Florida's Strategy to Improve Public Water Supply

Drinking Water Program
Division of Water Resource Management
August 2011

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Executive Summary

As part of its responsibility as the local administrator of the United States Environmental Protection Agency's (EPA) Safe Drinking Water Act (SDWA), the Florida Department of Environmental Protection (DEP) is required to submit a report to the Governor that describes how the agency has been implementing an assistance program for drinking water facilities in the state. This assistance program is called the Capacity Development (CD) Program. The full report is attached, and is intended to demonstrate the efficacy of the state's CD strategy as well as highlight the progress made toward improving the technical, managerial, and financial capacities of public water systems in Florida.

A main component of the CD program is assistance to small drinking water systems to help them improve their technical, financial, and management ability to operate in compliance with the Federal and State SDWA. For instance, DEP is responsible for performing sanitary surveys and compliance inspections on all public water systems to ensure that the systems are being run efficiently and providing safe, quality drinking water to the residents and visitors of Florida. Based upon the observations made during these inspections, follow-up action may include a combination of enforcement and referral to technical assistance providers, who in turn work with individual utilities to bring the systems back into compliance. In addition, DEP works to optimize the processes of water treatment plants by performing detailed comprehensive performance evaluations as part of the Area-Wide Optimization Program.

DEP draws on several sources to serve as technical assistance providers. For example, DEP works closely with six certified operators, two professional engineers, and a water systems trainer from the Florida Rural Water Association. These individuals visit hundreds of small drinking water plants each year to assist in improving the operation of the systems so that they may achieve compliance as well as identifying and eliminating potential problems before they affect the facility's performance.

Another component of the CD program examines proposed new facilities and their ability to successfully have the technical, managerial, and financial capacity to successfully operate and maintain a drinking water system and deliver clean water to the public they serve. Permit approval for new facilities is based upon each system's ability to demonstrate adequate capacity development.

For more information on this program, in addition to the attached report, please visit http://www.dep.state.fl.us/water/drinkingwater/docs/capdev.pdf or EPA's website at http://www.epa.gov/safewater/smallsys/capdev.htm.

Introduction

Pursuant to Section 1420(c)(3) of the 1996 Amendments to the Federal Safe Drinking Water Act (SDWA), states are required to "submit to the Governor a report that shall also be available to the public on the efficacy of the strategy and progress made toward improving the technical, managerial, and financial capacity of public water systems in the State." The initial report was prepared and delivered to Governor Jeb Bush in 2005. This is the third report of this series and is due by September 30, 2011, as required by the SDWA Amendments.

The U.S. Environmental Protection Agency (EPA) provides the following definition of 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 sufficient "Capacity."

Technical capacity refers to things such as the provision and operation of source, treatment, storage, pumping and distribution structures. Managerial capacity includes the institutional and administrative capabilities enabling a water system to conduct its affairs such that the system achieves and maintains compliance with requirements. Managerial capacity can be assessed by evaluating such issues as adequacy of maintenance of equipment and records, operating procedures, staffing and relationships with customers and other outside entities. Financial capacity is the ability of a water system to acquire and manage sufficient financial resources to enable the system to achieve and maintain compliance with requirements.

EPA provides the following definition of capacity development:

> Capacity Development is a State effort to help drinking water systems improve their finances, management, infrastructure, and operations so they can provide safe drinking water consistently, reliably, and cost-effectively. More specifically, the capacity development provisions provide an exceptionally flexible framework within which States and water systems can work together to ensure that systems acquire and maintain the technical, financial, and managerial [capabilities] to consistently achieve the health objectives of the 1996 [Federal] Safe Drinking Water Act.

The 1996 Federal Safe Drinking Water Act provides for two types of efforts involving capacity development: New Systems Capacity Development and the Capacity Development Strategy for Existing Systems. New Systems Capacity Development is specifically described in the *Capacity Development Program for New Public Water Systems* subsection of this report; it is part of Florida's overall Capacity Development Strategy. Florida's actions to assist existing

systems are described in the *Public Water System Supervision Program Enhancements Relating to the Capacity Development Strategy for Existing Public Water Systems* subsection of this report.

The Public Water System Supervision (PWSS) Program within the Florida Department of Environmental Protection (DEP) submitted its Capacity Development Strategy to EPA in May 2000; it was approved in September 2000. Florida's strategy involves a wide-ranging set of programs and activities to help ensure that public water systems improve their financial, technical, and managerial capabilities. Many of the organizations and programs included in the strategy existed before the formal Capacity Development program was established. The following organizations and programs have been instrumental in implementing Florida's Capacity Development Strategy since initial EPA approval:

DEP/Florida Department of Health (DOH) Public Drinking Water System Supervision Program
Florida Rural Water Association (FRWA)
DEP Drinking Water State Revolving Fund Program
DEP Water Supply Restoration Program
Florida Public Service Commission (PSC)
DEP Operator Certification Program
Florida's Water Management Districts
Florida Department of Community Affairs, Community Development Block Grant Program
Florida Department of Community Affairs, Division of Emergency Management
Southeast Rural Community Assistance Project
Department Plant Operations Excellence Awards

This report details certain notable components of the Capacity Development Strategy, including the roles of some of the entities listed above. Contact information for these entities is included in Appendix A. Other information is available at the DEP Division of Water Resource Management website at www.dep.state.fl.us/water.

"Department" refers to the organizations that administer the PWSS Program. They include the PWSS Program within DEP's Drinking Water Section and the nine Approved County Health Departments that have received delegation to administer the program in their counties. In this report, "we" and "our" refer to the Department.

"Subpart H" systems are systems that are regulated under the Code of Federal Regulations (CFR), Title 40, Part 136, Subpart H. Systems that use surface water or groundwater under the direct influence of surface water are Subpart H systems. In general, water under the direct influence of surface water is not sufficiently protected from contamination by surface water. Direct influence is determined for individual sources in accordance with criteria established by DEP rules.

Public Drinking Water System Supervision Program Implementation

Capacity Development Program for New Public Water Systems

Capacity development is an initiative to ensure that drinking water systems acquire and maintain adequate technical, managerial, and financial capabilities to enable them to consistently provide safe drinking water.

As part of the 1996 amendments to the Federal Safe Drinking Water Act, the U.S. Congress mandated that states set up such programs to ensure the capacity of new community water systems (CWS) and new non-transient non-community water systems (NTNC). In general, CWSs serve year-round residents, and NTNCs typically serve businesses and schools. Florida's program fulfills the congressional requirement.

EPA also provides a definition of "new system." For the purposes of capacity development, a new CWS or NTNC is a system which:

(1) Was constructed on or after October 1, 1999, or
(2) Started operating on or after October 1, 1999, or
(3) Was a non-regulated public water system which added infrastructure on or after October 1, 1999, to become a NTNC or CWS. Non-regulated public water systems which simply add additional users and thereby become NTNCs or CWSs are not considered new systems for the purposes of capacity development.

Florida's program uses EPA's new system definition and also addresses interconnected systems, replacements of existing systems, discovered systems, changes of ownership, changes from inactive to active status, and infrastructure addition. Rulemaking to adopt these additional circumstances into the Florida Administrative Code (F.A.C.) was completed in 2006.

Florida's program requires that new NTNCs and new CWSs undergo a capacity assessment by the Department. Affected systems must demonstrate acceptable capacity in order to receive a construction permit or clearance for use.

The following excerpt from DEP rule 62-555.525, F.A.C., includes the fundamental requirements that new water systems must meet for purposes of the Capacity Development Program:

> (3) Demonstrations of financial, managerial, and technical capacity for "new systems" shall contain the following:
> (a) Documentation that the owner of the "new system" holds, or will hold, an operator license sufficient to fulfill the staffing requirements in Chapter 62-699, F.A.C., or that the "new system" employs, or will employ, licensed operators to fulfill the staffing requirements in Chapter 62-699, F.A.C.

(b) A demonstration that the "new system" has, or will have, the capability to conduct the monitoring and reporting required under Chapter 62-550, F.A.C., and the capability to maintain the records required under Chapter 62-550, F.A.C.
(c) A demonstration that the "new system" has, or will have, the capability to meet the operation and maintenance requirements in this chapter.
(d) A demonstration of financial and managerial capacity.

A summary of the requirements of Florida's New Systems Capacity Development Program for typical cases follows:

- New CWSs and NTNCs are subject to an assessment of their capacity as part of the permitting process. Technical capacity is assessed through review of engineering documentation during the construction permitting process. The Department will deny the permit application of any system that does not document acceptable technical capacity. Financial and Managerial capacities are assessed through review of a required Financial and Managerial Operation Plan. (A copy of the form used to prepare this report is included as Appendix B.)
- The Department inspects each newly constructed CWS and NTNC for compliance with drinking water rules before allowing it to begin operation; no system is allowed to operate until any deficiencies are corrected.
- CWSs and NTNCs which start operating on or after October 1, 1999, must submit an updated Capacity Development Financial and Managerial Operation Plan to the Department three years after operations begin.
- Systems which are regulated by the PSC, which already imposes equivalent financial requirements, are not required to complete additional financial information for the Department.

Between October 1, 1999 and the last triennial report, 359 system applicants were subject to the New Systems Capacity Development requirements. The vast majority of the affected systems (352) made successful demonstrations initially or after responding to Department request(s) for additional information. More than 30 applicants decided not to open public water systems after being notified of the New Systems Capacity Development program.

In the last three-year period, beginning October 1, 2008, 32 systems have been subject to the New Systems Capacity Development requirements. All of these systems made successful demonstrations of financial, managerial, and technical capacity.

As noted above, the Department will deny the construction permit for a drinking water system, or will not otherwise allow that system to operate, if it fails to demonstrate acceptable capacity. New systems must submit an updated Financial and Managerial Operation Plan three years after the commencement of operations to demonstrate that it has maintained adequate capacity. Systems not meeting capacity requirements will be subject to enforcement.

PWSS Program Enhancements Relating to the Capacity Development Strategy for Existing Public Water Systems

As of June 30, 2011, there were 5,531 active public water systems in Florida: 1,726 CWSs, 868 NTNCs, and 2,937 transient, non-community water systems (TWS). The Department conducts programs to assist all of Florida's public water systems in complying with rules and regulations. Those programs include water system inspections, technical assistance by both the Department and the FRWA, and EPA Region 4 Area-Wide Optimization Program.

Water System Inspection Program

The Department's sanitary survey process aids public water systems in achieving and maintaining capacity. In accordance with federal regulations and grant conditions, the Department is responsible for performing sanitary surveys on CWSs and NTNCs every three years, and on TWSs every five years. As a program goal, we strive to conduct a compliance inspection (less comprehensive) every year for the years between sanitary surveys.

Within Part 40, Paragraph 142.16(b)(3) of the CFR, are requirements for enhanced sanitary surveys for subpart H systems, which are those that use or treat surface water either directly or from groundwater wells deemed "under the direct influence" of surface water. These sanitary surveys must be performed at least every three years for CWSs and NTNCs and at least every five years for TWSs. The first round of enhanced sanitary surveys began in September 2002.

During a sanitary survey, Department inspectors are required to inspect and address the following eight elements:

1. Source;
2. Treatment;
3. Distribution system;
4. Finished water storage;
5. Pumps, pump facilities, and controls;
6. Monitoring and reporting and data verification;
7. System management and operation; and
8. Operator compliance with state requirements

The Department's sanitary survey inspections for groundwater systems are regulated under 40 CFR 142.16(o)(2)(iii) and by grant conditions. Current surveys are performed using a format that now includes the eight elements specified in the federal regulation. To formalize ground water survey requirements, DEP has initiated a rule adoption process to incorporate the federal Ground Water Rule into the F.A.C. The F.A.C. will also be updated to identify deficiencies deemed to be "significant" and to include the rigorous corrective action procedures specified in the federal regulations.

The elements of the Department's compliance inspections differ from system to system, depending upon system type, size, complexity, and compliance history. Generally they are conducted in less depth than a sanitary survey but include an assessment of at least the following:

1. Compliance issues;
2. Sanitary Hazards;
3. Wells and pumps;
4. Treatment (primarily disinfection);
5. Operations and maintenance; and
6. Water quality.

The Department furnishes the system with a record of the inspection results along with recommendations. If there are deficiencies, the length of time the system has to correct those deficiencies is stated. If the system does not correct the stated deficiencies within the stated time, the Department will begin enforcement in order to ensure that the deficiencies are corrected. In most cases, systems correct deficiencies soon after they are notified. Systems use the inspection results and the technical and regulatory expertise of the Department as a source of information as they continually improve their system. In many cases, recommendations for technical assistance may be made. For instance, Department representatives may provide advice on water quality sampling or other topics or refer the system to the FRWA for assistance in setting rates, board member training, how to use management tools like the software program, CUPSS (a **c**heck**u**p **p**rogram for **s**mall **s**ystems).

The inspection program is a major way that the Department ensures the capacity of public water systems and is continually being improved. Week-long training sessions including on-site work are held annually for all interested inspectors. The sanitary survey forms are regularly being improved with capacity development in mind. Internal audits of each office's inspection programs are performed annually.

Specifically relating to the Department's capacity development efforts, we have added a sanitary survey policy stating that systems whose inspection results are "out of compliance" must be referred to the FRWA if the inspector determines that the system might benefit from technical assistance. This requirement helps ensure that the Florida Rural Water Association will have the opportunity to assist the systems most in need.

Technical Assistance - Florida Rural Water Association

Since 1990, the FRWA has been under grants or contract to the Department to provide technical assistance to public water systems serving less than 10,000 persons. Originally there were only three Circuit Riders. Over the years, additional positions were added, and FRWA currently serves these systems with six Drinking Water Circuit Riders, one Professional Engineer, an Assistant Engineer, one Trainer, and a supporting Financial/Managerial staff. Included as Appendix C is a description of activities

performed by the FRWA under contract to the Department. This summary shows that the FRWA makes many important contributions to the Department's permitting, compliance, and enforcement activities. For example, systems have the opportunity to work with the FRWA to resolve potential compliance problems before they are discovered by the Department, thus improving Florida's compliance rates.

The services provided under a contract agreement with the Department are free to public water systems, with the exception of a few services, such as loaning of equipment. Systems may request assistance directly from the Florida FRWA, the Association may volunteer to help systems, or the Department may refer systems. It is not necessary to be a member of the FRWA to receive assistance under the Department contract agreement.

Each Circuit Rider travels to water systems throughout the state each month. Circuit Riders are certified operators, and assistance they provide usually relates to the technical aspects of water system operations, but sometimes they provide assistance with rate studies and other financial or managerial matters. Most technical visits are related to helping water systems remain in or achieve compliance. Over the last year, the Circuit Riders made 3,158 technical assistance visits, of which 2,015 or 64 percent resulted in a return to compliance for the water systems.

Water Trainers provide comprehensive technical assistance and training to water systems using surface water and to groundwater systems with complex treatment. Specifically, this position has:

- Developed, established, and held more than 25 water treatment plant operator certification sessions for groundwater and surface water plants. These help reduce the shortage in effective, needed water treatment operators at facilities and allows for protection of public health.
- Developed, established, and held numerous water distribution operator training sessions.
- Developed an initial plan to train operators on how to evaluate and calculate compliance with the rules for new disinfection requirements.
- Assisted the Department in the evaluation of disinfection byproducts compliance issues.

The Financial/Managerial staff provides assistance with financial and managerial capacity development. Specifically, this staff has:

- Developed and established the Water University/National Rural Water Association Utility Management Certification Program for improving managerial capacity, competency, and effectiveness among utility managers.
- Utilized experienced and effective professionals to provide Utility Board Member Training to increase the board members' competency and understanding of fiduciary responsibilities necessary to provide the public with safe and reliable drinking water.

- Developed and held Asset Management Workshops to increase knowledge of preventative maintenance and prudent safeguarding of public infrastructure.
- Developed, established, and published standard Utility Management Policies for setting policies and procedures that enable utilities to fulfill their missions.
- Assisted numerous systems in setting Rates and Impact Fees that account for actual cost of services and continuing preventative maintenance without relying on governmental grants/loans to replace infrastructure.
- Prepared Water Audits, or analyses of water losses and unaccounted-for water to reduce the potential for lost revenues.
- Encouraged water conservation and provided implementation recommendations.
- Assisted systems in finding dependable sources for grants and loans for utility projects, including short-term, interim, and long-term financing options.
- Assisted with Long Range Planning/Capacity Analysis, specifically the evaluation of remaining treatment capacity as a management tool to address timing of future expansions, regulatory compliance, impact fees, planning, funding, engineering design, permitting, and construction.
- Provided assistance with a myriad of utility operation and compliance assistance concerns to help utilities stay effective, including:
    - Customer relations/services
    - Public Notices
    - Consumer Confidence Reports
    - Operation and Maintenance manuals
    - Emergency Response Planning
    - New Management Tools and Software

Two engineering positions assist approximately 150 water systems statewide annually with challenges related to minor permitting, compliance, potential compliance, water quality, security, health, environmental issues, capacity analysis, and areas of operation, maintenance, and management, and issues related to providing safe, ample, and reliable water to Floridians. Specific activities include:

- Assisting with water resource development, alternative water supply projects, and water supply and treatment issues.
- Assisting in compliance with the Safe Drinking Water Act, Federal, and State rules, including providing regulatory updates and assistance.
- Designing and permitting projects for small drinking water systems to correct capacity development or compliance problems.
- Reviewing plans and specifications submitted to DEP's Drinking Water State Revolving Fund program for cost effectiveness and efficiency.
- Providing technical advice on water treatment, water quality, and hydraulics, and troubleshooting system problems.

— Assisting with utility capital improvement planning, feasibility, cost estimates, emergency response planning, asset management, preventative maintenance, operation and maintenance, conservation, and customer relations/services

As an example of their workload, the two engineers assisted systems on 529 engineering projects during the last year.

Since promulgation of the Federal capacity development requirements, the FRWA has continually responded to our directives relating to improving the capacity of water systems. Indications of the efficacy of the FRWA's efforts are the many letters of praise from water system representatives received by the Department. An example is an excerpt from an April 2010 letter from a northwest Florida utility representative: "Our membership with FRWA has proven to be of great assistance with our efforts to comply with regulatory agencies and continually produce safe drinking water."

The FRWA also helps water systems improve their capacities through work performed under funding from entities other than the Department. The Department will sometimes recommend that the FRWA provide capacity-development-related services through these alternate funding sources. Entities other than the Department providing funding to the FRWA include Association members, National Rural Water Association, EPA, and the Rural Development mission area of the U.S. Department of Agriculture. An example of this is the services of the National Rural Water Association/U.S. Department of Agriculture Circuit Riders for Florida. These Circuit Riders provided management and finance assistance to systems eligible for U.S. Department of Agriculture - Rural Development funding. Another example is the Groundwater Technician Program that was funded through National Rural Water Association and EPA.

The FRWA provides training sessions on various topics year-round in locations throughout the state. Between October 1, 2008 and June 30, 2011, the FRWA held 285 training sessions with 8,125 attendees. Available training sessions are listed at the FRWA website, and some of them carry continuing education units toward operator certification. Examples of training sessions currently posted are: treatment technologies and conservation, and emergency response plan seminars for CWSs.

The FRWA also offers online training courses; examples are chlorinator maintenance and pumps and motors. Persons studying for operator certification exams can take exam preparation courses. Attendees who took recent exams had a pass rates higher than 55 percent for the Class A exam, 60 percent for the Class B exam, 65 percent for the Class C exam, and 75 percent for the Class D exam. By way of comparison, the overall state success rates were approximately 25 percent, 30 percent, 35 percent, and 65 percent, respectively. Yearly "Focus on Change" seminars provide a full day of information at each session. Department representatives inform the attendees about the latest regulatory changes and provisions, and representatives of the Department or

other entities hold sessions on pertinent topics such as disaster preparedness and disinfection calculations. The 2011 Focus on Change seminars took place in six cities and drew 1,380 attendees.

Area-Wide Optimization Program (AWOP)

Under the Area-Wide Optimization Program (AWOP), a team of regulators from EPA Region 4 and state programs follow EPA protocols to methodically assess the ability of water systems to meet key optimization performance goals for disinfection and filtration to enhance microbial and disinfection byproduct control at treatment plants. Utilizing a series of established investigative techniques, the AWOP team can evaluate specific system components and practices, present the findings to the water systems, and encourage the water systems to use the results to optimize their water systems. The Department originally utilized this program as a means of giving close evaluation of, and assistance to, public water systems in Florida whose sources are surface water. Recently, the AWOP protocol has been expanded, and the Department can also assist groundwater systems with a history of disinfection byproducts problems.

Department participation in AWOP began in 2002. By participating in multi-state microbial comprehensive performance evaluations (CPE) in Alabama, Georgia, and North and South Carolina, and hosting two in-state comprehensive performance evaluations at North Port and Cocoa, Florida, four team members received certifications as CPE evaluators. Additional CPEs were conducted utilizing only Florida evaluators at surface water plants at South Bay, Cedar Key, Steinhatchee, Pahokee, and Lee County Utilities. In June 2011, the Department conducted its first disinfection byproduct CPE (DBP-CPE) at a groundwater plant in Cocoa, Florida.

Over the last several years, the Department has built up an inventory of field equipment to facilitate CPEs. This equipment, and the knowledge of the certified CPE evaluators, will be utilized in the future to conduct microbial CPEs at all Subpart H treatment systems within the state. In addition, the Florida AWOP will identify candidates for DBP-CPEs by reviewing analytical results for trihalomethane and haloacetic acid in the distribution systems of groundwater treatment plants.

As a result of the CPEs done at surface water plants throughout the states, it was determined that operators at surface water plants need specialized training to adequately manage their coagulation and sedimentation processes. Additional training for surface water plant operators is necessary to improve filter backwash practices so that filters can meet the requirements of the surface water treatment rules. The regional AWOP program has developed a Performance Base Training (PBT) package that would help surface water plant operators improve their methods. It is the intent of the Florida AWOP program to initiate PBT sessions throughout the state to assist operators in achieving the necessary competence level to effectively operate surface water treatment plants.

In Florida, unlike some other states, operators are not specifically tested and certified to be surface water plant operators. Because of this, systems hire operators that may not be appropriately trained. The small surface water plants like those listed above were closed because the operators and the owners were not technically competent to run their plants. The AWOP program is an important vehicle that helps overcome this deficiency.

Recommendations and Conclusions

The Department's Capacity Development Strategy is working effectively to help ensure the capacity of public water systems; however, to improve our Strategy, we plan to refine the components described above. Examples of successful Strategy components include the programs discussed in this report.

The inspection program helps systems achieve and maintain capacity through regular inspections, follow-up actions, and technical assistance.

The technical assistance provided by the FRWA enables systems to improve their viability through non-regulatory means. These services are free to the public, cover a wide range of financial, managerial, and technical topics, and are provided at the water system being assisted. Our monitoring of the work provided and our receipt of favorable reviews from the public assures us of the success of this program.

The AWOP work performed so far has been successful in terms of providing comprehensive assessments and identifying inexpensive, yet effective, changes that water systems can make to optimize their processes. To improve our Strategy, we plan to establish clear optimization goals that can be implemented by surface water and groundwater treatment plant operators to improve a system's capability to comply with Federal requirements. In addition, PBT training sessions will be developed to provide training to surface water treatment plant operators who would benefit from surface water-specific issues and solutions. Finally, the Department will continue to perform microbial comprehensive performance evaluations at surface water treatment plants, and plans to increase the number of disinfection byproduct comprehensive performance evaluations when groundwater candidates are identified in order to help systems operate effectively and efficiently.

DEP's Drinking Water Program (Program) plans to continue these programs, as they are directly related not only to capacity development but also to the core mission of the Program. The core mission is to provide safe drinking water and effectively manage water resources, thus protecting public health. Each program element listed in this report is effective individually and is a part of a framework of capacity development-related efforts. This framework of initiatives results in many types of opportunities for systems to improve their capacity. Florida's capacity development strategy is improving the abilities of public water systems to manage their resources, operate their systems, and protect the health of Florida residents and visitors.

Appendix A: Contact Information

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Daniel Peterson, P.E., Capacity Development Coordinator
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Email: Jennifer.Porter@dep.state.fl.us
Email: Daniel.Peterson@dep.state.fl.us
Web: http://www.dep.state.fl.us/water/drinkingwater/index.htm

Florida Department of Health
Public Drinking Water Systems Program
4052 Bald Cypress Way, Bin C-22
Tallahassee, Florida 32399-1742
Edward A. Bettinger, R.S., M.S., Program Coordinator
Phone: (850) 245-4444 X 2696
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Web: http://www.doh.state.fl.us/environment/water/index.html

Florida Rural Water Association
2970 Wellington Circle West, Suite 101
Tallahassee, Florida 32309
Gary Williams, Executive Director
Phone: (850) 668-2746
Email: FRWA@FRWA.net
Web: http://www.frwa.net

Florida Department of Environmental Protection
Drinking Water State Revolving Fund Program
2600 Blair Stone Road, M.S. 3505
Tallahassee, Florida 32399-2400
Venkata Panchakarla, Program Administrator, Drinking Water Funding
Phone: (850) 245-8366
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Web: http://www.dep.state.fl.us/water/wff/index.htm

Florida Department of Environmental Protection
Water Supply Restoration Program
2600 Blair Stone Road, M.S. 3515
Tallahassee, Florida 32399-2400
Charles Coultas, P.E.
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Web: http://www.dep.state.fl.us/water/wff/index.htm

Florida Public Service Commission
Division of External Affairs
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Martha Golden
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Florida Department of Environmental Protection
Operator Certification Program
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Tallahassee, Florida 32399-2400
Ronald McCulley, Program Administrator
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Web: http://www.dep.state.fl.us/wff/index.htm

U.S. Department of Agriculture
Rural Development, Florida State Office
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Gainesville, Florida 32606
Michael Langston, Program Director for Florida Water and Wastewater Programs
Phone: (352) 338-3485
Email: Michael.Langston@fl.usda.gov
Web: http://www.usda.gov/rus/

Florida Department of Community Affairs
Community Development Block Grants
2555 Shumard Oaks Boulevard
Tallahassee, Florida 32399-2100
Monya Newmyer, Program Administrator
Phone: (850) 487-3644
Email: Monya.Newmyer@dca.state.fl.us
Web: http://www.dca.state.fl.us

Florida Department of Community Affairs
Division of Emergency Management
2555 Shumard Oak Boulevard
Tallahassee, Florida 32399-2100
Donald Kunish, Manager
Phone: (850) 413-9970
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Web: http://www.floridadisaster.org/cps/SERC/serc.htm

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Appendix B: DEP Form 62-555.900(20) – New Water System Capacity Development Financial and Managerial Operations Plan

NEW WATER SYSTEM CAPACITY DEVELOPMENT FINANCIAL AND MANAGERIAL OPERATIONS PLAN

INSTRUCTIONS: This operations plan shall be completed and submitted for the following public water systems, which are defined as "new systems" for the purposes of capacity development and which are hereinafter referred to as "new systems": entirely new community or non-transient non-community water systems constructed, or commencing operations, on or after October 1, 1999; and water systems that previously did not meet the definition of a community water system (CWS) or the definition of a non-transient non-community water system (NTNCWS) but that grow to become a CWS or NTNCWS through an infrastructure expansion constructed, or placed into operation, on or after October 1, 1999. (Water systems that previously did not meet the definition of a CWS or the definition of an NTNCWS but that grow to become a CWS or NTNCWS by adding users without expanding their infrastructure are not considered "new systems" for the purposes of capacity development.) Complete and submit one copy of this operations plan, including all required attachments, to the appropriate Department of Environmental Protection District Office or Approved County Health Department at the following times:

- with the construction permit application for the "new system" or for the infrastructure expansion creating the "new system;" or, if the construction permit for the "new system" or infrastructure expansion creating the "new system" was issued by the Department prior to the effective date of Rule 62-555.525, F.A.C., (9-22-99), with the certification of construction completion for the "new system" or for the infrastructure expansion creating the "new system"; or, if a construction permit is not required for the "new system," within 90 days after commencing operations as a CWS or NTNCWS;
- within 90 days after the third anniversary of the "new system" commencing operations as a CWS or NTNCWS; and
- within 90 days after a change in ownership of the "new system" if the change in ownership occurs after the effective date of this form.

Complete all parts of this operations plan for "new systems" that will not be regulated by the Florida Public Service Commission (FPSC), and complete only Parts I, IV, V, VI, and VII of this operations plan for "new systems" that will be regulated by the FPSC. All information provided in this operations plan, including all attachments to this plan, shall be typed or printed in ink. Refer to the *New Water System Capacity Development Planning Manual* as adopted in Rule 62-555.335, F.A.C., for recommended formats to use when preparing attachments to this operations plan. The *New Water System Capacity Development Planning Manual* includes criteria the Department uses to evaluate information in operations plans and includes a description of how the Department uses information in operations plans.

I. General Information		
Public Water System (PWS) Name:		
PWS Identification Number:*		
PWS Type: ☐ Community Water System (CWS) ☐ Non-Transient Non-Community Water System (NTNCWS)		
Number of Service Connections:†	Total Population Served: †	
PWS Owner:		
Contact Person:	Contact Person's Title:	
Contact Person's Mailing Address:		
City:	State:	Zip Code:
Contact Person's Telephone Number:	Contact Person's Fax Number:	
Contact Person's E-Mail Address:		

** This information is required only if the PWS has already commenced operations as a PWS (i.e., only if the PWS is an existing PWS).*

† *At the time the PWS commences operations as a CWS or NTNCWS or, for a PWS that has already commenced operations as a CWS or NTNCWS, at the time of submittal of this operations plan.*

II. Projected or Actual Expenses

Attach an expenses plan showing all projected or actual water system expenses for a five-year planning period. If this operations plan is being submitted with a construction permit application or with a certification of construction completion or within 90 days after the "new system" commences operations as a CWS or NTNCWS, the five-year expenses plan shall start at the date the "new system" is expected to, or did, commence operations as a CWS or NTNCWS. If this operations plan is being submitted as an updated plan after the third anniversary of the "new system" commencing operations as a CWS or NTNCWS, the five-year expenses plan shall start at the date of said third anniversary. If this operations plan is being submitted as an updated plan after a change in ownership of the "new system," the five-year expenses plan shall start at the date ownership of the "new system" changes. Include only the following two types of information: (1) the nature of the expense (e.g., salary of an operator); and (2) the dollar amount of the expense. Show only expenses pertaining to the water system. Include expenses for operators, persons maintaining the water system between operator visits, purchased utilities, water treatment chemicals, supplies for routine upkeep, and analytical testing. Other expenses under 10% of the total projected or actual amount must be listed but need not be described.

PWS Identification Number:

III. Projected or Actual Income

Attach an income plan showing projected or actual income and funds used to pay for all water system expenses for a five-year planning period. If this operations plan is being submitted with a construction permit application or with a certification of construction completion or within 90 days after the "new system" commences operations as a CWS or NTNCWS, the five-year expenses plan shall start at the date the "new system" is expected to, or did, commence operations as a CWS or NTNCWS. If this operations plan is being submitted as an updated plan after the third anniversary of the "new system" commencing operations as a CWS or NTNCWS, the five-year income plan shall start at the date of said third anniversary. If this operations plan is being submitted as an updated plan after a change in ownership of the "new system," the five-year income plan shall start at the date ownership of the "new system" changes. Show only income and funds used to pay for water system expenses. Include only the following two types of information: (1) the nature of each source of income or funds (e.g., revenue from the sale of water to customers, interest income, funding from a city, receipt of a loan or grant, or a personal bank account); and (2) the dollar amount to be provided by each source of income or funds. Report all projected or actual amounts; however, a description of each amount under 10% of the total projected or actual amount is not necessary.

IV. Management Capacity

Attach a list of positions and employees, including position titles and responsibilities, licensure requirements for the positions, and employee names and qualifications. If a position is vacant, indicate the projected hiring date. Include the license class and number for operators. Indicate the positions/employees who are responsible for acting on behalf of the water system in case of emergency, to spend money, or to make other decisions. Provide telephone numbers and addresses for these responsible positions/employees. Show only position/employee information pertaining to the water system.

V. Plans, Manuals, and Programs

Depending upon type and size, water systems may be required to have written plans, manuals, and programs as described in Department rules or in the *New Water System Capacity Development Planning Manual*. Contact the State Emergency Response Commission (SERC) regarding Risk Management Plans, and contact the appropriate Department of Environmental Protection (DEP) District Office or Approved County Health Department (ACHD) regarding all other plans, manuals, and programs listed below. Indicate below which plans, manuals, and programs the SERC or the appropriate DEP District Office or ACHD says will be required for your water system and the due dates for the required plans, manuals, and programs.

Plan, Manual, or Program	Required? (Y/N)	Initial Due Date (MM/YY)
Bacteriological Monitoring Plan		
Cross-Connection Control Program		
Disinfectants/Disinfection Byproducts Monitoring Plan		
Emergency Preparedness/Response Plan		
Operation & Maintenance Manual		
Risk Management Plan		
Sampling Plan for Lead and Copper Tap Samples and Water Quality Parameters		

VI. Alternate Means of Providing Water Service

Attach an explanation of why you are proposing to provide water service instead of connecting to another public water system. Include a list of the alternatives considered and the financial, managerial, and technical reasons for deciding to provide water service.

VII. Certification

I am duly authorized to sign this operations plan on behalf of the PWS identified in Part I of this operations plan. I certify that the information provided in this operations plan and on the attachments to this operations plan is true and accurate to the best of my knowledge and belief. I also certify that, for the five-year planning period covered by this operations plan, the PWS expects to collect, or already has, sufficient funds to equal or exceed its forecasted expenses, enabling the PWS to deliver drinking water meeting regulatory standards.

Signature and Date	Printed or Typed Name	Title

Appendix C: Florida Rural Water Association Activities

DRINKING WATER PERMITTING PROGRAM

PROGRAM AREA	TYPICAL RELATED SERVICES PROVIDED BY FRWA
Education for systems about Department requirements	Individualized on-site training in topics such as bacteriological sampling
Completion of permitting documents	1. Assistance with completion of renewals of water management district consumptive use permits and DEP construction permits 2. Assistance with completion of permit applications related to the operations of drinking water systems 3. Assistance with completion of permit applications for some projects where the sanitary survey states that a part of the facility is in use without the proper permit. 4. Assistance in compliance related project permitting, preliminary engineering reports (PERs), and engineering related to effective and affordable projects to attain compliance and receive project funding.
Water source planning	Using non-Department sources of funding, assistance to communities with the planning process to find new sources of water to replace sources that are no longer desirable.
Under the Direct Influence of Surface Water technical assistance and well evaluation	Identification of well maintenance and rehabilitation methods for wells that the Department has determined to be Under the Direct Influence of Surface Water.
Obtaining SRF and other funding	FRWA helps systems apply for such funding.

DRINKING WATER COMPLIANCE PROGRAM

PROGRAM AREA	TYPICAL RELATED SERVICES PROVIDED BY FRWA
Education for systems about Department requirements, including maximum contaminant level (MCL) and treatment technique requirements (continued)	1. Individualized onsite training in topics such as bacteriological sampling. 2. Small-group training. Each Circuit Rider is expected to hold at least a minimum number of such training sessions. 3. Focus on Change seminars: yearly seminars for operators and other interested persons. They are held at several cities. In 2011 there were 1,380 attendees. These seminars include topics in drinking water and wastewater rules and operations. 4. Training provided using funding from non-Department sources: small-group training sessions for operators and other interested persons on an as-needed basis throughout the state. The subjects of sessions conducted in the past include operator certification review, water conservation and beneficial use, water chemistry, introduction to operations, how to prepare for a Department sanitary survey inspection, and corrosion control. 5. Annual technical conference and joint technical conferences with other states: open to FRWA members and nonmembers 6. Consumer confidence reports (CCRs): Individual assistance and training workshops in addition to the Department workshops. 7. Lead and copper: Individual training on measuring water quality parameters, conducting desktop studies using software, and making corrective action recommendations to systems. In some cases, FRWA has also assisted systems with permit applications, as mentioned above under permitting.

PROGRAM AREA	TYPICAL RELATED SERVICES PROVIDED BY FRWA
	8. Assistance with other compliance related concerns including D-DBP rules, GWR, and other DEP/SDWA regulation
Long-term viability of water systems	1. FRWA provides rate reviews. FRWA provides management assistance/training and reviews to improve water system viability 2. Assistance with obtaining SRF and other funding – refer to listing above under permitting.
Sanitary surveys	Department representatives often refer FRWA to systems that have sanitary survey deficiencies. FRWA helps the systems to correct the deficiencies by providing training. FRWA also provides training classes for water system operators to show them how to prepare for a sanitary survey.
Groundwater protection and source water assessment program	The groundwater protection component of the FRWA/Department contract provides for the groundwater specialists to develop Wellhead Protection Plans/Source Water Plans for systems throughout the state. Thus, a number of sources of drinking water are better protected from contamination.
Short-term viability of water systems	FRWA provides individualized on-site assistance and training.

DRINKING WATER ENFORCEMENT PROGRAM

PROGRAM AREA	RELATED SERVICES PROVIDED BY FRWA
Sanitary survey deficiencies	Department representatives often refer FRWA to systems that have sanitary survey deficiencies that may be under enforcement. FRWA helps the systems correct the deficiencies by providing training.
Monitoring problems/other	Department representatives often refer FRWA to systems that have failed to monitor. FRWA helps the systems correct the deficiencies by providing training about rule requirements and field sampling procedures. On site services to help address problems which have systems on the Department Return to Compliance (RTC) list.

EMERGENCY MANAGEMENT PROGRAM

PROGRAM AREA	RELATED SERVICES PROVIDED BY FRWA
Drinking water drought management	Department representatives often refer FRWA to systems that have water shortages due to excessive well drawdown. FRWA helps the Water Management Districts identify systems in need of special assistance by taking field measurements of well pumping levels to establish regional trends. Perform water audits, leak detection, conservation plans and other water use reduction activities.
Hurricane damage at drinking water and wastewater facilities	The FRWA assists systems that have suffered storm damage by making on-site inspections and helping systems to maintain operational status.

DRINKING WATER/DOMESTIC WASTEWATER OPERATOR CERTIFICATION AND STAFFING PROGRAM

PROGRAM AREA	RELATED SERVICES PROVIDED BY FRWA
Operator Certification	1. Operator certification review training (see listing above under Compliance) 2. Training allows operators to earn continuing education units (C.E.U.s), which are essential for maintaining certification.
Operator Capability	Many services provided by FRWA listed above under permitting,

	compliance, and enforcement enable operators to improve in their abilities to operate water systems.