacts.

Separate surface water from ground water training.

Get GWWI an AMP out of the picture ..this situation is messed up.. GWWI does not educate you enough and AMP is making a fortune off of it, Any thing other than non profit organizations doing the testing should be illegal Im currently in contact with the Governor, SEC. of state, GA EPD and EPA to have all this Crap brought to light B.Brown 770 324 7153

Increase the training site location to be more statewide. Test more than 6 times a year.

None

"Better access to

books."

more specific training classes. classes geared more towards education than helping certification requirements

more classes/ the average classes of 1 week do not have time to cover much.

require applicants to take more course training after failing an exam before taking the exam again.

More education about the process of registration and the importance of registration.

The certification exam should be offered at the end of a training course as the State of South Carolina does.

More on the job training

Training schools for hi certifications 1,2,3.

More class room training

The classes need to force more on the test questions on the exam. That way, when you go in to take the exam, you know more about the questions. The questions on the exams should not have answers similar to the right answer. this is misleading and there bunches of these in the tests.

More classroom hours, more on hands training & Damp; more and better study guides then the Sacramento books.

Better study material that centered on the type of questions that I would see on the exam.

More free classes for recertification points.

Classroom instruction

- "1. Either train on what the test will be about or test on what the training covers.
- 2. Test on duties of operators, not obscure processes created by engineers that are seldom if ever applied in the plants."

For class 4 Water Operator. Need more than one 8 hour class class to prepare for test. As with most working employees (mine USDA FS) I found it difficult to self study for the exam while performing my regular duties although self study is the only way I passed the exam. Also, the testing site with the large numbers of test takers was hectic and stressfull.

"CD's and DVD's. Need fewer levels of certification. Technical College Courses.

Need wastewater workers to have extra time to oversee more than one city. Sewer training that does not involve bids or competitive edge procedures. Need quarterly oversight by objective, individuals who are not inspectors."

more comprehensive and to the point study guides relevant to the exam they are taking Wastewater 2 operators better realize that the current exam for them has heavy emphasis on Wastewater lab procedures in line with the current WW Lab Analyst exam. The current WW Lab Analyst exam content exceeds what 90% of the WW Lab Analysts need to know to properly perform their jobs.

The Class II should not be 130questions more, you should separate the lab licenses from the operator license. Now if they want both then the 130 or more would be efficient. Also it take to long to get your results back from Kansas 6weeks is too long. Also when you pass and everything checks out, you should not be required to wait until the board meets in order to be issued your license that makes no sense.

Knowing what to study

None

More localized training is made available.

Offer so many points for working in that field.

Everything from classroom training (GWWI) to the actual test is just too broad and covers way too much information to retain. We are given book after book, study manual after study manual, video after video to prepare for a test with 100-130 questions and we have to try to figure out what information on THOUSANDS of pages MIGHT be on the test! There are questions about OLD types of treatment processes that hardly anyone uses anymore. Why are we asked Management questions when we are just operators and never make mgmt. decisions? The math questions are over the top! I bet it is safe to say that very few operators of any level ever have to use the vast majority of math skills that are on the tests because plant engineers figure that out, plant managers make those decisions, as does the water system directors. Most of the lab questions on the tests are the same way...Advanced Lab Operators perform most of those tests because that is their job exclusively. (E-Coli, TOC, etc.) I am a Class II operator and can honeslty say that I had not seen, read, or been exposed to about 50-60% of the questions on the tests. Proof might be found in the high fail rates and low scores even when someone does pass a test. If it were not for the 5-10 military points, most of the people I work with would have failed most tests. That brings up another subject...I do not think ALL ex-military should receive extra points unless they have been wounded in combat, actually seen combat & points unless they have actually served IN a War...not just DURING a time of war.

Update the test most of the math on the test is not used every day in larger plants most of it is computer calculation, There need to be more class room study not just an outline of study in the class room.

The certification tests cover to broad a range. There should be a certain type study program for each classification. The way it is now a person could study for six months and still receive questions they never even heard of.

More advanced classes offered at GWWI.

the exam should be on what your training on

In water treatment, increase the courses for advance education, they are now to limited.

Classroom training should involve more of plant operations and process control and less of processes that are never seen. I attended the advanced training class in Carrolton, which is a requirement for obtaining the class2 license and the class 2 exam had nothing that was covered in the training. I passed the exam but it was due to my home studying, not the course.

too many different tests you give. You go to schooling and learn from instructor and end up taking different test than what you studied for

more work hours, not time on job

A requirement that all trainees receive a minimum of 10+ hours of initial basic training. Some do this already some do not.

START USING THE HOPE GRANT TO TRAIN A YOUNGER WORK FORCE TO REPLACE AN AGING ONE.

I would like to see the state exam. given after the school training.

"Add more years of on the job training required for each level of certificate -Class 3- 1 year, class 2- 3 years and class 1- over 5 years.

I believe this would make better operators and also make it easier on thr operator to pass the exam."

"establishing guidelines to ensure that operators are required to work a set number of years in each level of classification, more than what is the requirement today.

Ex: in field 1 yr prior to obtaining III

3yrs before obtaining class II

5yrs before obtaining class I"

The process begins with hiring more qualified personnel which in our case equates to higher starting salaries. You can't expect success in development of personnel by starting them well below the poverty level.

They need to get out of the mindset that going to GWWI is not going to get them the test questions before an exam.

Wait one year before taking the exam.

Give the training facilities a better scope of what is included on different certification exams. been my experience there are questions on test that classes or textbooks do not cover.

perhaps a pretest, online or by mail

pay increases

Require CEUs each re-registration event.

cross training or more classroom work to show the operator more about the exam examples (safety)

classroom study prior to taking test

"all personal are in need of a better study guide.

like the new York manual used to be. one manual that covers all aspects of the profession." Online training,

I would like to see the question pool expanded 5 times and then a book of all questions could be purchased. There is too much trivia just to go through a book and pick out questions. There might be 1 question out of a category of 10 that would be on the test. I have taken Amateur Radio Exams with the FCC and these exams seem to be a form that I like.

"Study Hard!

Pray Hard!"

none

Separate surface water from ground water

Pay increase incentives

Have the results of the exam available before the deadline to file for the next exam. Not being able to know if you passed the previous test is a real money and time waster.

Offer more detailed classroom training in the area of certification. Some of the classroom instruction is very broad and general and doesn't apply to the type of facilities that may be operated. When specific questions are asked in the classroom, a vague a broad answer is sometimes given.

Keep me informed ASAP of any changes no matter how minor these changes might be to the State of Ga. My reason is, I work at a Rock Quarry, and I'm not in this everyday as a person who is a city employee, and has hands on experience each work day. These changes might take me a little longer than city employees and is very critical to me for the safety of the employees who I am responsible for. Thanking you in advance.

More school

Operators should have to wait longer than the current 3 months to take the initial examination. By far the most effective incentive is financial; however, it is not always the most practical. I think if the State were to offer a tax credit for unreimbursed expenses related to training it would be a relatively low cost way to lower the "financial hurdle" for those seeking a license. Not all operators work for employers who are willing to help with the cost of or time required to obtain a license.

More resources to help with self study. This will help supplement the on the job training. INITIAL TRAINING SHOULD BE FIELD LEVEL CERTIFICATION. ADVANCED CERTIFICATIONS WOULD BE MORE TECHNICAL ADVANCED

More required on the job training time

Shorten the different requirements, make certification more attended to your field, be it groundwater or surface water. Two different tests.

Study the manuals you are given. Also, seek out information from operators in your field of work and the internet.

I think that the system we have now works good.

none

Teach water/wastewater treatment at vocational/technical schools and at colleges level.

Have classroom study geared closer to what's on the test and not a lot of filler.

More closely mate training to actual exam content.

A little more focus on ground water plants. It can be very confusing to ground water operators when your studying all these procedures you never experience. Surface water procedures are definitely something we all need to be acknowledged of. We just don't have to initiate the majority of them. It would be nice to have some specific guideline Manual solely for ground water plants.

Let teachers have the test to teach by so it would help students pass

Have more approved training classes held in the regional areas of the state that would be closer to the home/work locations of the operators.

longer classes paid for by the employer or by the state to licensed operators

Required to learn too much information for the small operation that we have.

"Offer study material that pertains to the test we take.

Use direct questions that pertain to operating waste water plants.

Stop trying to trick us with hypothetical questions."

"A Georgia textbook, geared to the examination, instead of using California dated material. Also third class operators should need 18 renewal points, and first class should need 6 points. The ones with the least education in the field, need the most recurrent training."

The state could produce it's own condensed version of the California manual and give operators exactly what they need to know instead of having to sift through so much information and process it. Most operators have the ability to use an index to look up any information they do not know and read about it in the California manual in order to help them operate a plant. But to ask them to retain a lot of that material and commit it to memory for a test is not very representative to their ability to me. why commit so much material to memory when it is just at arm length away and you can look it up if you need to know it.

More training at seminars that are on a operations level and not at the engineering level. Such as plant problems, equipment operation-calibration-etc. and understanding regulations and documentation

As a groundwater operator exclusively, I found the Water 2 and Water 3 exams very difficult. Most of the questions are geared towards surface water treatment, and I understand the reason why. However, many of the questions appear to have been pulled from obscure, insignificant facts that have no bearing on day-to-day operations in a groundwater or surface water plant. That is my opinion.

Centralized course study material-people taking exams need to know what to study--ex: Calif. Manual or ABC, it's not fair to not know where the test content is coming from. Also as a general note, I think the Cert. Board should allow license renewal should be able to be mailed to a person's P.O. Box and not require it to be sent to a physical address. Many people would rather have that because of security reasons esp. those in rural areas and also many people do not receive mail at their homes.

More night classes closer to home.

none

"Change some of the questions for the class 3 wastewater test, they are very hard and some of the answers are not correct but close to and that is very confusing when you get back to your job. BOD test is 5 days and temp is 20 degree Celsius and not 7 days and 20 degree Celsius. I don't think there should not be many math questions on Lab Math on class three because you are learning

the basic of the WWTP and not the producers of the lab."

Operators need to study and take responsibility for themselves, self study is the most important factor in passing these exams.

Not sure of what changes to make, but willing to accept any changes.

Better training, both in the field & p; classroom.

none

Require more class contact hours for higher certifications.

When the test results are given back the questions missed would be nice. After a long drive it's hard to remember every question. Just in case you see the question again

At least a 2-year college degree in math, engineering, biology, chemistry, or physics. none

I find that experience and time is the best way to prepare for higher levels of responsibility. An example is South Carolina requires 1 year trainee and 1 years as a Class D (4) and pass tests as a Class D (4) then Class (3) before you can operate a plant by yourself unsupervised. Then another year for Class 2 and another year for Class 1 operators, with pass of tests for these levels. I would like to see more questions pertaining more to the actual operations of the water and wastewater treatment plants.

Throw away that stupid book(green book for Class IV)that contradicts itself on every turn of the page. It is written as if the one who is reading the book already has the same knowledge as the one writing it. I am almost through with my Biology degree, and have not had as much difficulty

understanding text in all my 4 years in school as I have that book. And I have a 3.5 GPA. It's not like I'm stupid!!!!!!!!!!

Employer cooperation,

Ease up on the severity of the questions!!

Classroom teachers need to stress that if a person wishes to pass a test they are going to have to study more that the content of the class. Also there are people who are so ill prepared that they slow the classes down and discourage the others taking classes.

More In house training, on the job training more in depth

When one takes a certification exam I think it should be graded right there at the test site. If you failed you would have a lot more time to study and you would know what areas give you trouble instead of having to wait four weeks for your results. It could be done. The answer sheets are done on scan-tron sheets. You would have results in less than a minute. I've taken test at college and got the results before I left.

study not only your field but others as well

being able to see actual test after it's checked if a failing score is received.

Should consist only the type process in which pertains to individual.

I found the process, especially at the WW3 level to be excessive. The need for employment at a plant is kind of a catch 22. Suggestion is to allow anyone to take the exam simply by registering. I felt the exam was too academic and not practical enough.

I think one major change needs to be made...I have observed this at several facilities. Older operators who were certified Class III many years ago tend to lapse on much of the basic training they received, largely because it's not used or refreshed often enough. I strongly believe there should be a requirement for ALL operators to retest every 10 years, or at least to retake the Basic Wastewater Course, advanced certification levels could be required to take appropriate courses again as well. Too much basic knowledge is lost, and the conferences don't provide that knowledge. Conferences tend to provide other valuable and useful information, but not those core, basic, root knowledge elements. Please consider a requirement change to get folks back to the basics on some sort of recurring schedule, including me and you!

More information on new compliance regulations when needed. Make sure the operators know things can change and they will have assistance available.

Find a study group that is preparing for the exam you are going to take and network with others to get help or give help as the situation demands.

It seems like a lot of the questions for the Class 2 exam are still taken from the California Manuals, which the state of Georgia no longer accepts as advance training materials as a prerequisite for the state exam.

Training that is more relevant to the exams would be helpful.

I THINK THAT WHEN YOU GO TO SCHOOL THAT YOU SHOULD GET ALL THE BOOKS THAT THE TEST MATERAL COMES FROM NOT JUST THE SACROMENTO MANUALS BECAUSE THE TEST QUESTIONS COMES FROM OTHER MANUALS High schools should prepare students better if we employ high school graduates for important environmental jobs.

No opinion

I would suggest the tests being taken to cover specific job duties for that license and not things for higher licenses.

Continue with the current training material and instruction.

They need to open their manuals and actually study/understand the material.

Online refreshers course for those of us that have completed classes and just need a little more help before going to take another exam or retake an exam.

More detailed training for test subject areas. Current classes are too general in nature.

Additional class work should be required for initial and advanced license testing.

More material made accessible to students to study from, pertaining to the test.

I do not think that the ten points for the veterans is right, because there being giving the certification because only half to score a 60 on the test and that's not right there not earning it. make it more clear exactly what is required to get a license. I myself had to take both the class 3 and class 2 several times with passing test scores due to unclear requirements of training time and 'advanced' training concerning the California manuals and how they are accepted by the state.

Additional class hours, 40 hours is not enough classroom time for class II and class I certification examinations.

More detailed training. Seem that most training offered is very general. Also, training that deals with day to day management of a facility would be useful since the class 1 exam covers that topic.

DEVELOPE A PROGRAM IN THE UNIVERSITY OR COLLEGE SCHOOLS THAT WILL GIVE CREDITS IN A CAREER FIELD THAT IS RELATED.

Go back to six months job experience for the initial certification none

Online sample testing....Once online test is completed you would be given a report that includes score and answers to questions that were incorrect.

"spread basic certification course over biweekly

Spread out basic certification courses over 2 week period. Require pre-basic math course" Just study

"Better focus on the preparation (practicality too) and better exams. We should study pertinent material and we are tested on that material.

Right now anything goes and that's not right for the profession. Better support from GAWP. It's not just about making money off of us."

A packet of information that would describe the certification process from start to finish and give the student a class overview with enough info to hit the ground running the first day of class. being able to take test directly after the classroom training, possibly on lap top computers for ease of grading and score notification, Tech schools to get involved with training and testing for these certifications

"The training should be more extensive, utilizing on-line and/or computer based training. Should even consider tiered training for re-exams, i.e. 40 hr training of exam failed, 80 hr training if grade less that 50, or similar"

For advanced certification. I found that there was not a course that covered what would be on the Class I test. What I was told would be on the test and what I studies the most for was covered very little.

to let the instructors of the classes know more about what on the exams.

The length of the classes are to short. I think that a minimum of eighty (80) hours of class room time is needed. This would allow for expansion of the training now being given and would allow for additional training for regulations and maybe more processes.

None

We need a test in Augusta. Since there are usually 2 in Macon & Damp; Atlanta, take one away from Atlanta and have it here in Augusta. Also, the registration is a sham. We have to register for the upcoming test prior to getting our previous test results. And last, the questions on the tests need to pertain to what we operators are actually doing.

Have the tests contain material pertinent to the actual level of test. what I am hearing is the new tests are not passable at the basic level, too much advanced knowledge needed to pass a class III None

Separate water well and surface water testing

More emphasis on basic skills; math, reading, critical thinking, problem solving. Regurgitation of rote information does insure good operators or analysts, nor does it help protect the future of Georgia's waters.

"Classroom time should be longer than 1 week cram session

Experience time should be increased for entry level positions

All aspects of plant operation should be considered for recertification including Laboratory, Safety, maintenance, Human relations etc."

Longer on the job experience

"When an individual shows up to take the Water/Wastewater exams, the initial wait time from showing up on time to the time the exam is administered is UNNECESSARILY LONG. I have taken numerous exams from high school exams, SAT's to several exams through college including State administered Regents Exams where thousands of students are tested, and I have never had such a horrible experience as the water/wastewater exams (for the record I have taken 5 of them at different locations with Atlanta being the worst). The administration of the exam in its current state is totally uncalled for with the technology available to create a more examinee friendly; environment (not having to wait 1.5 hours to get started on the exam). Simply stated cattle are herded in and out of slaughter houses and are processed more efficiently and timely than the water/wastewater exams are administered.

Centralized testing location(s) with exams being scored IMMEDIATELY after the exam has been administered would be highly beneficial to the State and the examinee (NO EXCUSE for it this costing the state money)....many examinees lose income weekly, waiting for the 4-6 week scoring process, which seems only common to the 1950's era (snail mail), and the State would benefit because people's increased salaries from passing the exams would boost state tax revenue, never mind that many persons if not all, would gladly pay higher exam costs to get their test scores immediately, in order to get pay raises that accompany higher certification. Personally, I would with no hesitation pay double. Over the course of waiting on an exam which arrived 5 weeks after the exam was administered, I lost 712 dollars worth of income waiting for my exam to travel to Iowa, get scored, then travel all back to Georgia.

Also when an individual takes an exam, they must wait two testing dates to retake the exam because the scoring process has yet to be finished. What that means is....if a person takes a test in January, they must wait to retake an exam in May having to skip signing up for the April test because their scores from the January test fail to arrive before the cut off date to sign up for the Apri exam, thus having to wait till May to retake the exam (this is absolutely ridiculous)." For wastewater class III make trainer more aware of the number of collection system questions on test that are normally not covered in classroom.

Better wording on the test questions.

"ON Line3 re certification

On Line Training

On Line CE"

Different training sites

Better study guides

The process is good as it is.

Break the classes into sections. You would attend a specified course. At the end of this course you would be given a final exam. If you achieved a passing score, you could advance to future

courses. When you have passed a specified number of these courses, you would then be awarded a higher certification. This could be an option that an operator might exercise verses the general exam.

Provide regular consistent schedule at the GWWI so that all classes are offered for the class III and class II level between each testing cycle. Also develop a set of classes for the class I levels. Also increase the amount of training offered for the maintenance and instrumentation skill sets. Surface water-operators should be tested on surface water questions and ground water operators should be tested on ground water questions--should be separate test for surface and ground water operators.

More detailed oriented training at the Class II and Class III levels. Most information being asked on tests is not information that the majority of operators will ever see or have the need for in the plant they are working in.

make questions on exams based on what the operator is testing for.

- 1) Require recertification hours in management training for Class I and II operators.
- 2) Require training for Class 3 and Class 2 operators related to a higher level of certification. For example, the Advanced Treatment for Class 3 operators to prepare for the next certification.
- 3) Require that training be related to the certification presently held. For example, operators holding only certification in water treatment would be required to obtain certification hours directly related to water treatment and/ or distribution.
- 4) Offer and/or require training in regulatory issues and changes for Class I and II operators.
- 5) Offer and/or require training in basic environmental science for all operators."

"Have the questions on the Class 3 tests as much about what is most important in as far as the I had a question on my test (years ago) that asked what to check first when you are getting ready to start a lawn mower, the gas or the oil.

That has absolutely nothing to do with the water treatment."

On the job training is on hands training and practice. I feel that the test have practical use knowledge as for actual use it's fine until it comes to actual use. Each facility operates differently and actual knowledge, practical knowledge and test knowledge are three different things. The writers of the tests should consider these factors.

training that better prepares operators for the actual exam

More instruction in math, laboratory and rules for safe drinking water.

"Lower cost of training. Most employers will not pay for training or advanced training. Training is cost prohibitive.

Lack of training availability. GWWI is expensive. Expand training opportunities." provide better resources to study by, The California manual is the only material that operators have to use. The questions on Class 2 Wastewater were more in depth than the material that I had to study with. The questions should relate to the plants the operators work at, not questions made by people who never work outside of an office.

I would endorse the company what taught the class I took for CTA credits. On the job training is most relevant, particularly at my facility which has most treatment processes & Damp; used to have one we are no longer operating. Industry specific questions such as tannery effluent, these were pointless to my relevant treatment plant knowledge despite being part of test material. Operators better know details of other industries to get a few more test questions right.

on line courses

Open book test

"I would like to see on-line courses offered at a

minimal cost to certificate holders. Lottery money could be used to fund some of the expense since it is educational."

More written material

More class room training to better comprehend the test

I do not have any suggestions.

Experience to qualify for higher license should be more than just 3 years for a class 1 operator. A class 1 can operate just about any plant in the state accordingly to the state. And just with 3 years of actual experience? don't think so

Make the training classes about teaching. last class I was at the teacher talk about current events more than the study's needed to pass, every one there was just getting points and me and the guy next to me was the only ones taking the test.

none at this time

Have the exams come from one source and make that source available to everyone.

more appropriate questions for the level exam you are taking

Be able to do any of the MATH; therefore, you'd get all those questions correct. During training, learn as much as possible and UNDERSTAND it. STUDY a lot!!!

No comments.

more classroom instruction. I also think the test is somewhat to hard and the questions are a little tricky.

Go back to having classes for 4 days and the test on day 5. Why learn stuff you never use and then try to be tested on it a few months later?

None

more specified training for each level, not everything all thrown together

make test questions more relevant to what operators do on a daily basis. These questions have nothing to do with what an operator has to know to run his plant.

Made it mandatory.

I believe the Class I Water Operator's exam is too difficult, because of ambiguity of questions and focus on areas that are not truly relevant to performing the job. The pass/fail rate is at only 15% passing, which is unbelievable.

"I would eliminate the Industrial wastewater operator category or allow them to advance to class II without obtaining a class three. Many industrial processes involving BOD use the same treatment modalities that municipalities do.

The industrial operator is expected to be able to operate these as well as tertiary processes yet cannot obtain advanced levels of certification without repeating basic operator training and certification.

The primary difference between the class III and industrial training is that class III has more disinfection training. There are chlorine and disinfection questions on the class II exam so the operators understanding of these concepts is evaluated again at this time.

Most industrial operators obtain this certification at the direction of their employer who perceives industrial training as more specialized (and maybe more advanced). Those of us who wish to advance and develop professionally can easily sell the idea of advanced training, but have a difficult time convincing an employer to pay us for a week at school when it does not support additional skills or abilities in the work place."

Send the questions you get wrong back to the client

I recommend completing both a self-study course and formal(classroom)training, as well as the on the job training, before taking a certification exam.

Industrial certification addresses much more information related to municipal sewage treatment than industrial wastewater treatment.

More practical topics, after 21 years in the field, always with the top license, I have seldom used what the certification exams have asked

The test did not cover the materials covered or studied for the test.

None the classroom training was sufficient for me

More focus on basic knowledge for class 3 tests in the areas of: treatment processes, all types of pumps and chemical feeders, the basic chemical applications and functions, laboratory analysis and interpreting results of the tests.

More stuff on Micro Floc plants not as much on conventional plants, if you have never worked conventional you do not understand the process like a micro-floc plant none

Require more hours of recertification training for lower class licenses and the same or fewer hours for higher class licenses. It has been my experience that systems will provide the minimum training required. Lower class license holders need more opportunities for education. Higher class license holders often have opportunities beyond that required by virtue of their position - Attending meetings, exposure to peers, being involved in planning activities, etc.

More hands on experience.

More hands on training.

"Get rid of the California manuals and go back to the

New York manuals or Georgia should create our own manuals!"

Some kind or level of self study course to help prepare for the exam being most employers will not help. These exams are after all for the benefit of the public's safety.

The test is too hard. On the job training is better for most.

Institutes should be changed to certified educational facilities wherein a passing grade must be achieved to receive points, be recertification or required in order to sit for an examination. Also the time on plant should be extended to previous levels in order sit for next exam. access to college-level instruction, including incentive-based or reimbursed attendance to mathematics, chemistry, and environmental science courses at state colleges and universities and their satellite campuses. These courses would allow operators to become more knowledgeable in their fields, enabling them to provide a more educated and professional service to their

My guys do not work on pumps. A more in depth class on pumps from troubleshooting to engineering the size would help them understand when it comes time to take the exams.

Up to date Training manuals

Study several weeks before taking exams

Some of the things taught are the same things that we have studied or already know. Sometimes the sessions are boring. On the job training is the best training you will receive. Very few jobs or situations can go JUST BY THE BOOK.

Classroom instruction

employers.

offer more training classes around the state

require more hours of study

I would like to see the class II license shorten. I think the lab license should be separate from the wastewater operator license. And I think the requirements should be upgrade because other states will not accept Georgia license straight across. A class I Georgia license is a Class III in Texas or Class II

Unfortunately more time is needed for the formal training. Too much material to cover at either of the levels of certification for either water or wastewater treatment and lab. Trainers need more time and employers can't afford to have operators in class longer but it is much needed. More availability of online practice questions as a study aid and to let new operators get a feel for what types of questions to expect on the exam.

I feel that EPD places too much importance on class Is. And that makes plant management put importance on that class. I know of many class Is that are worse or dishonest in running a plant than some operator trainees. I also feel that cameras need to be in all process labs, certified labs and operator offices. You'd be amazed at what really goes on.

Provide a means for extensive training locations at all nine districts in the state (not necessarily from GWWI). Revamp the GWWI to begin a thorough training program that will provide adequate training for preparation of certification exams.

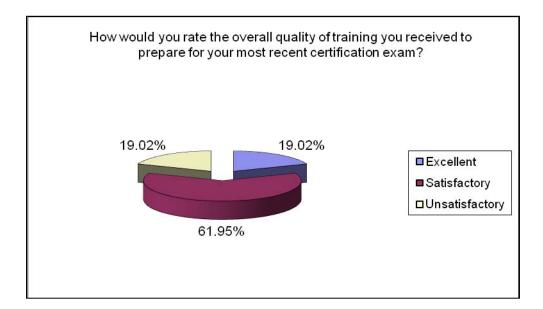
Forget the trick questions. Do not use far out questions that seem to be for doctors or lawyers. None

I think the way the programs are being run is excellent.

Have the state board of examiners distribute a consistent core curriculum with various difficulty levels for the appropriate class levels. Example: how many plants use or have ozone technology? When 90% of plants have chlorination technology!

Question #14.

How would you rate the overall quality of training you received to prepare for your most recent certification exam?							
answer options	Response Percent	Response Count					
Excellent	19.02%	109					
Satisfactory	61.95%	355					
Unsatisfactory	19.02%	109					
ans	573						
s	40						



Reviewers Comments:

- Eight one percent of the respondents rated the classroom training they received as satisfactory or excellent.
- Did not ask respondents to qualify this response or identify which training provider they utilized.
- Overall a very good rating for training in Georgia as a whole.
- Twenty percent unsatisfactory does still leave room for improvement.

CONTRACT BETWEEN THE GEORGIA ENVIRONMENTAL FACILITIES AUTHORITY AND THE GEORGIA ENVIRONMENTAL PROTECTION DIVISION AND GEORGIA ASSOCIATION OF WATER PROFESSIONALS

AMENDMENT #3

CK

THIS MODIFICATION is made this 1st day of September, 2006 to the pre-existing contract #(03)-55-7208 7206-1029 between the Georgia Environmental Facilities Authority (GEFA), the Georgia Environmental Protection of the Department of Natural Resources (EPD), and the Georgia Association of Water Professionals, hereinafter referred to as the "Contractor."

WITNESSETH THAT:

WHEREAS, the parties hereto did enter into a contract dated February 1, 1999, in which the parties agreed to perform certain tasks and cooperate in the research, development, and education of the most effective and economical way for all Georgia Community Public Water Systems to comply with the requirements of the Final Rule, Consumer Confidence Reporting (CCR), 40 CRF Parts 141 and 142.

NOW, therefore, and in consideration of the mutual benefits to the parties, the parties agree that said contract is hereby amended as follows:

- 1. The Contractor agrees to perform the additional services as set forth in Exhibit B-1: Scope of Work and Services Delivered, Amendment #3 dated September 1, 2006.
- 2. That on page 2, the contract ending date specified in paragraph 4 is extended for three years to August 31, 2009.
- 3. That Attachment C: Payment Schedule is hereby deleted and replaced with the attached Exhibit B-3: Revised Payment Schedule, Amendment #3 - dated September 1, 2006.

This MODIFICATION, it is expressly agreed, is supplemental to the contract #(03)-55-7306-1029. Said contract is by reference made a part hereof, and all of the terms, conditions, and provisions thereof, unless specifically modified herein, are to apply hereto and are made a part hereof the same as though they were expressly rewritten, incorporated and included herein.

GEORGIA ENVIRONMENTAL FACILITIES AUTHORITY	
By: Megon Mason EXECUTIVE DIRECTOR	Date: 2/16/07
EXECUTIVE DIRECTOR	, ,
Attest:	Date: 2/16/07
\mathcal{O}	' /
GEORGIA ENVIRONMENTAL PROTECTION DIVISION	
By: Carolli Surviv	Date: 2-7-07
Attest: Manda P. Janna	Date: 2-7-07
GEORÒLA ASSOCIATION OF WATER PROFESSIONALS	
By: And C. Das	Date: //8/07
Attest: Our Com	Date: 01/18/04

Exhibit B-1

SCOPE OF WORK AND SERVICES

Amendment #3 - September 1, 2006

Consumer Confidence Report Program

- The CONTRACTOR will hold a minimum of nine "hands-on" CCR educational workshops during the length of this contract. A minimum of three workshops will be conducted between April thru June, 2007, April thru June, 2008, and April thru June, 2009 in order to meet the needs of water systems actively working on the development of their CCR prior to the annual July 1st deadline. The workshops will be held in different locations across Georgia, thus making the CCR workshops easily accessible to all areas of the State.
- ALL CCR workshops will specifically target the small community water systems serving less than 1,000 in population. GA EPD's Drinking Water Section the (DIVISION) will provide the appropriate CWS list, and the CONTRACTOR will perform the solicitation mailing on behalf of the DIVISION.
- The CONTRACTOR will continue to provide copies of the CCR Guidance and Preparation Manual to municipalities upon request and those attending the CCR Workshops.
- The CONTRACTOR will continue to provide a unique CCR webpage maintained on the GAWP website where water systems can download all necessary forms and guidance manuals.
- The CONTRACTOR will endeavor to adhere to the proposed workshop schedule provided below.

PROJECTED CCR WORKSHOP SCHEDULE

September 1, 2006 - August 31, 2009

CCR Workshops	Proposed Location/Time Period
Small System CCR Workshop	Dalton – April/2007
Small System CCR Workshop	Columbus – May/2007
Small System CCR Workshop	Savannah – June/2007
Small System CCR Workshop	Dalton – April/2008
Small System CCR Workshop	Macon – May/2008
Small System CCR Workshop	Augusta – June/2008
Small System CCR Workshop	Gainesville – April/2009
Small System CCR Workshop	Tifton – May/2009
Small System CCR Workshop	Albany – June/2009

Municipality Communication, Education, and Capacity Development Program

These deliverables will continue to occur as deemed appropriate by the DIVISION and/or the AUTHORITY for the full term of this extension.

- The CONTRACTOR will continue efforts on behalf of the DIVISION to immediately disseminate and deliver crucial information in relation to new drinking water policies, rules, security issues, and regulations when solicited. Through press releases and various other direct communication avenues, the CONTRACTOR will inform all affected municipalities on topics deemed necessary by the DIVISON'S Drinking Water Section and/or AUTHORITY'S staff.
- As necessary, develop operational guidance as well as specific drinking water protocol documents as deemed appropriate by the DIVISION and/or the AUTHORITY.
- Provide immediate notice of all the DIVISION'S Drought Press Releases and Outdoor
 Restrictions to GAWO members through comprehensive electronic database distribution.
- Provide logistical support for the DIVISION'S Drinking Water Section employee presentations at all GAWP Technical Conferences and District Meetings.
- Provide specific technical advisories relative to drinking water treatment practices deemed appropriate by the DIVISION'S Drinking Water Section.
- Provide Legislative/Regulatory advisories to GAWP members relative to proposed and enacted drinking water compliance and operational modifications.
- Provide advisories relative to drinking water security issues and potential threats though GAWP electronic database, publications, and special mailings.
- Conduct formal technical sessions and discussion relative to utility drinking water security and disaster preparedness as it relates to drinking water protection and distribution.
- Provide specific solicitation and advertisement opportunities for public water system involvement in Georgia's Safe Drinking Water Act State Revolving Fund (SRF) Program.
- Drinking Water SRF information will also be released to targeted public drinking water systems via direct
 electronic distribution. This solicitation will describe current Drinking Water State Revolving Fund policies
 and objectives with the goal of significantly increasing enrollment and involvement in this important
 program

- The CONTRACTOR will serve as the "Nominating Official" on behalf of the DIVISION for the Region IV
 Environmental Protection Agency Wastewater Facility of the Year (Plant of the Year) competition
- The CONTRACTOR will serve as the "Nominating Official" on behalf of the DIVISION for the Region IV
 Environmental Protection Agency Drinking Water Facility of the Year (Plant of the Year) competition.
- The CONTRACTOR will serve as the "Nominating Official" on behalf of the DIVISION for the Region IV
 Environmental Protection Agency Consumer Confidence Report Excellence Program (Best CCR)
 competition.
- The CONTRACTOR will coordinate and support two <u>Utility Forums</u> each year. Critical information is
 delivered to the top utility leadership in the State at both events and the CONTACTOR will endeavor to
 include presentations from both the DIVISION and the AUTHORITY leadership.
- The CONTRACTOR will provide the DIVISION with <u>complimentary</u> listings in the GAWP Job Bank.
 This professional career listing service is posted both online and in printed format. The online product
 receives over 3,000 "hits" per month and the printed format is delivered to over 4,000 water professionals
 on a monthly basis.
- The CONTRACTOR will extended a limited number of <u>complimentary</u> registrations to the DIVISION and AUTHORITY employees to attend and participate in GAWP's Georgia's Water Future, Industrial, Spring, Annual, and Fall Conferences. An employee from both the DIVISOIN and the AUTHORITY will be appointed to receive said offer (s) and make the appropriate selections to forward to the CONTRACTOR.
- The CONTRACTOR will assist the AUTHORITY with solicitation and participation outreach relative to the Drinking Water SRF "Needs Survey". All communication methods at the disposal of the CONTRACTOR will be utilized to reach the goal of 100% participation in this critical program.

GEORGIA'S OPERATOR CERTIFICATION PROGRAM COMPREHENSIVE EXTERNAL REVIEW

- The CONTRACTOR will administer a formal external review of Georgia's certification and recertification program for operators of Community and Non-transient Non-community Public Water Systems.
- The CONTRACTOR will administer an online survey for this project.
- The CONTRACTOR will use its comprehensive email database of over 5,000 water professionals (and other stakeholders) to encourage electronic participation in this process.
- The CONTRACTOR will review and compile data from the electronic survey returned from multiple solicitation methods. A final document will describe the results of and provide conclusions and suggestions relative to Georgia's Operator Certification Program.

Proposed Timeline and Milestone Deliverables for this Component

Initial certification/recertification survey tool development	1/01/07
Focus groups identified Interview candidates identified (State and Federal) Database of licensed operators obtained Sample question pool created Question pool approved	1/31/07
Online survey tool(s) reviewed	2/01/07
Online survey tool created	2/19/07
Online survey tool tested	2/28/07
Survey tool released for open participation Electronic solicitation to complete survey provided Paper solicitation to complete online survey provided Survey closed for participation	3/01/07 3/31/07
Analysis of results	4/13/07
Preliminary report of findings (for EPA reporting purposes)	5/01/07
Final report of findings and results	8/31/07

LT 2 / STAGE 2 DBPR DRINKING WATER SUPPORT

- The CONTRACTOR will assist the DIVISION with the coordination up to five technical support workshops over the course of this three-year contract.
- The CONTRACTOR reserves the right to charge a nominal fee for course registration not to exceed \$75
 per individual attendee.
- The CONTRACTOR will provide the DIVISION with a structured venue for this critical information exchange that includes the following:
 - Secure meeting site and coordinate onsite logistics (to include morning refreshments).
 - Provide onsite audiovisual equipment setup/breakdown and technical support.
 - Assist in attendee solicitation for program.
 - Provide distribution of workshop materials in an electronic format if at all possible and printed material onsite.
 - Provide formal online registration to facilitate planning and coordination.

Exhibit B-3 PAYMENT SCHEDULE Amendment 3- September 1, 2006

September 1, 2006 - August 31, 2009

Period	Amount
December 1, 2006	25,000
March 1, 2007	25,000
June 1, 2007	25,000
September 1, 2007	25,000
December 1, 2007	25,000
March 1, 2008	25,000
June 1, 2008	25,000
September 1, 2008	25,000
December 1, 2008	25,000
March 1, 2009	25,000
June 1, 2009	25,000
August 31, 2009	25,000

Total Contract Fee \$300,000

<u>CIRCUIT-RIDER VISITS - TECHNICAL ASSISTANCE</u>: Using DWSRF 2% technical assistance set-aside funds, EPD has contracted with Georgia Rural Water Association (GWRA) through the Georgia Environmental Facilities Authority (GEFA) to provide a number of "circuit rider" type technical assistance visits each year on an as needed or as requested basis. Under the provisions of this original contract, GWRA is required to provide up to 10% of the visits within 48 hours of notification by EPD in order to quickly address problems posing an immediate threat to public health.

The visits made by the Georgia Rural Water Association technicians are in the following broad categories: Actual compliance, potential compliance, water conservation, managerial/finance, operation/maintenance, and water treatment. The variety of technical assistances provided by the circuit-rider technicians include, but is not limited to, rate studies, water audits and leak detection surveys, pipe and valve location services, infrastructure assessments, source water protection, operation and maintenance programs, on-site operational assistance, troubleshooting and problem-solving, fluoridation equipment evaluations and inspections, and the identification of financing alternatives.

The table on the next page shows the number of Circuit-Rider Visits (face-to-face contacts) by each calendar year and the reasons for them.

In FY 2003 GEFA expended monies from the 2% Technical Assistance set-aside account to help public water systems, serving populations less than 10,000, comply with existing and proposed drinking water regulations. The objectives of the Technical Assistance Program are to 1) assist targeted systems in developing operations and managerial capacity; 2) assist small systems in a non-regulatory manner to meet the minimum standards of the SDWA; 3) educate system operators in the best technology and methods for their specific infrastructure design and size, raw source water and customer needs; and 4) help maintain the monitoring waiver program [which allows EPD to reduce and/or waive certain required monitoring for synthetic organic contaminants (SOCs) under the federal drinking water regulations] by assisting the water system designated by EPD with the proper collection, handling & transportation of quarterly SOC samples to the EPD laboratory for analysis.

The contract with the Georgia Rural Water Association utilized four full time technicians or "circuit riders" that completed 3,167 on-site, face-to-face field visits with water system owners/operators throughout the State from July 1, 2002 through June 30, 2008. The purpose of these field visits is to improve the public water system's technical and managerial capacity to comply with the State and Federal Drinking Water Regulations. Field visits were performed at both public and private water systems. Of those 3,167 on-site face-to-face visits, 2,210 (69.8%) were made to private systems and 957 (30.2%) were made to public systems. Two thousand two hundred sixty-one (2,389), or 75.4%, of these visits were to systems serving fewer than 3,300 customers. In addition, in order to provide uniform assistance to all Georgia regions, the GWRA performed on-site face-to-face visits in all 5 EPD District Offices.

For the contract period from July 1, 2005 to June 30, 2006, a total of 518 on-site visits were made. 112 of the on-site technical assistance visits were made to private water systems and 406 were made to governmentally owned water systems. 128 (30.7%) of the "circuit rider" visits were made to systems serving a population of less than 3,300.

Better coordination between EPD and GRWA is being accomplished to more effectively target systems that are most in need of assistance. Copies of the list of CWS and NTNCWs with a history of significant non-compliance are being provided to the GRWA field technicians. In the

future, EPD plans to continue forwarding running base SNC lists or multiple violation reports for follow-up by GRWA personnel in an effort to reduce the number of historical SNCs.

Fiscal Year	Total Visits	Private systems	Government Systems	Systems Serving < 3,300 Persons	Reasons for the Visit
2001	1007	677	324	941	Actual Compliance: 102 Managerial/financial: 307 Potential compliance: 23 Operation/maintenance, and treatment: 285 Sampling and Water Quality Parameters: 290
2002	750	619	131	729	Actual Compliance: 239 Managerial/financial: 73 Potential compliance: 30 Operation/maintenance, and treatment: 64 Conservation: 37 Sampling and Water Quality Parameters: 307
2003	791	637	154	752	Actual Compliance: 378 Potential compliance: 10 Conservation: 5 Managerial/financial: 71 Operation/maintenance, and treatment: 1 Sampling and Water Quality Parameters: 326
\2004	731	626	105	676	Actual Compliance: 342 Potential compliance: 22 Managerial/financial: 269 Operation/maintenance, and treatment: 178 Conservation: 20 Sampling and Water Quality Parameters: 300
2005	478	220	258	104	Actual Compliance: 251 Potential compliance: Managerial/financial: 74 Operation/maintenance, and treatment: 114 Conservation: 27 Sampling and Water Quality Parameters: 12
2006	417	108	309	128	Actual Compliance: 141 Potential compliance: Managerial/financial: 68 Operation/maintenance, and treatment: 122 Conservation: 8 Sampling and Water Quality Parameters: 78
2007	477	334	143	165	Actual Compliance: Potential compliance: Managerial/financial: Operation/maintenance, and treatment: Conservation: Sampling and Water Quality Parameters:
2008	518	112	406	134	Actual Compliance: 165 Potential compliance: 143 Managerial/financial: Operation/maintenance, and treatment: 334 Conservation: Sampling and Water Quality Parameters: 383

<u>CLERK, MANAGER, AND ELECTED OFFICIAL TRAINING:</u> GRWA has contributed to the clerk and manager training programs conducted at the Carl Vinson Institute of Government of each February and September. Previous topics include, but are not limited to, Safe Drinking Water Act compliance issues, water rates, water conservation, distribution systems, customer service, operator training, record keeping, sampling, and Consumer Confidence Report (CCR) requirements. GRWA anticipates including security issues during future sessions.

Georgia Water and Wastewater Institute, under its parent organization Georgia Association of Water Professionals, also conducts numerous workshops and trainings focused on providing continuing education opportunities for professionals in the water and wastewater industry, including managers and utility directors. During the previous year, a total of 27 managers and/or elected officials attended the "Small/Medium Systems Managers Forum" meeting held at City of Cartersville on April 9-10, 2008. During the meeting, planning and networking forum was provided for managers of Georgia's small and medium water systems around the State. It should also be noted that GWWI also conducts "Train the Trainer" sessions for the GAWP's District Directors to ensure operator training, support and recertification opportunities are offered equally statewide and to promote the benefits of operator training program.

<u>SOURCE WATER ASSESSMENT AND DELINEATION</u>: 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 and the information is summarized in the table below. Ground water SWAPs are being completed utilizing in-house staff.

All scheduled SWAPs have been completed. Currently we are in the process of performing SWAPs on all privately-owned groundwater systems. For the privately owned ground water systems, approximately 1,133 SWAPs have been prepared since July 1, 2001 through June 30, 2007. During the current reporting period from July 1, 2006 to June 30, 2007, approximately 19 SWAPs were completed for privately owned community ground water systems, 39 SWAPs for non-transient non-community ground water systems and 42 SWAPs for transient non-community ground water systems. This activity for the privately owned ground water systems will continue until completion.

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).

Georgia's WARN program is in its final stages of development. The WARN's steering committee board members consist of state's Environmental Protection Division staff, Public Utilities' staff, Georgia Association of Water Professionals' staff and Georgia Rural Water Association's staff and meet 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 GA WARN network.

Georgia is also currently working on developing an interactive website program where water utilities will be able to request help, respond to incidents and upload their resources into the program. 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 GA WARN Mutual Aid and Assistance agreement is available to all public and private water and wastewater utilities in the State.

The GA WARN had its first activation in response to the Iowa Flooding in June of 2008. No actual deployment was necessary, however it was an excellent preparatory and learning opportunity to prove how important the GA WARN is to water and wastewater utilities. The GA WARN is a great tool to provide hope and restoration to affected water and wastewater utilities through out the State of Georgia and out side the state for both Natural Disasters and Manmade ones. With the Current Hurricane Season, the GA WARN 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.

However, it should be noted that the initial compliance rates for the regulation were significantly lower. For example, for the 2000 reporting year, the initial compliance rate for water systems meeting the July 1 delivery deadline was less than 70% 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

Fiscal	CCRs	CCRs	Compliance
Year	Received	Required	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	1,553	1,694	91.7

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 steps to correct this. Recently, we hired a new associate to focus primarily on the CCR Rule in the Drinking Water Compliance Program's Enforcement Unit. As a result, compliance rates for the FY 2006 reporting period increased noticeably from 89.7% to 97.3% and have remained steady into FY 2007. In order to achieve a compliance rate of 97.3% in FY2006, EPD had issued 675 violations, 289 Notices of Violations (NOVs) and 175 "second notice" NOVs. This year, EPD has already issued 586 Notices of Violations (NOVs) to improve the 91.7% compliance rate.

<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 Facilities 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.

The primary goal of the DWSRF program is to better protect public health. To accomplish this goal, the DWSRF program directs funds toward the most pressing compliance and public health related needs. As of June 2008, \$26.8 million of the total \$192.5 million in loans (14%) has been to help non-compliant systems achieve compliance with drinking water standards and \$162.6 million (84%) has been to help utilities maintain compliance with drinking water regulations. As stated in the Intended Use Plan, Georgia also tries to use at least 30% of the funds available to assist systems serving less than 10,000 people. As of June 30, 2008, 79 of the total 101 water system improvement projects funded through the DWSRF program were for water systems serving less than 10,000 people.

DWSRF Assistance	Annual Number of Projects Receiving Assistance										
by Population Size	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	0	1	10	10	6	9	13	15	11	9	
Cumulative Number of	f Agreen	Cumulative Number of Agreements: 84 (through 2006)									

DWSRF Assistance	Annual Number of Projects Receiving Assistance											
by Population Size	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016		
Less than 500	2	2										
501 – 3,300	3	3										
3,3001 – 10,000	2	0										
10,001 – 100,000	4	1										
100,001 and Above	0	0										
Total Number of Agreements	11	6										
Cumulative Number of Agreements: 101 (through 2008)												

A secondary goal of the DWSRF program is identified as supporting the continuation of

prevention programs to ensure compliance with drinking water standards. Georgia EPD attempts to utilize 100% of the Public Water System Supervision set-aside from each Capitalization Grant to accomplish this goal.

Since the inception of the DWSRF program in 1997 through fiscal year 2008, Georgia has received federal capitalization grants totaling \$179,924,445. The State of Georgia has matched that dollar figure with \$34,525,643 in funding from the sale of General Obligation (G.O.) Bonds. Through an interagency agreement with the Georgia Environmental Protection Division (EPD), certain project management services (i.e. engineering, technical

Annual Fede	eral Grants Received
1997	\$ 25,775,000
1998	0
1999	\$ 15,253,300
2000	\$ 15,986,900
2001	\$ 16,615,100
2002	\$ 16,683,800
2003	\$ 25,423,000
2004	\$13,146,000
2005	\$13,118,800
2006	\$14,808,945
2007	\$23,116,000
2008	NA

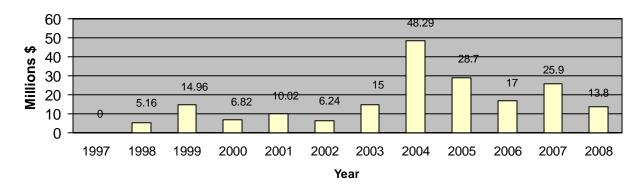
reviews, construction inspections, etc) are provided by EPD to assist in the administration of the DWSRF Program.

Through June 30, 2008, more than \$192,495,826 in DWSRF project assistance has been

awarded for 101 water system improvement projects. During this reporting period ending June 30, 2008, binding commitments were made to six (6) communities, totaling more than \$13,838,205. Five (5) of these communities are "small systems" where the population served less than 10,000 people.

Figure below displays the total dollar amount of DWSRF project assistance provided to water systems each year from 1997 through 2008 (in million \$).

Project Assistance Provided



The tables below displays detailed statistics on DWSRF project assistance for the period from 1997 through June 30, 2008.

Category	Total	Yearly Assistance in Millions (1997 – 2005)									
	Projects	1997	1998	1999	2000	2001	2002	2003	2004	2005	
Treatment	36	0	0	7.5	0.54	0	0.106	2.7	18.3	14.2	
Transmission Distribution	96	0	0	5.2	3.3	8.2	2.8	6.1	22.8	10.3	
Source	51	0	5.16	1.8	1.11	0.93	0.73	1.4	1.06	1.6	
Storage	54	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 Systems		0	1	23	22	12	26	31	24	34	
Cumulative Number		0	1	24	46	58	84	115	139	173	
Cumulative Total	Cumulative Total Dollar Amount: \$135,216,124 (through 2005)										

Category	Total	Yearly Assistance in Millions (2006 – 2007)									
	Projects	2006	2007	2008	2009	2010	2011	2012	2013	2014	
Treatment	36	1.95	11.75	0.06							
Transmission Distribution	96	11.79	13.24	8.53							
Source	51	1.41	0.396	1.19							
Storage	54	2.32	0.572	4.06							
Other	6	0	0								
Number of Systems		27	22	21							
Cumulative Number		200	222	243							
Cumulative Total Dollar Amount: \$192,495,826 (through 2008)											

Further analysis of the above project assistance tables shows the following percentages in each project category and loan amounts since 1997 through June 30, 2008:

Category	Number of Projects	Percent of Total Projects (%)	Loan Amount (Million \$)	Percent of Total Loan Amount (%)
Treatment	36	14.8	57.1	29.7
Transmission & Distribution	96	39.5	58.7	30.5
Source	51	21.0	33.6	17.4
Storage	54	22.2	16.8	8.7
Other	6	2.5	24.8	12.9

Many of the measures identified in the Statewide Water Management Plan would be 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.

<u>COMPREHENSIVE STATEWIDE WATER MANAGEMENT PLAN</u>: Of all Georgia's natural resources, none is more important to the future of our state than water. The wise use and management of water is critical to support the state's economy, to protect public health and natural systems, and to enhance the quality of life for all citizens. Georgia has abundant water resources, with fourteen major river systems and multiple groundwater aquifer systems. These waters are shared natural resources. Streams and rivers run through many political jurisdictions. The rain that falls in one region of Georgia may replenish the aquifers used by communities

many miles away. And, while water in Georgia is abundant, it is not an unlimited resource. It must be carefully managed to meet long-term water needs.

Georgia is one of the fastest growing states in the nation, and population growth and economic prosperity in the state are tied to our water resources. As the state's population and economy grow, demands on the state's water will grow as well. Over the past several decades, decisions about water management were made largely in response to specific issues or needs. Meeting future water challenges will require a more proactive and comprehensive approach. To prepare for a future in which we better balance increasing and sometimes conflicting demands on the state's water resources, the General Assembly charged the Environmental Protection Division (EPD) with developing a draft Comprehensive Statewide Water Management Plan and presenting it to the Water Council. The Water Council was charged with providing oversight in the plan's development and submitted a final plan to the Georgia General Assembly for action during the 2008 legislative session. It was written by the water council with extensive public involvement (approximately 70,000 volunteer hours) and assistance from agencies including EPD. The legislature passed and the governor signed the comprehensive Statewide Water Management Plan on February 6, 2008.

In preparing the plan, EPD, in cooperation with the Water Council, assembled basin advisory committees, a statewide advisory committee, and technical advisory committees to discuss potential water policies and management practices and to consider regional concerns. Hundreds of individuals representing agricultural and business interests, local governments, nonprofit agencies, trade associations and others have provided input into the plan's development through an extensive public involvement process. What has emerged is a blueprint that, when executed, will guide future decisions about water management across the state. It provides a flexible framework for regional water planning that will follow in the years to come.

Early on, the Water Council and EPD recognized that flexibility and adaptability are essential for any effective plan. Water resources and water needs vary widely by region, and future growth and development will occur differently in each region. The plan allows for these regional differences while also providing statewide policies and management practices to support regional planning. Some of these statewide policies and practices will require rulemaking, which will include a public involvement process before being brought to the Board of Natural Resources for consideration.

The Water Council and many stakeholders also recognized a need for better information about how much water we have and how much water we will need. New jobs, homes, schools, and businesses all require water and wastewater services. But currently, we do not have good measurements of how much water is available from Georgia's streams and aquifers, or how much waterborne pollutants our streams and rivers can safely assimilate. In addition, there are no reliable forecasts of how much water the state will need, or how much wastewater will be discharged, as the state continues to grow.

We cannot effectively plan for and manage what we do not measure. Better information is needed on water quantity as well as water quality. The State must determine how much water can be removed from rivers, lakes, and aquifers without causing unacceptable negative impacts and determine how much wastewater and stormwater streams can handle before water quality begins to degrade. Georgia also must develop a better understanding how much water is, and needs to be, returned to our natural systems, and must consider alternative ways to meet our long-term water needs. These assessments will provide the foundation for regional planning decisions across the state.

The Comprehensive Statewide Water Management Plan hinges on development of regional water plans. Regional forecasts of future needs for water and wastewater will be completed. Then, regional plans will be developed to identify the management practices to be employed, following state policy and guidance, to ensure that the anticipated demands can be met. Once the regional plans have been developed and approved, the State and the regions must partner to implement the plans. Regional plans primarily will be implemented by the various water users in the region, with state permitting and financial assistance as consistent with the regional plan.

Looking toward a future with increasing demands on water resources, it is clear that coordinated water planning will be an on-going need. The Comprehensive Statewide Water Management Plan provides a framework to measure water resources, to forecast how much water supply and assimilative capacity will be needed to support future growth, and to identify regional solutions to water needs. This plan will help guide the stewardship of Georgia's precious water resources to ensure that those resources continue to support growth and prosperity statewide while maintaining healthy natural systems.

The purpose of the plan is to guide Georgia in managing water resources in a sustainable manner to support the State's economy, to protect public health and natural systems, and to enhance the quality of life for all citizens. The plan lays out statewide policies, management practices, and guidance for regional planning.

The plan employs concepts that are innovative for Georgia. The first is the use of thorough evaluation of resources, called Water Resource Assessments. We cannot effectively plan for and manage what we do not measure. Selecting the optimum water management strategies requires precise information about the capacities of Georgia's water resources. EPD must determine how much water can be consumed from the state's major rivers, lakes, or aquifers without causing unacceptable negative impacts; this amount of water is also called the consumptive use assessment, which is intended to reflect the capabilities of these resources under dry year conditions. EPD also must determine the assimilative capacity, which is the amount of wastewater and stormwater streams can assimilate before water quality begins to degrade. EPD will begin the process of assessment by identifying the hydrologic boundaries of watersheds and aquifers to be used for assessment purposes. EPD will analyze existing information, and when that information is not sufficient, undertake enhanced monitoring.

The second new concept is the development of regional forecasts of water supply and assimilative capacity demands. These forecasts will be developed for planning regions that are designed to reflect jurisdictional boundaries and economic interdependencies as well as hydrologic boundaries. Regional forecasts will be compared with the water resource assessments for each planning region so that areas that may face water challenges in the future can be identified. A package of management practices, tailored to local needs and resource conditions, can then be selected to meet those challenges.

The third concept is the regional water development and conservation plans. These plans, which will be developed for all of the planning regions, will describe the water management practices to be employed in each area. Since water resources, their conditions, and their uses vary greatly across the state, selection and implementation of management practices on a regional and local level is the most effective way to ensure that current and future needs for water supply and assimilative capacity are met.

The management practices specified in the water development and conservation plans for each region will be supported by statewide guidance.

All three of these water management concepts are supported by and consistent with current Georgia law. State law provides the foundation for development and implementation of a comprehensive statewide water management plan, and this plan is designed to be consistent with Georgia's current statutes. Most fundamentally, the regulated riparian legal doctrine as described by Georgia case law from its appellate courts and the O.C.G.A., including provisions regarding reasonable use, will continue to guide water management in Georgia.

Other provisions of our management systems will remain in place. For example, this plan will not affect current provisions in State law that provides the Director the authority, during an emergency period of water shortage, to impose restrictions on water use beyond those that might be identified in this plan or subsequent regional water development and conservation plans. Additionally, this plan will not affect provisions in current law that set up a system of water use priorities during emergency periods of water shortage; which includes the provision "...first priority to providing water for human consumption and second priority for farm use." Similarly, the plan will not change or replace current statutory provisions for permitting of water withdrawals (including provisions therein recognizing the economic consequences and preference for an existing water user) and wastewater discharges, or replace the rules promulgated under those statutes. It also will not compel interbasin or intrabasin transfers, or favor one area of the state over another.

The plan builds upon Georgia's current statutory framework to create a more integrated water management policy consistent with the vision and guiding principles presented in O.C.G.A. §12-5-522. The process is a cycle, rather than a one-time plan. Based on current State laws and policies, the cycle has four major steps that will be addressed in regional planning conducted following the provisions of this plan:

- 1. The cycle begins with completion of a set of water resource assessments by EPD. These assessments will define the capabilities of Georgia's water resources in terms of water supply and capacity to assimilate pollution.
- 2. A regional water planning council will then be responsible for using regional population and employment estimates to forecast needs for water and assimilative capacity within a water planning region.
- 3. A regional water development and conservation plan will be prepared by EPD and by regional water planning councils, as described in Section 14. The plan will identify the management practices to be employed to ensure that the forecasted regional water and wastewater needs can be met without exceeding the water quantity and water quality capacities identified in the resource assessments. In some situations, the regional water plan may identify management practices that will supplement the resource capacities in a manner that conforms to policies and criteria presented in this plan. The regional water management plans will be reviewed by the EPD, and if they are consistent with established guidance,
- 4. Once adopted, the plans would be implemented by the water users in the water planning region and EPD will make water permitting decisions based on the plans.

adopted by EPD.

EPD, in cooperation with federal agencies, local governments, and other partners, will continue to monitor water resources to maintain and update information on the status and condition of the state's waters. This information will support future revisions in resource assessments and management practices.

The plan is intended to guide long-term planning for Georgia's water resources and is not intended to address responses to extreme conditions, like drought, or emergency circumstances that may result. It will be implemented in conjunction with the State Drought Management Plan, the Flint River Drought Protection Act, and other statutes and regulations that guide responses to drought or other emergency circumstances.

This plan has four major components:

- Integrated water policies that will govern water management decisions in the State;
- Provisions for assessment of the capacities of the state's water resources;
- A "toolbox" of water quantity and water quality management practices; and
- Provisions for regional planning to select the management practices that best fit the resource conditions and uses in different regions throughout the state.

A portion of the actions required to implement this plan can be taken by EPD within its current statutory authority and administrative procedures specified in the rules and regulations promulgated to date by the Board of Natural Resources. Other actions will require amendment of the rules and regulations promulgated by Board of Natural Resources.

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 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.

ATTACHMENT A

"NEW PUBLIC WATER SYSTEMS LISTS"

<u>NEW PUBLIC WATER SYSTEMS</u> JULY 1, 2007 THROUGH JUNE 30, 2008

WSID	PWS Name	WS Type	SDWIS Begin Date	SNC
GA0250027	SATILLA WATER SYSTEM	С	25-Feb-08	N
GA0290094	LAUREL GROVE	С	29-Aug-07	N
GA0290098	HIDDEN CREEK	С	25-Feb-08	N
GA0290099	HAYDEN LAKES SUBDIVISION	С	25-Feb-08	N
GA0310243	PEBBLESTONE SUBDIVISION	С	25-Feb-08	N
GA0310252	EAST HAMPTON AT MILL CREEK	С	28-May-08	N
GA0310255	WINDMILL PLANTATION SUBDIVISION	С	25-Feb-08	N
GA0310257	STILLWATER SUBDIVISION	С	25-Feb-08	N
GA0310261	STONEBROOK SUBDIVISION	С	29-Aug-07	N
GA0310274	CYPRESS CROSSING WATER SYSTEM	С	25-Feb-08	N
GA0390056	SANCTUARY COVE WATER SYSTEM	С	29-Aug-07	N
GA0430026	CANOE LAKE ESTATES S/D	С	29-Aug-07	N
GA0690084	CROSSWINDS SUBDIVISION	С	29-Aug-07	N
GA1030138	MALLARD POINTE/DRAKE LANDING	C	29-Aug-07	N
GA1030155	MELDRIM APRTMENTS	С	29-Aug-07	N
GA1030157	PENNINGTON ESTATES WATER SYSTEM	C	25-Feb-08	N
GA1050042	NEWTON'S POINTE SUBDIVISION	C	16-Nov-07	N
GA1050046	LAKE RUSSELL PARK SHORES	C	28-May-08	N
GA1070039	THE WOODLANDS SUBDIVISION	C	29-Aug-07	N
GA1110070	SHEPHERDS RIDGE SUBDIVISION	C	16-Nov-07	N
GA1110091	MOUNTAIN HIGH SUBDIVISION	C	16-Nov-07	N
GA1470064	FREEDOM HEIGHTS SUBDIVISION	C	28-May-08	N
GA1470066	PROVIDENCE POINT LANDING S/D	C	25-Feb-08	N
GA1470068	YORK SHORES	C	28-May-08	N
GA1470080	PARADISE PT-WATERFRONT SUBDIVISION	C	16-Nov-07	N
GA1790144	ARCADIA SUBDIVISION	C	25-Feb-08	N
GA1790144 GA1790151	VILLAGE AT SUNBURY	C	29-Aug-07	N
GA1730131	DAVENPORT WATER SYSTEM	C	25-Feb-08	N
GA1850322	LOWNDES COCREEKSIDE WEST S/D	C	25-Feb-08	N
GA1850323	LAUREN ESTATES SUBDIVISION	C	29-Aug-07	N
GA1870092	BRYNDEMERE SUBDIVISION	C	16-Nov-07	N
GA1910101	COOPER'S POINT	C		N
		C	28-May-08	
GA1950065 GA1950070	ROSE HILL SUBDIVISION NEESE MOBILE HOME PARK	C	16-Nov-07	N N
	GRAYSON POINT SUBDIVISION	C	29-Aug-07	N
GA2110056		C	16-Nov-07	N
GA2190073	BRIDLEGATE S/D		28-May-08	
GA2210060	THE ESTATES AT HAWKS LANDING	C	16-Nov-07	N
GA2210063	DUNBAR CROSSING	C	16-Nov-07	N N
GA2290036	PINE RIDGE PLANTATION		16-Nov-07	
GA2370054	THE POINTE SUBDIVISION	C	25-Feb-08	N
GA2370072	CLOPTON RIDGE	C	16-Nov-07	N
GA2370085	WATER OAKS SUBDIVISION	C	28-May-08	N
GA2370088	ALEXANDER LAKES SUBDIVISION	C	25-Feb-08	N
GA2790032	HUNINGTON SUBDIVISION WS	С	28-May-08	N
GA2890031	TWIGGS COUNTY HWY 96/I16	С	16-Nov-07	N
GA2930054	JOINER HOUSING, INC.	С	16-Nov-07	N
GA3110107	MOSSY ACRES	С	25-Feb-08	N
GA0310253	FOREST HEIGHTS CENTER	NTNC	25-Feb-08	N
GA1310057	MILLSAPS TRAINNG FACILITY	NTNC	16-Nov-07	N
GA2730016	GRAMMY`S PLAYHOUSE	NTNC	25-Feb-08	N

Note: None of the above new public water systems have become SNCs during the reporting period of July 1, 2007 through June 30, 2008.

<u>NEW PUBLIC WATER SYSTEMS</u> JULY 1, 2005 THROUGH JUNE 30, 2008

WSID	PWS Name	WS Type	SDWIS Begin Date SNC
GA0250027	SATILLA WATER SYSTEM	С	25-Feb-08 N
GA0290090	DEMERIES LAKE SUBDIVISION	С	18-May-06 N
GA0290092	VICTORIA PLACE SUBDIVISION	С	18-May-06 N
GA0290093	TAYLOR PLACE SUBDIVISION	С	18-May-06 N
GA0290094	LAUREL GROVE	С	29-Aug-07 N
GA0290098	HIDDEN CREEK	С	25-Feb-08 N
GA0290099	HAYDEN LAKES SUBDIVISION	С	25-Feb-08 N
GA0310238	LEEFIELD STATION MOBILE HOME PARK	С	15-Nov-05 N
GA0310241	SADDLE CREEK	С	13-Feb-07 N
GA0310243	PEBBLESTONE SUBDIVISION	С	25-Feb-08 N
GA0310246	JOHNSON RUN SUBDIVISION	C	18-May-06 N
GA0310240	SMITH CREEK SUBDIVISION	C	22-Aug-06 Y
GA0310247	CARRINGTON SOUTH SUBDIVISION	С	22-Nov-06 Y
GA0310240	WAVERLY COVE SUBDIVISION	C	18-May-06 N
	EAST HAMPTON AT MILL CREEK	C	
GA0310252			28-May-08 N
GA0310255	WINDMILL PLANTATION SUBDIVISION	С	25-Feb-08 N
GA0310257	STILLWATER SUBDIVISION	С	25-Feb-08 N
GA0310261	STONEBROOK SUBDIVISION	С	29-Aug-07 N
GA0310262	OAKWOOD SUBDIVISION	С	22-Nov-06 N
GA0310266	WILLIAMSBURG SUBDIVISION	С	18-May-07 N
GA0310274	CYPRESS CROSSING WATER SYSTEM	С	25-Feb-08 N
GA0390056	SANCTUARY COVE WATER SYSTEM	С	29-Aug-07 N
GA0430026	CANOE LAKE ESTATES S/D	С	29-Aug-07 N
GA0430029	CREEKSIDE MANOR	С	15-Nov-05 N
GA0690084	CROSSWINDS SUBDIVISION	С	29-Aug-07 N
GA0710098	ISAAC HALL SUBDIVISION	С	15-Nov-05 Y
GA1030127	HIDDEN LAKES	С	30-Sep-05 N
GA1030138	MALLARD POINTE/DRAKE LANDING	С	29-Aug-07 N
GA1030142	CASTLEWOOD SUBDIVISION	С	13-Feb-07 N
GA1030143	SHADOWBROOK SUBDIVISION	С	18-May-06 N
GA1030144	STONEGATE SUBDIVISION	С	22-Nov-06 N
GA1030146	HUNTER`S CHASE / ABBY LANE	С	16-Feb-06 N
GA1030147	EAGLE'S LANDING SUBDIVISION WATER SYSTEM	С	18-May-07 N
GA1030155	MELDRIM APRTMENTS	С	29-Aug-07 N
GA1030157	PENNINGTON ESTATES WATER SYSTEM	С	25-Feb-08 N
GA1050042	NEWTON'S POINTE SUBDIVISION	С	16-Nov-07 N
GA1050042	LAKE RUSSELL PARK SHORES	С	28-May-08 N
GA1070039	THE WOODLANDS SUBDIVISION	C	29-Aug-07 N
GA1110070	SHEPHERDS RIDGE SUBDIVISION	C	16-Nov-07 N
GA1110070	MOUNTAIN HIGH SUBDIVISION	C	16-Nov-07 N
GA1110091 GA1230065	OWENSBY MILL S/D		15-Nov-05 Y
		C	
GA1270184	MYERS HILL SUBDIVISION		22-Aug-06 N
GA1270188	EMANUEL CHURCH/AVONDALE/SILVER BLUFF SUB	С	30-Sep-05 N
GA1270190	HUNTER'S POINT SUBDIVISION	С	16-Feb-06 N
GA1330071	EMERALD SHORES SUBDIVISION	С	22-Aug-06 N
GA1330073	PARK PLACE DEVELOPMENT WATER SYSTEM	С	18-May-06 N
GA1470064	FREEDOM HEIGHTS SUBDIVISION	С	28-May-08 N
GA1470066	PROVIDENCE POINT LANDING S/D	С	25-Feb-08 N
GA1470068	YORK SHORES	С	28-May-08 N
GA1470080	PARADISE PT-WATERFRONT SUBDIVISION	С	16-Nov-07 N
GA1550016	LAMBERTH MOBILE HOME PARK	С	18-May-07 N
GA1730015	BANKS LAKE POINTE SUBDIVISION	С	22-Nov-06 N
GA1790144	ARCADIA SUBDIVISION	С	25-Feb-08 N
GA1790151	VILLAGE AT SUNBURY	С	29-Aug-07 N
	VIEE/ (GE / CONDOIC)		
GA1790153	TRADEPORT EAST	С	18-May-06 N
GA1790153 GA1790157		C C	18-May-06 N 13-Feb-07 N
	TRADEPORT EAST		

GA1830049	CRAWFORD WATER SYSTEM	c	18-May-07 N
GA1850319	LOWNDES COKINDERLOU FOREST	С	15-Nov-05 N
GA1850320	QUARTERMAN CROSSING SUBDIVISION	С	30-Sep-05 N
GA1850322	LOWNDES COCREEKSIDE WEST S/D	С	25-Feb-08 N
GA1850323	LAUREN ESTATES SUBDIVISION	С	29-Aug-07 N
GA1870081	LUMPKIN COROCK POINTE S/D	С	13-Feb-07 N
GA1870092	BRYNDEMERE SUBDIVISION	С	16-Nov-07 N
GA1910101	COOPER'S POINT	С	28-May-08 N
GA1910104	COASTAL PINE FOREST SUBDIVISION	С	30-Sep-05 N
GA1950063	STONE CREEK SUBDIVISION	С	22-Aug-06 Y
GA1950065	ROSE HILL SUBDIVISION	С	16-Nov-07 N
GA1950070	NEESE MOBILE HOME PARK	С	29-Aug-07 N
GA2110056	GRAYSON POINT SUBDIVISION	С	16-Nov-07 N
GA2190073	BRIDLEGATE S/D	С	28-May-08 N
GA2210060	THE ESTATES AT HAWKS LANDING	С	16-Nov-07 N
GA2210063	DUNBAR CROSSING	С	16-Nov-07 N
GA2210064	EMERALD LANDING	С	15-Nov-05 Y
GA2210066	PINEWOOD HILLS SUBDIVISION	С	15-Nov-05 Y
GA2250033	PEACH VALLEY CLUB	С	13-Feb-07 N
GA2290036	PINE RIDGE PLANTATION	С	16-Nov-07 N
GA2310027	PIKE CO - RURAL DELVELOPMENT DIVISION	С	18-May-07 N
GA2330017	POLK COUNTY-VINCENT MOUNTAIN WATER SYSTM	С	30-Sep-05 Y
GA2370054	THE POINTE SUBDIVISION	С	25-Feb-08 N
GA2370072	CLOPTON RIDGE	С	16-Nov-07 N
GA2370085	WATER OAKS SUBDIVISION	С	28-May-08 N
GA2370088	ALEXANDER LAKES SUBDIVISION	С	25-Feb-08 N
GA2370092	RAINBOW MOBILE HOME PARK	С	30-Sep-05 Y
GA2510055	NEWINGTON EAST SUBDIVISION	С	16-Feb-06 N
GA2550036	SPALDING COUNTY WATER SYSTEM	С	30-Sep-05 N
GA2670046	THE OAKS SUBDIVISION	С	18-May-07 N
GA2750069	PINE GROVE MHP/WHIPPOORWILL S/D	С	22-Nov-06 Y
GA2750072	MEADOWS AT DILLON SUBDIVISION	С	18-May-07 N
GA2750075	WILLOW RIDGE SUBDIVISION	С	18-May-07 N
GA2750078	SWEET BRIAR LAKES SUBDIVISION	С	18-May-07 N
GA2790032	HUNINGTON SUBDIVISION WS	С	28-May-08 N
GA2890031	TWIGGS COUNTY HWY 96/I16	С	16-Nov-07 N
GA2930054	JOINER HOUSING, INC.	С	16-Nov-07 N
GA3110107	MOSSY ACRES	С	25-Feb-08 N
GA0290091	BRYAN COUNTY - INTERSTATE CENTRE	NTNC	15-Nov-05 N
GA0310253	FOREST HEIGHTS CENTER	NTNC	25-Feb-08 N
GA0710094	SANDERSON FARMS	NTNC	30-Sep-05 N
GA0710099	LIBERTY FAITH CHRISTIAN ACADEMY	NTNC	18-May-07 N
GA0870076	PACIFIC TOMATO GROWERS	NTNC	
GA1310057	MILLSAPS TRAINNG FACILITY	NTNC	16-Nov-07 N
GA1850321	BETHANY BAPTIST CHURCH	NTNC	22-Aug-06 Y
GA2730016	GRAMMY`S PLAYHOUSE	NTNC	25-Feb-08 N
GA2750075 GA2750078 GA2790032 GA2890031 GA2930054 GA3110107 GA0290091 GA0310253 GA0710094 GA0710099 GA0870076 GA1310057 GA1850321	WILLOW RIDGE SUBDIVISION SWEET BRIAR LAKES SUBDIVISION HUNINGTON SUBDIVISION WS TWIGGS COUNTY HWY 96/I16 JOINER HOUSING, INC. MOSSY ACRES BRYAN COUNTY - INTERSTATE CENTRE FOREST HEIGHTS CENTER SANDERSON FARMS LIBERTY FAITH CHRISTIAN ACADEMY PACIFIC TOMATO GROWERS MILLSAPS TRAINNG FACILITY BETHANY BAPTIST CHURCH	C C C C C C C NTNC NTNC NTNC NTNC NTNC	18-May-07 N 18-May-07 N 28-May-08 N 16-Nov-07 N 25-Feb-08 N 15-Nov-05 N 25-Feb-08 N 30-Sep-05 N 18-May-07 N 22-Aug-06 N 16-Nov-07 N 22-Aug-06 Y

ATTACHMENT B

Notes from

Georgia Water & Wastewater Institute, Inc.

and

Georgia Rural Water Association



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

Tout A Pearock

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

Technical Assistance, Education, Outreach Efforts:

GRWA	Conferences:
-------------	--------------

<u>Dates</u>	Location	<u>Attendance</u>	
Oct. 28-30, 2007	Helen	354 water systems Total attendance > 900	
May 18-20, 2008	Jekyll Island	586 water systems Total attendance > $1,500$	
GRWA Water System Technical Assistance Contacts: (NOT DWSRE funded)			

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

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

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:

Year	Total	Number	number of	Systems
	Number	of	Govt	serving
	of	Private	systems	<3,300
	systems	systems	visited	people
	visited	visited		
2007 - 8				
	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% setaside.

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.

Please file with Quarter 1+2

02 October 2007

Kim Yawn 233 Peachtree St. NW Suite 900 Peachtree Center-Harris Tower Atlanta, GA 30303-1727 2%

2007

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 $\underline{90}$ SOC's, $\underline{6}$ 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 <u>multiple water/waste-water</u> 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 $\overline{99}$ SOC's, $\overline{3}$ 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.

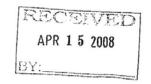
There were 125 SRF contacts made during this quarter.

- -Of the 125 SRF's,92 were conducted with systems having less than 3,300 population.
- -Of the $\overline{125}$ SRF's, $\overline{30}$ were conducted with systems having more than 3,300 population.
- -106 contacts were made with public systems.
- -96 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

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 93 SOC's, 70 were sampled at sites having less than 3,300 population. -Of the $\overline{\underline{93}}$ SOC's, $\overline{\underline{3}}$ were sampled at a site having more than 3,300 population.

-Of the $\overline{93}$ SOC's, $\overline{19}$ 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.

-27contacts were made with private systems.

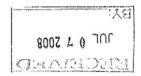
* Please be aware that assistance was provided on multiple water/waste-water systems at several locations listed.

TRAINING • TECHNICAL ASSISTANCE

JUL 0 7 2008 BY:

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 $\underline{80}$ SOC's, $\underline{4}$ 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



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