



New Water System Capacity Development Planning Manual

**Division of Water Resource Management
Bureau of Water Facilities Regulation
Drinking Water Section
Florida Department of Environmental Protection
April 2003**

New Water System Capacity Development Planning Manual

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I General Introduction

The 1996 Safe Drinking Water Act (SDWA) amendments include capacity development requirements. For more information about these requirements, refer to Part II of this document.

This document includes:

- description of the State of Florida's New Systems Capacity Development Program,
- explanation of the State of Florida's New Systems Capacity Development Program requirements,
- instructions for completing the required capacity demonstration, and
- information on additional sources of funding and/or information.

Before investing a significant amount of time or money in a proposed water system, we suggest that you do the following, as a minimum:

- Contact all the organizations and agencies which may be involved in regulating your water system. Find out what their requirements are. These agencies may include, but are not necessarily limited to, the Florida Department of Environmental Protection, the appropriate Water Management District, the Florida Public Service Commission, and the Florida Department of Community Affairs.
- Learn about the state and federal requirements for public water systems, water system design, water system operation and maintenance, water system personnel management, contingency planning, and financial management.
- Determine whether there is a need for service in your proposed service area. Investigate and consider having all or part of the water service to your proposed service area provided by another water system. In this manual there is information on this issue.
- Note that the state and federal requirements for public drinking water systems are complex, and maintaining compliance will require expertise and a significant amount of money and time. The state rules, which reference or include all applicable federal requirements, are found in Chapters 62-550, 555, 560 and 699, F.A.C.

If you would like more information or assistance, please contact the Drinking Water Section, Florida Department of Environmental Protection, 2600 Blair Stone Road, M.S. 3520, Tallahassee, FL, 32399-2400 at (850) 487-1762. To contact other agencies, you may wish to refer to Part IV of this document, which contains a list of addresses and telephone numbers.

II Introduction to Capacity Development and Summary of the State of Florida New Water System Capacity Development Program Requirements

What is a public water system (PWS)? Chapter 62-550, Florida Administrative Code (F.A.C.), defines it as a system which has at least 15 service connections or regularly serves at least 25 individuals daily at least 60 days out of the year.

What is a community water system (CWS)? Chapter 62-550, F.A.C., defines it as 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.

What is a non-transient, non-community water system (NTNCWS)? Chapter 62-550, F.A.C., defines it as a public water system which is not a community water system and that regularly serves at least 25 of the same persons over 6 months per year.

What is capacity? The EPA definition is:

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.”

Capacity refers to the capability of a system to remain viable over time. It is the ability to deliver water meeting applicable standards consistently over time, not just intermittently.

Elements of capacity can be classified as technical, managerial, and financial. Technical capacity includes, but is not limited to: source water adequacy and condition of the infrastructure. Managerial capacity includes, but is not limited to: staffing, organization, and having the appropriate planning documents. Financial capacity includes, but is not limited to: credit worthiness, revenue sufficiency, and usage of proper accounting methods.

What is capacity development?

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

What is a new system for the purposes of capacity development? The EPA has provided a definition upon which the State definition is based. For the purposes of capacity development, a new CWS or NTNCWS is a CWS or NTNCWS which:

(1) is constructed on or after October 1, 1999, or

- (2) commences operations on or after October 1, 1999, or
- (3) was a non-PWS or TNC water system which added infrastructure on or after October 1, 1999, to become a NTNCWS or CWS. Infrastructure is defined as connections and/or treatment.

Water systems which add additional users and thereby become NTNCWSs or CWSs are not considered new systems for the purposes of capacity development.

Why is the capacity development program necessary? In recent years there has been a growing recognition of the need for long-range planning and basic infrastructure repair. To address this, some states have had “viability” initiatives to help systems enhance their capabilities. As part of the 1996 amendments to the Federal Safe Drinking Water Act, the U.S. Congress mandated that states set up programs to ensure the capacity of new CWSs and new NTNCWSs. The State of Florida’s program fulfills this congressional requirement.

What are the requirements of Florida’s New Systems Capacity Development Program?

- Technical Capacity: Subject systems that undergo the construction permitting process are subject to an assessment of their technical capacity as part of the permitting process. All subject systems are subject to an assessment of their technical capacity through regular sanitary survey inspections.
- Financial and Managerial Capacity: Subject systems undergo an assessment of their financial and managerial capacity. This assessment is made using the New Water System Capacity Development Financial and Managerial Operations Plan, DEP Form 62-555.900(20).

The form is initially submitted to the Department at one of the following times:

- With the construction permit application for the system, or
- With the construction permit application for the infrastructure expansion creating the system, or
- With the certification of construction completion for the newly constructed subject system or for the infrastructure expansion creating the subject system (only if the construction permit was issued before September 22, 1999), or
- Within 90 days after commencing operations as a CWS or NTNCWS (only if a construction permit is not required for the subject system).

Subject systems also must complete DEP Form 62-555.900(20) at the following times:

- Within 90 days after the third anniversary of the system commencing operations as a CWS or NTNCWS, and
- Within 90 days after a change in ownership of the system, if the change in ownership occurs after the effective date of DEP Form 62-555.900(20).

- Systems regulated by the Florida Public Service Commission (PSC) are not required to complete Items II and III (financial information) of DEP Form 62-555.900(20). Systems in counties under PSC jurisdiction but not to be regulated by the PSC are required to complete the entire DEP Form 62-555.900(20).

What are the State requirements relating to technical capacity? Refer to Chapters 62-550 and 62-555, F.A.C. If you are also going through the construction permit process, contact the District or Approved County Health Department representative(s) associated with your application(s). Otherwise contact your local District or Approved County Health Department office and ask to be put in contact with the appropriate representative(s).

What are the State requirements relating to financial and managerial capacity? The Department assesses financial and managerial capacity using the Capacity Development Financial and Managerial Operation Plan, DEP Form 62-555.900(20). Refer to the next section of this document, which describes minimum criteria for approval of the completed form.

To whom should the completed DEP Form 62-555.900(20) be submitted? If you are applying for a construction permit, submit the completed DEP Form 62-555.900(20) to the District or Approved County Health Department representative(s) associated with your application(s). Otherwise contact your local District or Approved County Health Department office and ask to be put in contact with the appropriate person(s). The Department will evaluate the completed form and issue a Request for Additional Information (RAI) if necessary to notify the system about deficiencies in its capacity demonstration.

III Instructions for Completing DEP Form 62-555.900(20) and Criteria for Approval or Denial

The Department will assess technical capacity through the construction permitting process. The Department will assess financial and managerial capacity using the Capacity Development Financial and Managerial Operation Plan, DEP Form 62-555.900(20).

For examples of answers to some of the items of DEP Form 62-555.900(20), please refer to Part V of this manual.

A. Instructions for Completing DEP Form 62-555.900(20)

1. Instructions for Completing DEP Form 62-555.900(20), Items II and III (Financial Information)

- You must provide information for each of the five year-long planning periods required by the form.
- To provide the Department with the information requested in Items II and III of DEP Form 62-555.900(20), you may use the worksheet at the end of Part III of this New Water System Capacity Development Planning Manual or one similar to it. The blank worksheet is provided for your use on an optional basis to aid you in furnishing the Department with the required information. The Department does not require usage of the worksheet, or any other specific format, to prepare or submit the information asked for in Items II and III.
- The worksheet at the end of Part III of this Manual may be useful as a budgeting tool. It can be used to compare income plus funding against expenses.
- Show only those amounts pertaining to your drinking water operations.
- On the worksheet you may write in your own categories of income sources, funds, or expenses. For instance, you may wish to add hypochlorite solution under expenses, chemicals.
- Amounts must be shown for all expenses, income, and funds during the appropriate five-year period. The amounts must be described, unless
 - they are less than 10% of the total expenses or income plus funds and
 - they are not expenses mentioned in Form Item III (expenses for the operator(s), person(s) maintaining the system between operator visits, purchased utilities, water treatment chemicals, supplies for routine upkeep, and analytical testing.)

- For each of the five years covered by Form 62-555.900(20), analytical expenses may be itemized by parameter or reported as totals for all parameters. For example, you may list a single amount per year to cover bacteriological and chemical analyses. An example of this is found in part V. B. of this document. Or, you may itemize by parameter, as shown in V. A. of this manual.
- When providing analytical costs, it is suggested that you include the name and city of the laboratory which will analyze the samples from your water system. If such information is not included, the Department may request it for verification.
- If your system will be regulated or is regulated by the Florida Public Service Commission (PSC), your system need not complete the financial sections (Items II and III) of the Capacity Development Financial and Managerial Operation Plan, DEP Form 62-555.900(20). It is required that such systems complete the other sections of the form.
- For each of the five years, totals for the following items must be included:
income and funds, and
total expenses.
- The total income and funds must be equal to or greater than the total expenses. You need not report all income and funds; instead, report only the income and funds needed to pay for the expenses of the system.

2. Instructions for Completing DEP Form 62-555.900(20), Items IV and V (Managerial Information)

- DEP Form 62-555.900(20) Item IV: Instructions are on the form.
- It is required that the operator hold the appropriate certification.
 - Chapter 403.867, Florida Statutes: “A person may not perform the duties of an operator of a water treatment plant or a domestic wastewater treatment plant unless he or she holds a current operator’s license issued by the department.”
 - Chapter 403.865, Florida Statutes: “It is the legislative intent that any person who performs the duties of an operator and who falls below minimum competency or who otherwise presents a danger to the public be prohibited from operating a plant or system in this state.”
 - Chapter 62-555.350(2), Florida Administrative Code: “The supplier of water shall provide responsible operation

personnel in accordance with Chapters 62-602 and 62-699, F.A.C.”

- Where appropriate, the Department encourages advance planning relating to hiring an operator. However, if you do not yet know the operator’s name, provide the name and phone number of the operator service. If you do not yet know the name or service, please provide the class of operator to be hired and the anticipated starting date.
- DEP Form 62-555.900(20) Item V: Instructions are on the form. Below is a table showing the State of Florida rules citations and applicability of each planning document.

Plan Name	State Rules Reference	Applicability
Risk Management Plan	DCA Rule 9G-21, F.A.C. Form 001	Contact: Victoria Sharpe, Division of Emergency Management, Florida Department of Community Affairs, (850) 413-9913
TTHM Monitoring Plan	62-550.514	40 CFR 141, Subpart L Subpart H systems serving 10,000 or more persons: 1/1/02. All CWSs, NTNCWSs that are adding a chemical disinfectant: 1/1/04.
Operations Plan	None	Optional
Sampling plan for Lead and Copper Tap Samples and Water Quality Parameters	62-555.900(12), 62-550.800	Refer to rules.
Auxiliary Power Plan	62-555.320(6)(e)	Refer to rules. Optional for less than 150 connections and 350 persons.
Bacteriological Monitoring Plan	62-550.518(1)	Refer to rules.
Cross Connection Control Plan	62-555.360(2)	Refer to rules. Optional for NTNCs.
Emergency Preparedness/Response Plan	62-555.350(15)	Required for CWSs serving or designed to serve 350 or more persons or 150 or more service connections. Optional for other systems.

3. Instructions for Completing DEP Form 62-555.900(20), Item VI (Alternate Means of Providing Water Service)

- The Department is not authorized to prevent any prospective system from starting a new system based on the availability of alternative means to provide service to all or part of the

proposed area. However, you must demonstrate using DEP Form 62-555.900(20) that you investigated and considered alternate means of providing water service.

- To be acceptable, a capacity demonstration must include, as a minimum, a statement as to why you decided to start a new system rather than hook up to regional water.
- It is recommended, but not required, that you investigate the following:
 1. Are there any other utilities close to the service area of your proposed system? If so, what are their names and locations?
 2. Are there any utilities able to provide service to all or part of the service area of your proposed system? If so, what are their names and locations?
 3. How did you determine which utilities are close to the service area of your proposed system, and which utilities might be able to provide service to all or part of the service area of your proposed system? (e.g. talked with city representative, drove through the area and looked for water systems)
- You may wish to use the table below to gather your information.

Utility Name	Utility Address	Person(s) contacted	Date(s) of contact	Might they be able to provide service in any part of your proposed service area?	Do they have a ready ability to expand their capacity to meet the immediate and anticipated needs of all or part of your proposed service area?

If any of the answers in the last two columns of the above table are yes, and no service to any part of your proposed service area will be provided by another utility, it is recommended that you attach to your completed DEP Form 62-555.900(20) an explanation of why you plan to start up your own water system without using the capabilities of those other utilities. Include a description of the technical, managerial, and financial reasons for the selected approach.

- It is recommended but not required that you submit as attachments to DEP Form 62-555.900(20) selected correspondence from the other utilities you contacted. The correspondence you select might include, for instance, a statement by the utility that they do not have the capacity to provide service in any part of your proposed service area and that they do not have the ready ability to expand their capacity to meet the immediate and anticipated needs of all or part of your proposed service area.
- In some cases the utility or utilities close to your proposed service area may be available to assist you temporarily, such as by providing temporary wastewater service.

B. Minimum Criteria for Approval of DEP Form 62-555.900(20)

1. Minimum Criteria for Approval Relating to Entire Form:

The form must be completed.

2. Minimum Criteria for Approval of DEP Form 62-555.900(20) Items II and III (Financial Information)

- Amounts must be shown for all expenses, funds, and income for the appropriate five-year period. The amounts must be described, unless
 - they are less than 10% of the total expenses or income + funding and
 - they are not expenses mentioned in Form Item III (expenses for the operator(s), person(s) maintaining the system between operator visits, purchased utilities, water treatment chemicals, supplies for routine upkeep, and analytical testing.)
- The amounts shown must be obtained using a good faith effort to estimate these amounts. Income, funding, and expenses listed must be realistic estimates, based on current amounts for the same services or goods.
- The Department may compare the projected deficit or surplus against historical values for similar sizes and types of water systems.
- Many water systems are not able to rely on water revenue alone during the first few years of operation and therefore must use funds.
- The income plus funds must equal or exceed the expenses for each year.

3. Minimum Criteria for Approval of DEP Form 62-555.900(20) Items IV and V (Managerial Information)

- At all times during the operation of a system, there must be a designated responsible party who can take charge of the system. That person or persons must be able to act on behalf of the system to spend money, to act on behalf of the system in case of emergency, or to make other decisions on behalf of the system. This is called being in responsible charge of the system. The completed Item IV of Form 62-555.900(20) must include the name(s), address(es), and telephone number(s) of the person(s) in responsible charge of the system.
- Your capacity demonstration must show that you have or plan to have an operator who holds the appropriate certification. If you furnish the name of the operator, the Department will verify that he holds the appropriate certification. If you furnish the name of an operator

service instead of an operator, the Department will contact the service and verify that the operators working or planned to work at the system have the proper certification(s).

- Your system must have contacted the District or Approved County Health Department office. Your system must have determined from that office which planning documents are required and the plan due dates.

4. Minimum Criteria for Approval of DEP Form 62-555.900(20) Item VI (Alternate Means of Providing Water Service)

- The Department is not authorized to prevent any prospective system from starting a new system based on the availability of alternative means to provide service to all or part of the proposed area. However, you must demonstrate using DEP Form 62-555.900(20) that you investigated and considered alternate means of providing water service.
- To be acceptable, a capacity demonstration must include, as a minimum, a statement as to why you decided to start a new system rather than hook up to regional water.

C. Worksheet of Projected or Actual Income Sources or Funds and Expenses

Note: Usage of this worksheet is optional.

Water System Name: _____

Identification Number (PWS-ID) _____

Month and year of commencement of actual or planned operations _____

Note: the beginning of Year 1 is the commencement of operations.

	Year 1 (200) __ Projected == Actual	Year 2 (200) __ Projected == Actual	Year 3 (200) __ Projected == Actual	Year 4 (200) __ Projected == Actual	Year 5 (200) __ Projected == Actual
Expenses					
a. Salaries, Wages, Benefits, and Pensions					
1. Operator	\$	\$	\$	\$	\$
2. Owner	\$	\$	\$	\$	\$
3. Person maintaining system between operator visits	\$	\$	\$	\$	\$
4.	\$	\$	\$	\$	\$
b. Purchased Water	\$	\$	\$	\$	\$
c. Purchased Utilities					
1. Purchased Power	\$	\$	\$	\$	\$
2. Telephone Service	\$	\$	\$	\$	\$
3. Other Utilities	\$	\$	\$	\$	\$
d. Fuel for Power Production	\$	\$	\$	\$	\$
e. Chemicals					
1. chlorine	\$	\$	\$	\$	\$
2.					
3.					
4.					
5.					
f. Materials, Supplies, and Parts					
1.					
2.					
3.					
4.					
5.					
g. Contractual Services					

	Year 1 (200) ___ Projected ___ Actual	Year 2 (200) ___ Projected ___ Actual	Year 3 (200) ___ Projected ___ Actual	Year 4 (200) ___ Projected ___ Actual	Year 5 (200) ___ Projected ___ Actual
1. Engineering	\$	\$	\$	\$	\$
2. Accounting	\$	\$	\$	\$	\$
3. Legal	\$	\$	\$	\$	\$
4.					
5.					
h. Equipment Rental					
1.					
2.					
3.					
i. Real Estate					
1. Rental Expense					
2. Purchase Expense					
j. Transportation Expenses					
1.					
2.					
3.					
4.					
5.					
k. Analytical Monitoring					
1. Bacteriological					
2. Nitrate/Nitrite					
3. Inorganics					
4. VOCs					
5. Pesticides and PCBs					
6. Naturally-occurring Radiologicals					
7. Synthetic Radiologicals					
8. Total Trihalomethanes (TTHM)					
9. Turbidity – Surface Water					
10. Lead and Copper (tap water)					
11. Secondary Contaminants					
12. Unregulated Contaminants					
13. ICR Monitoring					
14. Monitoring for process control (e.g. turbidity)					

	Year 1 (200) __ Projected __ Actual	Year 2 (200) __ Projected __ Actual	Year 3 (200) __ Projected __ Actual	Year 4 (200) __ Projected __ Actual	Year 5 (200) __ Projected __ Actual
15.					
16.					
17.					
18.					
l. Insurance					
1. Vehicles	\$	\$	\$	\$	\$
2. Liability	\$	\$	\$	\$	\$
3. Workers' Comp	\$	\$	\$	\$	\$
4.					
m. Advertising					
n. Loan or Bond Principal Payments					
1.					
2.					
o. Loan or Bond Interest Payments					
1.					
2.					
p. Transfers of Funding Out					
q. Capital Equipment Purchases					
1. New Facilities					
2. Renewal and Replacement Facilities					
r. Equipment Depreciation					
s. Taxes					

	Year 1 (200) __ Projected __ Actual	Year 2 (200) __ Projected __ Actual	Year 3 (200) __ Projected __ Actual	Year 4 (200) __ Projected __ Actual	Year 5 (200) __ Projected __ Actual
1. Property Tax	\$	\$	\$	\$	\$
2. Income Tax	\$	\$	\$	\$	\$
3. Sales Tax Based on Water Sales	\$	\$	\$	\$	\$
4. Other Taxes					
5.	\$	\$	\$	\$	\$
6.					
t. Other Expenses					
1. Office supplies	\$	\$	\$	\$	\$
2. Postage	\$	\$	\$	\$	\$
3.					
4.					
Total Expenses					
Income and Funds					
a. Unmetered Water Revenue	\$	\$	\$	\$	\$
b. Metered Water Revenue	\$	\$	\$	\$	\$
c. Other Water Revenue	\$	\$	\$	\$	\$
d. Connection Fees	\$	\$	\$	\$	\$
e. Other Fees	\$	\$	\$	\$	\$
f. Loan Funds	\$	\$	\$	\$	\$
g. Grant Funds	\$	\$	\$	\$	\$
h. Funds from Personal or Corporate Account	\$	\$	\$	\$	\$
i. Cash Reserves	\$	\$	\$	\$	\$
j. Interest and Dividend Income	\$	\$	\$	\$	\$
k.					
Total Income and Funds					
Total Expenses Subtracted From Total Income and Funds					

IV) List of Additional Sources of Funding and/or Information

Disclaimer: This list is not intended to be exhaustive, nor does it necessarily include all of the organizations and/or resources most relevant to your situation.

United States Environmental Protection Agency
Region 4
Drinking Water Section
61 Forsyth Street
Atlanta, GA 30303-8960
<http://www.epa.gov/ogwdw>

Florida Department of Environmental Protection
Drinking Water Section Headquarters Office
2600 Blair Stone Road, M.S. 3520
Tallahassee, FL 32399-2400
(850) 245-8624
<http://www.dep.state.fl.us>

Florida Public Service Commission
Division of Water and Wastewater
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850
(850) 413-6100
<http://www.psc.state.fl.us>

Florida Rural Water Association
2970 Wellington Circle W., Suite 101
Tallahassee, FL 32308-6885
(850) 668-2746
<http://www.frwa.net>

USDA Rural Development
Rural Utilities Services
Mr. Glenn Walden, Rural Utilities Services Program Director
P.O. Box 147010
Gainesville, FL 32614
(352) 338-3440 x3485
Glenn.Walden@fl.usda.gov
<http://www.usda.gov/rus/water/index.htm>

Florida Department of Community Affairs
Division of Housing and Community Development
Community Development Block Grants, STEP Programs
Ms. Libby Lane, Program Administrator, (850) 487-3644
Ms. Gail Stafford, Community Assistance Consultant, (850) 922-1889
2555 Shumard Oaks Boulevard
Tallahassee, FL 32399-2100
<http://www.dca.state.fl.us>

Florida Department of Community Affairs
Division of Emergency Management
Risk Management Planning Program
Ms. Victoria Sharpe
Program Manager
2555 Shumard Oak Boulevard
Tallahassee, FL 32399-2100
(850) 413-9913
<http://www.dca.state.fl.us/cps/arprmp/start.htm>
<http://www.dca.state.fl.us/cps/SERC/serc.htm>

Southeast Rural Community Assistance Project
145 W. Campbell Avenue S.W., Suite 800
P.O. Box 2868
Roanoke, VA 24001-2868
(540) 345-1184
<http://www.sercap.org>

Southeast Rural Community Assistance Project
2135 N.W. 40th Terrace, Suite A
Gainesville, FL 32605
(352) 379-9802
sercap@bellsouth.net

Northwest Florida Water Management District
81 Water Management Drive
Havana, FL 32333-4712
Tel. (850) 539-5999
<http://www.state.fl.us/nwfwmd/>

St. Johns River Water Management District

P.O. Box 1429
Palatka, FL 32178-1429
(386) 329-4500
<http://sjr.state.fl.us>

South Florida Water Management District
P.O. Box 24680
West Palm Beach, FL 33416-4680
(561) 686-8800 or
1-800-432-2045 (FL only)
<http://www.sfwmd.gov>

Suwannee River Water Management District
9225 County Road 49
Live Oak, FL 32060
Phone: (386) 362-1001 or
1-800-226-1066 (inside Florida)
<http://www.srwmd.state.fl.us/>

Southwest Florida Water Management District
2379 Broad Street
Brooksville, FL 34604-6899
(352) 796-7211 or
1-800-423-1476 (FL only)
<http://www.swfwmd.state.fl.us/>

American Water Works Association
6666 West Quincy Ave.
Denver, CO 80235
(303) 794-7711
<http://www.awwa.org>

Florida Resource Journal site
<http://www.fwrj.com>

National Drinking Water Clearinghouse site
<http://www.nesc.wvu.edu/ndwc/>

Rural and Small Water Systems Training Guide, Understanding Financial Reports, National Rural Water Association, 1990.

Rural and Small Water Systems Training Guide, Water Rates: Information for Decision Makers, National Rural Water Association, 1990.

American Water Works Association Manual of Water Supply Practices, Alternative Rates, AWWA Manual M34, First Edition.

American Water Works Association Manual of Water Supply Practices, Water Rates, AWWA Manual M1, Fourth Edition.

Show-Me Ratemaker Software: download from Missouri Department of Natural Resources, Environmental Assistance Office, Government Assistance Unit, P.O. Box 176, Jefferson City, MO 65102, (800) 361-4827, www.DNR.state.mo.us/OAC/LGOV.htm#emisoftware

V. Examples of Answers to Items II through IV and VI of DEP Form 62-555.900(20) for Two Hypothetical Water Systems

A. Hypothetical System #1

Hypothetical Water System #1 is a mobile home park. The system has 20 connections and serves 60 people. It is a groundwater system, and the only treatment is hypochlorite. The cost to build was \$25,000. The loan is a 10-year loan at 10%. The charge to the customers for water is \$5.50/gal. The owner devotes only part of his time to the water system.

Answer to Items II and III of DEP Form 62-555.900(20)
Hypothetical System #1

Worksheet of Projected or Actual Income Sources or Funds and Expenses

Water System Name: Hypothetical Water System #1

Identification Number (PWS-ID) XXXXXXXX

Date of commencement of actual or planned operations January 1, 2003

Note: the beginning of Year 1 is the date of commencement of operations.

Example of Completed DEP Form 62-555.900(20) for Hypothetical Water System #1 (continued)					
Capacity Development Worksheet of Projected or Actual Income or Funds and Expenses					
	Year 1 (2003)	Year 2 (2004)	Year 3 (2005)	Year 4 (2006)	Year 5 (2007)
	<u> </u> <input checked="" type="checkbox"/> Projected	<u> </u> <input checked="" type="checkbox"/> Projected	<u> </u> <input checked="" type="checkbox"/> Projected	<u> </u> <input checked="" type="checkbox"/> Projected	<u> </u> <input checked="" type="checkbox"/> Projected
	<u> </u> Actual	<u> </u> Actual	<u> </u> Actual	<u> </u> Actual	<u> </u> Actual
Expenses					
a. Salaries, Wages, Benefits, and Pensions					
1. Operator at \$250/mo	3,000.00	3,180.00	3,370.80	3,573.05	3,787.43
2. Owner/manager at \$13/h X 2 h/wk	1,352.00	1,433.12	1,519.11	1,610.25	1,706.87
3. Administrative Assistant at 8 h/mo X 7.50/hr (includes accounting)	720.00	763.20	808.99	857.53	908.98
4. Maintenance person (maintains system between operator visits) (\$7.00/hr X 4 hr/mo)		336.00	356.16	377.53	400.18
b. Purchased Water					
c. Purchased Utilities					
1. Purchased Power at \$125/mo	1,500.00	1,590.00	1,685.40	1,786.52	1,893.72

Example of Completed DEP Form 62-555.900(20) for Hypothetical Water System #1 (continued)					
Capacity Development Worksheet of Projected or Actual Income or Funds and Expenses					
	Year 1 (2003)	Year 2 (2004)	Year 3 (2005)	Year 4 (2006)	Year 5 (2007)
	<input type="checkbox"/> Projected	<input type="checkbox"/> Projected	<input type="checkbox"/> Projected	<input type="checkbox"/> Projected	<input type="checkbox"/> Projected
	Actual	Actual	Actual	Actual	Actual
2. Telephone Service at \$15/mo (1/3 of \$45.00 total phone bill)	178.20	188.89	200.23	212.24	224.97
3. Other Utilities					
d. Fuel for Power Production					
e. Chemicals					
1. Chlorine (hypochlorite)	100.00	100.00	100.00	100.00	100.00
f. Materials, Supplies, and Parts					
1. Pipes for chlorine injection					
2. General O&M tools, parts	200.00	212.00	224.72	238.20	252.50
3. Cleaning Supplies	50.00	53.00	56.18	59.55	63.12
4. Paint	30.00	31.80	33.71	35.73	37.87
5. Generator fuel (not required)					
g. Contractual Services					
1. Engineering					
2. Accounting/auditing					
3. Legal	700.00				
4. Storage Tank Cleaning and Maintenance					

Example of Completed DEP Form 62-555.900(20) for Hypothetical Water System #1 (continued)					
Capacity Development Worksheet of Projected or Actual Income or Funds and Expenses					
	Year 1 (2003)	Year 2 (2004)	Year 3 (2005)	Year 4 (2006)	Year 5 (2007)
	<input checked="" type="checkbox"/> Projected	<input checked="" type="checkbox"/> Projected	<input checked="" type="checkbox"/> Projected	<input checked="" type="checkbox"/> Projected	<input checked="" type="checkbox"/> Projected
	Actual	Actual	Actual	Actual	Actual
5. Assistance with preparing reports relating to state and federal regulations (provided through FRWA membership)	79.00	79.00	79.00	79.00	79.00
h. Equipment Rental					
i. Rental of Real Estate					
j. Transportation Expenses					
1. Truck purchase payment (relating to water business)					
2. Truck gas, repair, and maintenance (relating to water business)					
3. Vehicle Mileage at \$0.31/mi (relating to water business)	500.00	500.00	500.00	500.00	500.00
k. Analytical Monitoring. Note: The number of samples and the dates of sampling are determined according to state and federal rules. For information on the requirements for a specific system, contact the Department.					
1. Bacteriological (\$15/sample X 3 samples/mo. X 12 mo.)	540.00	572.40	606.74	643.15	681.74
2. Nitrate/Nitrite (1 sample)	15.00	15.90	16.85	17.87	18.94

Example of Completed DEP Form 62-555.900(20) for Hypothetical Water System #1 (continued)					
Capacity Development Worksheet of Projected or Actual Income or Funds and Expenses					
	Year 1 (2003)	Year 2 (2004)	Year 3 (2005)	Year 4 (2006)	Year 5 (2007)
	<u> </u> <u> </u> Projected	<u> </u> <u> </u> Projected	<u> </u> <u> </u> Projected	<u> </u> <u> </u> Projected	<u> </u> <u> </u> Projected
	Actual	Actual	Actual	Actual	Actual
3. Inorganics (without asbestos)	190.00			190.00	
4. VOCs (\$135 per sample)	540.00			135.00	135.00
5. Pesticides and PCBs (4 quarterly samples at \$850 each. Note this cost could be reduced if the system were eligible to composite samples with other systems and did so. Representatives of the Department will have details.)	3,400.00		waiver		
6. Naturally-occurring Radiologicals	160.00			40.00	
7. Synthetic Radiologicals					
8. Stage 1 D/DBP Parameters		150.00	150.00	150.00	150.00
9. Turbidity – Surface Water					
10. Lead and Copper (tap water) (10 samples at \$7.50 per sample)	75.00	75.00	extended	extended	75.00
11. Secondary Contaminants	140.00			140.00	
12. Unregulated Contaminants					
13. ICR Monitoring					
14. Monitoring for process control (for example, turbidity)	20.00	20.00	20.00	20.00	20.00

Example of Completed DEP Form 62-555.900(20) for Hypothetical Water System #1 (continued)					
Capacity Development Worksheet of Projected or Actual Income or Funds and Expenses					
	Year 1 (2003)	Year 2 (2004)	Year 3 (2005)	Year 4 (2006)	Year 5 (2007)
	<input checked="" type="checkbox"/> Projected	<input checked="" type="checkbox"/> Projected	<input checked="" type="checkbox"/> Projected	<input checked="" type="checkbox"/> Projected	<input checked="" type="checkbox"/> Projected
	Actual	Actual	Actual	Actual	Actual
l. Insurance					
1. Vehicles					
truck					
2. Liability	1,500.00	1,500.00	1,500.00	1,500.00	1,500.00
3. Workers' Comp	1,000.00	1,100.00	1,200.00	1,300.00	1,400.00
m. Advertising					
n. Loan or Bond Principal Payments					
1. loan	770.00	900.00	1,030.00	1,155.00	1,285.00
o. Loan or Bond Interest Payments					
1. loan	3,230.00	3,100.00	2,970.00	2,845.00	2,715.00
p. Transfers of Funding Out					
q. Capital Equipment Purchases					
1. New Facilities					
new pipes as part of planned expansion to provide 10 more connections					1,000.00
new meters and other equipment as part of planned expansion to provide 10 more connections and installation					5,000.00

Example of Completed DEP Form 62-555.900(20) for Hypothetical Water System #1 (continued)					
Capacity Development Worksheet of Projected or Actual Income or Funds and Expenses					
	Year 1 (2003)	Year 2 (2004)	Year 3 (2005)	Year 4 (2006)	Year 5 (2007)
	<u> </u> <u>x</u> Projected	<u> </u> <u>x</u> Projected	<u> </u> <u>x</u> Projected	<u> </u> <u>x</u> Projected	<u> </u> <u>x</u> Projected
	<u> </u> Actual	<u> </u> Actual	<u> </u> Actual	<u> </u> Actual	<u> </u> Actual
2. Renewal and Replacement Facilities					
savings for storage tank repair					
perimeter fencing repair	15.00	20.00	25.00	30.00	35.00
r. Equipment Depreciation					
s. Taxes					
1. Property Tax (relating to water business)	250.00	265.00	280.90	297.75	315.62
2. B & O Tax					
3. Income Tax					
4. Other Taxes					
5. Sales tax based on water sales					
t. Other Expenses					
1. Office supplies	300.00	318.00	337.08	357.30	378.74
2. Postage	75.00	79.50	84.27	89.33	94.69
3. Operator's Logbook (bound with numbered pages, \$10.00 for 100 pp. 7.5 x 11")	20.00	21.20	22.47	23.82	25.25

Example of Completed DEP Form 62-555.900(20) for Hypothetical Water System #1 (continued)					
Capacity Development Worksheet of Projected or Actual Income or Funds and Expenses					
	Year 1 (2003)	Year 2 (2004)	Year 3 (2005)	Year 4 (2006)	Year 5 (2007)
	<input checked="" type="checkbox"/> Projected	<input checked="" type="checkbox"/> Projected	<input checked="" type="checkbox"/> Projected	<input checked="" type="checkbox"/> Projected	<input checked="" type="checkbox"/> Projected
	Actual	Actual	Actual	Actual	Actual
Total Expenses	20,649.20	16,604.01	17,177.61	18,228.82	24,649.62
Income and Funds					
a. Unmetered Water Revenue	100.00	100.00	100.00	100.00	100.00
b. Metered Water Revenue	7,528.13	10,037.50	10,037.50	10,037.50	15,056.25
c. Other Water Revenue					
d. Connection Fees	15,000.00	5,000.00			10,000.00
e. Other Fees					
f. Loan Funding					
g. Grant Funding					
h. Funding from Personal or Corporate Account	7,000.00	3,000.00	2,000.00	2,619.01	0.00
i. Cash Reserves (carryover from last year's surplus)		8,978.93	10,512.42	5,472.31	0.00
j. Interest and Dividend Income					
k. Cash reserves (Other than carryover from last year's surplus. For depreciation, savings for equipment maintenance, etc.)					
l.					
m.					

Example of Completed DEP Form 62-555.900(20) for Hypothetical Water System #1 (continued)					
Capacity Development Worksheet of Projected or Actual Income or Funds and Expenses					
	Year 1 (2003)	Year 2 (2004)	Year 3 (2005)	Year 4 (2006)	Year 5 (2007)
	<input checked="" type="checkbox"/> Projected	<input checked="" type="checkbox"/> Projected	<input checked="" type="checkbox"/> Projected	<input checked="" type="checkbox"/> Projected	<input checked="" type="checkbox"/> Projected
	Actual	Actual	Actual	Actual	Actual
Total Income and Funds	29,628.13	27,116.43	22,649.92	18,228.82	25,156.25
Total Expenses Subtracted From Total Income and Funds	8,978.93	10,512.42	5,472.31	0.00	506.63

Answer to Item IV (Managerial Capacity) of DEP Form 62-555.900(20) for
Hypothetical Water System #1

Title	Responsibilities	Certifications	Is position vacant or filled?
Owner/Manager	Responsible for entire water system. Manages operations. Supervises operator, maintenance person, and administrative assistant.	N/A	filled
Operator	Operation of water system	Class C	filled
Maintenance Person	Building maintenance, grounds work	N/A	vacant (projected hiring date 12/2002)
Administrative Assistant	Assist with duties such as accounting, dealing with persons outside the water system	N/A	filled

Operator: C.D. Anyname, Class C Operator Certification number XXXXXXXXXX.

Persons responsible for system: The owner, A.B. Noname, 2345 Noname Lane, Anytown, FL XXXXX, (XXX) XXX-XXXX is responsible for acting on behalf of the system in case of emergency, to spend money, or to make other decisions.

Answer to Item VI of DEP Form 62-555.900(20) (Alternate means of providing water service) for Hypothetical System #1

The Hypothetical Water System will be located in a rural area.

How determined which utilities are close to the proposed service area: We have worked in this area for several years and know the locations of other water systems. There is only one utility close to us, the Anonymous Water System.

Utilities able to provide service to our proposed service area: The address of the Anonymous Water System is XXX Nowhereville Lane, Anytown FL XXXXX. Their closest distribution line is four miles from our planned distribution system. We spoke with J. Fakename, who said they would not be interested in extending their lines into our proposed service area. They said the number of customers we could provide would not be enough to make it cost effective for them to extend their lines. X. Fakename said the Anonymous Water System would be willing and capable of supplying water to the potential customers of the Hypothetical Water System, if the Hypothetical Water System were to install the distribution system. The Anonymous Water system would charge a connection charge.

Reasons the Hypothetical Water System does not plan to connect to the Anonymous Water System:

Technical – It would be more convenient for us to build our system as planned rather than build lines connecting our system to the Anonymous Water System, each of which would be several miles long.

Managerial – We would prefer to have control over the operations of our water system and thus be able to make any needed changes. Delays caused by working with an outside utility would be eliminated.

Financial – We have estimated that over the life of our system the expense of hooking up to the Anonymous Water System would exceed the expense of building and operating our own system. This would be mostly due to the expenses of building distribution lines, maintaining the distribution lines, and paying the connection charges. Also the rates charged by the Anonymous Water System would be out of our control. We have determined that we will be able to provide water to our customers at competitive rates.

B. Hypothetical System #2

Hypothetical Water System #2 serves a day care center. It previously was in operation as a non-public water system. It added chlorination and connections and thereby became a public water system. This system is required to submit the completed Form 62-555.900(20) within 90 days of its becoming a public water system. The system has 5 connections and serves 50 people. It is a groundwater system, and the only treatment is hypochlorite. The owners do not plan to have any capital improvements or replacements during the first five years of operation, because the system was recently upgraded.

The owners of the day care center paid the cost of constructing the water system using funds from the business bank account before it became a public water system. Because these costs were paid before it fell under the capacity development rules, they need not be included in the attached answer to Item 2 of Form 62-555.900(20). The funding to pay for the system's operating expenses comes from the bank account of the business.

**Answer to Items II and III of DEP Form 62-555.900(20)
Hypothetical System #2**

Water System Name: Hypothetical Water System #2

Identification Number (PWS-ID): 1164567

Date of commencement of operations of water system: January 1, 2003

Note: the beginning of Year 1 is the commencement of operations.

	Year 1 (2003) <u>X</u> Projected __ Actual	Year 2 (2004) <u>X</u> Projected __ Actual	Year 3 (2005) <u>X</u> Projected __ Actual	Year 4 (2006) <u>X</u> Projected __ Actual	Year 5 (2007) <u>X</u> Projected __ Actual
Form Item II - Expenses					
a. Salaries, Wages, Benefits, and Pensions					
1. Operator	\$2,700	\$2,700	\$2,700	\$2,700	\$2,700
2. Owner	\$	\$	\$	\$	\$
3. Person maintaining the system between operator visits	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000
4.	\$	\$	\$	\$	\$
b. Purchased Water	\$	\$	\$	\$	\$
c. Purchased Utilities					
1. Purchased Power	\$500	\$500	\$500	\$500	\$500
2. Telephone Service	\$	\$	\$	\$	\$
3. Other Utilities	\$	\$	\$	\$	\$
d. Fuel for Power Production	\$	\$	\$	\$	\$
e. Chemicals					
1. chlorine	\$100	\$100	\$100	\$100	\$100
2.					
3.					
4.					
5.					
f. Materials, Supplies, and Parts	\$100	\$100	\$150	\$150	\$150
1.					
2.					

V Examples of Answers to Items II through IV and VI of Form 62-555.900(20)

	Year 1 (2003) <u>X</u> Projected __ Actual	Year 2 (2004) <u>X</u> Projected __ Actual	Year 3 (2005) <u>X</u> Projected __ Actual	Year 4 (2006) <u>X</u> Projected __ Actual	Year 5 (2007) <u>X</u> Projected __ Actual
3.					
4.					
5.					
g. Contractual Services					
1. Engineering	\$	\$	\$	\$	\$
2. Accounting	\$	\$	\$	\$	\$
3. Legal	\$	\$	\$	\$	\$
4.					
5.					
h. Equipment Rental					
1.					
2.					
3.					
i. Real Estate					
1. Rental Expense					
2. Purchase Expense					
j. Transportation Expenses					
1.					
2.					
3.					
4.					
5.					
k. Analytical Monitoring	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000
1. Bacteriological					
2. Nitrate/Nitrite					
3. Inorganics					
4. VOCs					
5. Pesticides and PCBs					
6. Naturally-occurring Radiologicals					
7. Synthetic Radiologicals					
8. Total Trihalomethanes (TTHM)					

V Examples of Answers to Items II through IV and VI of Form 62-555.900(20)

	Year 1 (2003) <u>X</u> Projected __ Actual	Year 2 (2004) <u>X</u> Projected __ Actual	Year 3 (2005) <u>X</u> Projected __ Actual	Year 4 (2006) <u>X</u> Projected __ Actual	Year 5 (2007) <u>X</u> Projected __ Actual
9. Turbidity – Surface Water					
10. Lead and Copper (tap water)					
11. Secondary Contaminants					
12. Unregulated Contaminants					
13. ICR Monitoring					
14. Monitoring for process control (e.g. turbidity)					
15.					
16.					
17.					
18.					
l. Insurance					
1. Vehicles	\$	\$	\$	\$	\$
2. Liability	\$	\$	\$	\$	\$
3. Workers' Comp	\$	\$	\$	\$	\$
4.					
m. Advertising					
n. Loan or Bond Principal Payments					
1.					
2.					
o. Loan or Bond Interest Payments					
1.					
2.					
p. Transfers of Funding Out					
q. Capital Equipment Purchases					
1. New Facilities					

V Examples of Answers to Items II through IV and VI of Form 62-555.900(20)

	Year 1 (2003) <input checked="" type="checkbox"/> Projected <input type="checkbox"/> Actual	Year 2 (2004) <input checked="" type="checkbox"/> Projected <input type="checkbox"/> Actual	Year 3 (2005) <input checked="" type="checkbox"/> Projected <input type="checkbox"/> Actual	Year 4 (2006) <input checked="" type="checkbox"/> Projected <input type="checkbox"/> Actual	Year 5 (2007) <input checked="" type="checkbox"/> Projected <input type="checkbox"/> Actual
2. Renewal and Replacement Facilities					
r. Equipment Depreciation					
s. Taxes					
1. Property Tax	\$	\$	\$	\$	\$
2. Income Tax	\$	\$	\$	\$	\$
3. Sales Tax Based on Water Sales	\$	\$	\$	\$	\$
4. Other Taxes					
5.	\$	\$	\$	\$	\$
6.					
t. Other Expenses					
1. Office supplies	\$	\$	\$	\$	\$
2. Postage	\$	\$	\$	\$	\$
3.					
4.					
5.					
6.					
Total Expenses	\$6,400	\$6,400	\$6,450	\$6,450	\$6,450
Form Item III - Income and Funds					
a. Unmetered Water	\$	\$	\$	\$	\$

V Examples of Answers to Items II through IV and VI of Form 62-555.900(20)

	Year 1 (2003) <input checked="" type="checkbox"/> Projected <input type="checkbox"/> Actual	Year 2 (2004) <input checked="" type="checkbox"/> Projected <input type="checkbox"/> Actual	Year 3 (2005) <input checked="" type="checkbox"/> Projected <input type="checkbox"/> Actual	Year 4 (2006) <input checked="" type="checkbox"/> Projected <input type="checkbox"/> Actual	Year 5 (2007) <input checked="" type="checkbox"/> Projected <input type="checkbox"/> Actual
Revenue					
b. Metered Water Revenue	\$	\$	\$	\$	\$
c. Other Water Revenue	\$	\$	\$	\$	\$
d. Connection Fees	\$	\$	\$	\$	\$
e. Other Fees	\$	\$	\$	\$	\$
f. Loan Funding	\$	\$	\$	\$	\$
g. Grant Funding	\$	\$	\$	\$	\$
h. Funding from Personal or Corporate Account	\$6,400	\$6,400	\$6,450	\$6,450	\$6,450
i. Cash Reserves	\$	\$	\$	\$	\$
j. Interest and Dividend Income	\$	\$	\$	\$	\$
k.					
l.					
m.					
Total Income and Funds	\$6,400	\$6,400	\$6,450	\$6,450	\$6,450
Total Expenses Subtracted From Total Income and Funds	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

**Answer to Item IV (Managerial Capacity) of DEP Form 62-555.900(20)
for Hypothetical Water System #2**

The following person is in responsible charge of the water system. This includes, but is not limited to, acting on behalf of the water system in case of emergency and spending money on the system.

John _____
Owner, Day Care Center
1234 Main Street
Anytown, Florida 32xxx
Telephone (XXX) XXX-XXXX

The operator is Mike _____, Class C license number _____

**Answer to Item VI (Alternate Means of Providing Water Service) of
DEP Form 62-555.900(20) for Hypothetical Water System
#2**

The closest point where we could hook up to another water system is five miles away. Therefore it would be too expensive to hook up to another water system.