South Florida Water Management District

Memorandum

TO: Users of the Management of Water Use Permitting Information Manual Volume III

FROM: Regulation Division - Water Use Bureau

DATE: July 31, 2014 (revised 9/7/2015)

SUBJECT: *Volume III Water Use Permitting Manual*

The Water Use Bureau offers several ways to access Volume III. The most current version of Volume III can always be retrieved online by visiting our website as follows:

- by going to www.sfwmd.gov, under "*Businesses"*, click on "*Permits*"; under "*Related Links*" click on the "*Consumptive Water Use Permits"* icon; scroll down to the center of the webpage; or
- by performing a search on the District's Library & Multimedia search page and entering keywords such as (CUP, WU, Vol III, Manual, etc).

If you would like to be notified of future revisions as they become available, please use the District's ePermitting system. T*o receive electronic notification of updates to Volume III* subscribe to eNoticing (ePermitting) at www.sfwmd.gov/ePermitting.

If you need further information regarding eNoticing, you may contact Cathy Widness by email at: cwidness@sfwmd.gov or by telephone: 561-682-6317.

If you need further information about this manual, please contact Kellie Madison at 561-682-6906.

8/31/03 ("B-List"): 40E-1.607, 40E-2.011, 40E-2.091, 40E-2.301, 40E-2.321, 40E-5.011, 40E-5.021, 40E-5.041, 40E-5.051, 40E-5.101, 40E-5.301, 40E-5.321, 40E-5.331, 40E-5.381, 40E-20.011, 40E-20.091, 40E-20.101, 40E-20.301, 40E-20.302, 40E-20.321, 40E-20.331, 40E-21.651, and the Basis of Review for Water Use Permit Applications within the South Florida Water Management District - revisions to the supplemental irrigation requirements, pollution remediation, interference with existing legal uses, existing offsite land use impacts, pasture irrigation, reuse of reclaimed water, wellfield operational plans, diversion/impoundment allocation, permit duration, permit renewal process, impact evaluations, local sources first, aquifer storage and recovery, wetland protection, areas with maximum developable limits, water conservation measures, water shortage plan, and fees and forms.

4/23/07 ("Lower East Coast Regional Water Availability Restricted Allocation"): 40E-2.091, 40E-2.301, 40E-2.321, 40E-2.331, 40E-8.421, 40E-20.011, 40E-20.091, 40E-20.301, 40E-20.302, 40E-20.321, 40E-20.331, 40E-20.381, and the Basis of Review for Water Use Permit Applications within the South Florida Water Management District – restricts allocation to consumptive users the water needed for the recovery, protection and restoration of the Everglades and North Palm Beach County/Loxahatchee River Watershed Waterbodies. These rule amendments regulate the use of water from the Waterbodies by the Lower East Coast and Northern Palm Beach County urban areas within Dade, Broward, Palm Beach and Martin Counties.

9/13/07 ("Lake Okeechobee Basin Irrigation Permit Expiration"): 40E-2.091, 40E-20.091, and the Basis of Review for Water Use Permit Applications within the South Florida Water Management District – extends the application and expiration dates for the Lake Okeechobee Basin irrigation permits.

2/13/08 ("Central Florida Coordination Area (CFCA) Phase I"): 40E-1.091, 40E-2.301, 40E-2.321, 40E-2.331, 40E-2.381, 40E-20.011, 40E-20.091, 40E-20.301, 40E-20.302, 40E-20.321, 40E-20.331, 40E-20.381, and the Basis of Review for Water Use Permit Applications within the South Florida Water Management District – implements an interim regulatory strategy for protecting the public interest against excessive stress on the water resources of Central Florida due to the consumptive use of water and provide for allocations of available groundwater and expeditious development of supplemental water supply projects to avoid the adverse effects of competition as well as harm to the water resources.

10/14/08 ("Lake Okeechobee Service Area Water Availability"): 40E-2.091, 40E-8.421, 40E-20.091, and the Basis of Review for Water Use Permit Applications within the South Florida Water Management District – establishes criteria that affect applications for consumptive use permits requesting withdrawal of surface water from Lake Okeechobee or hydraulically connected systems. The criteria requires permit applicants to demonstrate the requested allocation will not cause a net increase in the volume of surface water withdrawn from Lake Okeechobee over the base condition water use. Moreover, the criteria states allocation of water to new public water supply uses above the general permit threshold is determined to be incompatible with the Lake Okeechobee

water supply source. The amendment also includes changes to the Lake's minimum flows and levels rule include recovery strategies.

7/2/09 ("Picayune Strand and Fakahatchee Estuary Water Reservation"): Rules 40E-2.011, 40E-2.091, 40E-2.301, 40E-2.331, 40E-10.011, 40E-10.021, 40E-10.031, 40E-10.041, 40E-20.091, 40E-20.301, 40E-20.331, and the Basis of Review for Water Use Permit Applications within the South Florida Water Management District - reserves the water identified for the protection of fish and wildlife for Picayune Strand and the Fakahatchee Estuary (CERP Project). These rule amendments provide the affected community with an easily identified location for water reservations which are a tool to protect natural system waters from consumptive use.

3/15/10 ("Mandatory Year-Round Landscape Irrigation Conservation Measures"): Rules 40E-2.051, 40E-2.061, 40E-2.091, 40E-2.331, 40E-20.091, 40E-20.331, 40E-24.011, 40E-24.101, 40E-24.201, 40E-24.301, 40E-24.401, 40E-24.501, F.A.C. – and the Basis of Review for Water Use Permit Applications within the South Florida Water Management District, creates a general permit by rule for outdoor residential consumptive use of water and allows for modification of such a permit that does not allow more cumulative days and time to conduct landscape irrigation than those provided under Chapter 40E-24, F.A.C., and amends water conservation requirements consistent with ongoing rule amendments for mandatory year-round landscape irrigation conservation measures in Chapter 40E-24, F.A.C.

3/18/10 ("North Fork St. Lucie River Water Reservation"): Rules 40E-2.091, 40E-10.021, 40E-10.031, 40E-10.041, 40E-10.051, 40E-20.091, and Section 3.11.2 of the Basis of Review for Water Use Permit Applications within the South Florida Water Management District – reserves the water identified for the protection of fish and wildlife in the North Fork of the St. Lucie River (CERP Project). The rule amendments contain specific language concerning the timing when the reserved water will be available for the protection of fish and wildlife because this water will not be available until certain components of the Indian River Lagoon – South project are operational. The rule amendments provide a mechanism for reviewing and revising the reservation in light of changed conditions. The amendments set forth that presently existing legal uses for the duration of the permit existing on [effective date] are determined to be not contrary to the public interest, pursuant to Section 373.223(4), F.S. The amendments to Chapters 40E-2 and 40E-20, F.A.C., and the incorporated Basis of Review for Water Use Permit Applications include a new subsection 3.11.2, which clarifies that all applications for consumptive use permits that are deemed complete prior to operation of certain components of the Indian River Lagoon – South Project are determined not to use the water reserved for the North Fork of the St. Lucie River.

5/20/12 ("Reduction of Regulatory Burdens"): Rule 40E-1.659, 40E-4.021. 40E-4.051, 40E-4.091, 40E-4.101, 40E-4.321, F.A.C. - reduces the number of copies applicants are required to submit and increase the duration of conceptual permits from 2 years to 5, thereby reducing regulatory burdens. The amendments also delete definitions and exemptions that are duplicative of Florida Statutes.

5/27/12 (Legislative Repeals): Rules 40E-0.103, 40E-0.105, 40E-1.100, 40E-1.1065, 40E-1.125, 40E-1.200, 40E-1.208, 40E-1.300, 40E-1.400, 40E-1.500, 40E-1.511, 40E-1.520, 40E-1.521, 40E-1.564, 40E-1.570, 40E-1.601, 40E-1.608, 40E-1.611, 40E-1.6115, 40E-2.441, 40E-3.010, 40E-3.0511, 40E-4.311, 40E-7.201, 40E-7.205, 40E-7.300, 40E-7.401, 40E-20.141, 40E-20.341, 40E-20.391, 40E-21.031, 40E-21.132, 40E-21.611, 40E-22.112, 40E-22.132, 40E-22.242, 40E-22.252, 40E-22.272, 40E-23.011, 40E-23.021, 40E-23.023, 40E-23.031, 40E-23.043, 40E-23.053, 40E-63.201, 40E-63.211, 40E-63.212, 40E-63.223, 40E-63.225, F.A.C. - Executive Order 11-211, Section 6, requires agencies to review its rules and regulations annually and submit recommendations to the Office of Fiscal Accountability. The District identified numerous rules that should be eliminated as duplicative or unnecessary. In lieu of the typical rulemaking process, those rules were repealed by the Legislature.

9/26/12: ("Reclaimed Water"): Rules 40E-2.091, 40E-20.091, F.A.C., and the Basis of Review for Water Use Permit Applications within the South Florida Water Management District – deletes references to repealed Chapter 40E-23, F.A.C.; requires applicants within a mandatory reuse zone to perform the feasibility evaluation; requires certain permit applicants to provide documentation from a reuse utility addressing the availability of reclaimed water; and requires applicants located within a mandatory reuse zone, who are seeking an allocation less than 3 million gallons per month, to perform the end user feasibility evaluation.

9/26/12 ("Water Well Rule"): 40E-3.021, 40E-3.038, 40E-3.101, 40E-3.411, 40E-3.507, 40E-3.512, 40E-3.517, 40E-3.521, 40E-3.600, 40E-3.601, F.A.C. - incorporates water well construction standards and forms adopted by the Florida Department of Environmental Protection (FDEP) to reflect FDEP's amendments to Chapter 62-524, F.A.C., to adopt revised statewide forms, update District forms, design criteria, and standards, delete old forms, and to remove duplicative definitions and rules; and creates new Rule 40E-3.600, F.A.C., Scope of Part VI, and Rule 40E-3.601, F.A.C., General Permit for Water Wells within a Portion of Southern Miami-Dade County.

10/23/12 ("CUP Glitch Rule"): 40E-0.102, 40E-0.113, 40E-0.109, 40E-1.021, 40E-1.603, 40E-1.607, 40E-1.6065, 40E-1.6107, 40E-1.615, 40E-1.659, 40E-1.711, 40E-1.715, 40E-2.010, 40E-2.011, 40E-2.031, 40E-2.041, 40E-2.091, 40E-2.101, 40E-2.331, 40E-2.341, 40E-2.381, 40E-2.451, 40E-2.501, 40E-5.101, 40E-5.381, 40E-8.011, 40E-8.021, 40E-8.221, 40E-8.321, 40E-8.341, 40E-8.421, 40E-20.010, 40E-20.061, 40E-20.091, 40E-20.101, 40E-20.301, 40E-20.321, F.A.C., and the Basis of Review for Water Use Permit Applications within the South Florida Water Management District - In accordance with the requirements in Section 120.74(1), F.S., to review and revise the District's rules as often as necessary to ensure that its rules are correct and comply with statutory requirements, the District identified a number of water supply related and water use permitting rules in need of correction, modification, or updating. Amendments include deleting language regarding basin expiration dates; deleting references to repealed rules and other minor corrections; updating rules to be consistent with statutory amendments regarding the Governing Board's delegation authority; incorporating forms and materials;

extending submission of compliance reports every ten years; and changing "Xeriscape" to "Florida-Friendly Landscaping".

12/19/12 ("Repeal of Chapter 40E-30"): Rules 40E-30.011, 40E-30.031, 40E-30.042, 40E-30.112, 40E-30.141, and 40E-30.302, F.A.C. – repeals this Chapter as duplicative or unnecessary due to the amendments to Chapter 40E-3, F.A.C.

7/21/13 ("Biscayne Bay Coastal Wetlands (Phase I) Water Reservation"): Rules 40E-2.091, 40E-20.091, 40E-10.021, 40E-10.031, 40E-10.041, 40E-10.051, 40E-10.061, F.A.C., and the Basis of Review for Water Use Permit Applications within the South Florida Water Management District - reserves water from consumptive use for this CERP project and ensures that water is available to provide reasonable assurances that the proposed use of water will not withdraw water reserved for the natural system. Establishes criteria for direct and indirect withdrawals in the Nearshore Central Biscayne Bay reservation area.

9/8/13 ("Publications and Forms Incorporated by Reference – Water Wells"): Rule 40E-3.036, F.A.C. – Incorporated water well construction standards and forms adopted by the Florida Department of Environmental Protection.

10/1/13 (SWERP): Rules 40E-0.113, 40E-1.602, 40E-1.603, 40E-1.6065, 40E-1.607, 40E-1.6107, 40E1.615, 40E-1.659, 40E-4.010, 40E-4.011, 40E-4.021, 40E-4.041, 40E-4.0415, 40E-4.042, 40E-4.051, 40E-4.0515, 40E-4.054, 40E-4.091, 40E-4.101, 40E-4.201, 40E-4.205, 40E-4.301, 40E-4.302, 40E-4.303, 40E-4.305, 40E-4.321, 40E-4.331, 40E-4.341, 40E-4.351, 40E-4.361, 40E-4.381, 40E-4.451, 40E-40.010, 40E-40.011, 40E-40.021, 40E-40.031, 40E-40.041, 40E-40.042, 40E-40.051, 40E-40.061, 40E-40.091, 40E-40.101, 40E-40.141, 40E-40.302, 40E-40.321, 40E-40.331, 40E-40.341, 40E-40.351, 40E-40.381, 40E-40.391, 40E-40.407, 40E-41.011, 40E-41.043, 40E-41.053, 40E-41.063, 40E-41.143, 40E-41.160, 40E-41.243, 40E-41.260, 40E-41.263, 40E-41.333, 40E-41.343, 40E-41.363, 40E-400.010, 40E-400.021, 40E-400.201, 40E-400.211, 40E-400.215, 40E-400.315, 40E-400.316, 40E-400.417, 40E-400.427, 40E-400.431, 40E-400.437, 40E-400.439, 40E-400.443, 40E-400.447, 40E-400.453, 40E-400.455, 40E-400.457, 40E-400.463, 40E-400.467, 40E-400.470, 40E-400.475, 40E-400.483, 40E-400.485, 40E-400.487, 40E-400.495, 40E-400.500, and Chapter 62-330, F.A.C. - Section 373.4131, F.S. (2012), required DEP, in coordination with the five WMDs, to develop Statewide Environmental Resource Permitting rules. This was done by adopting Chapter 62-330, F.A.C., and amending the District's rules to assure consistency and eliminate redundancy. Chapters 40E-40 and 40E-400 were repealed.

1/19/14 ("Electronic Posting"): Rules 40E-1.021 and 40E-1.6058 - defines the term "electronic posting" and provides for electronic posting of the receipt of certain applications, as opposed to newspaper publication. Notice of Receipt of applications for individual water use permits, environmental resource permits for construction or alteration of dams, impoundments, reservoirs, and appurtenant works, and permits under Section 403.812, Fla. Stat., will continue to be published in the newspaper in accordance with Section 373.116, Fla. Stat.

7/14/14 ("CUPCON"): Rules 40E-1.021, 40E-1.602, 40E-1.603, 40E-1.6065, 40E-1.6107, 40E-1.615, 40E-1.659, 40E-2.011, 40E-2.041, 40E-2.061, 40E-2.071, 40E-2.091, 40E-2.101, 40E-2.301, 40E-2.321, 40E-2.331, 40E-2.381, 40E-3.011, 40E-3.021, 40E-3.040, 40E-3.041, 40E-3.051, 40E-3.301, 40E-3.451, 40E-5.011, 40E-5.041, 40E-5.301, 40E-8.011, 40E-8.421, 40E-8.431, 40E-10.011, 40E-10.031, 40E-10.051, 40E-20.010, 40E-20.011, 40E-20.061, 40E-20.091, 40E-20.101, 40E-20.301, 40E-20.302, 40E-20.321, 40E-20.331, 40E-20.351, 40E-20.381, 40E-24.011, 40E-24.101, 40E-24.201, F.A.C, and renaming and reorganizing the Basis of Review to the Applicant's Handbook for Water Use Permit Applications within the South Florida Water Management District – statewide consistency effort to make consumptive use permitting program less confusing for applicants, treat applicants equitably statewide, provide consistent protection of the environment, streamline the process, and incentivize behavior that protects water resources. Amendments include: 1) clarifying when agency action will occur for specific types of permit applications and the procedure for notifying applicants when projects do not qualify for noticed general water use permits; 2) clarifying types of permits; 3) incorporating and listing new forms and deleting old forms; updating fee table to make it easier to read, conform the permit types to those proposed in new Rule 40E-2.071, F.A.C., and incentivize the online submission of applications for noticed general permits by reducing the application fee; 4) setting forth the policy for permit applications that do not meet the provisions in Chapter 40E-2 for a general permit; 5) requiring a single noticed general permit for contiguous areas unless the projects are served by separate withdrawal facilities; 6) granting a general permit by rule for short-term dewatering and for closed-loop systems; 7) setting criteria for qualification for a noticed general permit; 8) incorporating provisions from Chapter 40E-20 and repealing 40E-20; 9) conforming to the Water Resource Implementation Rule; 10) providing for modification of permits by letter for certain types of projects or activities; 11) facilitating implementation of the recent amendments to Section 373.236(5), F.S.; 12) deleting references to repealed rules; and, 13) changing Basis of Review references to the Applicant's Handbook.

7/16/14 ("C-43 West Basin Storage Reservoir Water Reservation"): Rules 40E-2.091, 40E-10.021, 40E-10.031, 40E-10.041, F.A.C., and the Applicant's Handbook for Water Use Permit Applications within the South Florida Water Management District – this rulemaking is prospective in nature in that the proposed amendment involves a future reservation of water when the C-43 West Basin Storage Reservoir becomes operational. The proposed amendment includes language relative to the water reservation and new section 3.11.4 of the Applicant's Handbook.

7/31/14 ("CUPCON Fee Rule"): Rule 40E-1.607, F.A.C. – conforms the permit types to those proposed in new Rule 40E-2.071, F.A.C., makes the fee table easier to read, and incentivizes the online submission of applications for noticed general permits by reducing the application fee.

6/8/15 ("2015 Water Well Rule Updates"): New Rule 40E-3.042, F.A.C., sets forth circumstances in which an applicant may obtain a single permit for multiple wells. Rules 40E-3.011, 40E-3.021, 40E-3.035, 40E-3.036, 40E-3.038, 40E-3.040, 40E-3.041, 40E-

3.042, 40E-3.051, 40E-3.101, 40E-3.321, 40E-3.411, 40E-3.451, 40E-3.461, 40E-3.500, 40E-3.502, 40E-3.507, 40E-3.517, 40E-3.600, F.A.C. - includes hyperlinks to delegation agreements with local permitting authorities and adds the "Amendment to Agreement between South Florida Water Management District and Collier County (February 28, 1989); clarifies the exemption for a well which has received a permit under Chapter 62-528, F.A.C.; updates language regarding location of well(s); incorporates updated Chapters 62-531, 62-532, 62-524, the Department's Water Well Construction Disciplinary Guidelines and Citations Dictionary, the Department's Water Well Contractor Continuing Education Program, Rules 62-555.312, 62-555.315(1), Application for Continuing Education Coursework Approval, Florida Water Well Contractor Continuing Education Program, DEP Form 3 (June 2014), Application for Continuing Education Course Provider, Florida Water Well Contractor Continuing Education Program, DEP Form 4 (June 2014); and other minor corrections.

9/7/2015 ("2015 CUP Amendments"): Rules 40E-1.607, 40E-1.659, 40E-2.061, 40E-2.071, 40E-2.091, 40E-5.041, 40E-5.101, 40E-8.021, 40E-8.421, 40E-8.431, F.A.C. – clarifies the fees for individual mining/dewatering permit applications without increasing the fee; updates the list of forms incorporated by reference in the District's rules; updates to reflect current vertical datum; amends the Applicant's Handbook to provide clarity to recently adopted Consumptive Use Permitting Consistency rules; properly incorporates specific sections of the Environmental Resource Permit Applicant's Handbook Volume I; incorporates subsection 62-40.416(9), F.A.C.; adds language to permitting criteria for a public water supply conservation plan that is consistent with associated permit conditions; provides additional clarity for dewatering uses and associated permit conditions; updates statutory and rule references; updates references to water use forms; and make other minor corrections.

8/7/2016 ("ERP Amendments"): 40E-1.021, 40E-1.607, 40E-1.6107, 40E-1.615, 40E-1.659, 40E-1.702- addresses comments received from the Joint Administrative Procedures Committee regarding incorporation of enforcement guidelines that apply to the environmental resource permitting, consumptive use, and surface water management enforcement programs.

Management of Water Use
Permitting Information Manual
Volume III

Part A - Applicant's Handbook for Water Use Permit Applications

Part B - Water Use Management System Design and Evaluation Aids

Part C - Water Use Management Rules

South Florida Water Management District

Part – A

Applicant's Handbook

Applicant's Handbook for Water Use Permit Applications

WITHIN THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT

EFFECTIVE SEPTEMBER 7, 2015

sfwmd.gov

APPLICANT'S HANDBOOK FOR WATER USE PERMIT APPLICATIONS WITHIN THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT

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1.0 GENERAL PROVISIONS

Chapter 373, Florida Statutes (F.S.), enables and directs the District to regulate the use of water within its jurisdictional boundaries. The purpose of the water use regulatory program is to ensure that those water uses permitted by the District are reasonable-beneficial, will not interfere with any presently existing legal uses of water, and are consistent with the public interest pursuant to Section 373.223, F.S. The District has adopted rules for regulating the consumptive use of water, which are set forth in Chapters 40E-2, Florida Administrative Code, (F.A.C.). The Applicant's Handbook for Water Use Permit Applications within the South Florida Water Management District (Applicant's Handbook) is incorporated by reference in Rule 40E-2.091, F.A.C., and must be read in conjunction with Chapter 40E-2, F.A.C., as applicable.

1.1 Definitions

Additional definitions can be found in Chapter 373, F.S., and Chapters 40E-3, 40E-8, and 62-40, F.A.C.

Allocation Coefficient - A multiplier used in calculating permit allocations which accounts for the irrigation system efficiency and the effects on the relevant water storage system (see Resource Efficiency).

Annual Withdrawal - The quantity of water permitted to be withdrawn during any 12 month time period.

Aquifer - A geologic formation, group of formations, or part of a formation that contains sufficient saturated, permeable material to yield significant quantities of water to wells and springs.

Aquifer Remediation - A use of water involving the withdrawal of groundwater for the authorized removal of contaminants for the purposes of restoring water quality.

Aquifer Storage and Recovery – A well system operated for the purpose of injecting and storing water in an aquifer for direct retrieval and use.

Area of Influence – For groundwater systems the area of influence is defined by the cone of depression, and for surface water systems the area of influence is defined as the extent to which the withdrawal results in a measurable change in surface water levels or flows.

Certification or Certify – means the formal determination by the District, through a validation process consistent with state and federal law, of the total amount of water made available for consumptive use by a water resource development project or project phase.

Cone of Depression – The conical shape taken by the potentiometric surface showing the variation of drawdown with distance due to pumping from a well or wellfield.

Confined Aquifer - An aquifer that contains groundwater which is confined under pressure and bounded between significantly less permeable materials, such that water

will rise in a fully penetrating well above the top of the aquifer. In cases where the hydraulic head is greater than the elevation of the overlying land surface, a fully penetrating well will naturally flow at the land surface without means of pumping or lifting.

Confining Unit - A body of significantly less permeable material than the aquifer, or aquifers, that it stratigraphically separates. The hydraulic conductivity (K) may range from nearly zero to some value significantly lower than that of the adjoining aquifers.

Conservation - The beneficial reduction of water use through voluntary or mandatory altering of water use practices, reduction of distribution losses or installation and maintenance of low-volume water use systems, fixtures, or devices.

Constant Drawdown - In dewatering systems, the practice of pumping the source unit to a static level for a long duration. Also used in context with aquifer performance tests associated with flowing wells.

Consumptive Use - Any use of water which reduces the supply from which it is withdrawn or diverted.

Demand Management - Reducing the demand for water through activities that alter water use practices, improve efficiency in water use, reduce losses of water, reduce waste of water, alter land management practices and/or alter land uses.

Desalination - The process of removing or reducing salts and other chemicals from seawater or other highly mineralized water sources.

Detention - The delay of stormwater runoff prior to discharge into receiving waters.

Drawdown - The vertical distance between the static water level and the surface of the cone of depression.

Effluent - Water that is not reused after flowing out of a wastewater treatment facility.

Elevation - The height in feet above mean sea level according to National Geodetic Vertical Datum (NGVD) or North American Vertical Datum 88 (NAVD). May also be expressed in feet above mean sea level (MSL) as reference datum.

Evapotranspiration - The total loss of water to the atmosphere by evaporation from land and water surfaces and by transpiration from plants.

Existing Legal Use of Water - A water use that is authorized under a District consumptive use permit or is existing and exempt from permit requirements.

Florida-Friendly Landscaping – A landscaping method that details nine landscape principles that conserve water, protect the environment, and promote planting native flora adaptable to local conditions. The principles are described in Section 373.185, F.S.

Flow Meter - An instrument, when properly installed and calibrated, that is used for the accurate measurement of water flow through a closed pipe.

Freshwater - An aqueous solution with a chloride concentration equal to or less than 250 milligrams per liter (mg/L).

Hydraulic Conductivity (K) - For an isotropic medium and homogeneous fluid, the volume of water at the existing kinematic viscosity that will move in unit time under a unit hydraulic gradient through a unit area measured at right angles to the direction of flow.

Hydroperiod - The range of water level fluctuation coupled with the duration of the periods of inundation or saturation and drying in a wetland.

Irrigation Water Use - A consumptive use classification which incorporates all uses of water for supplemental irrigation purposes including golf, nursery, agriculture, recreation and landscape.

Irrigation Return Flow - The flow of water under the influence of gravity, to a watercourse, which occurs as surface water flow or shallow groundwater flow resulting from the application of water for supplemental irrigation purposes.

Irrigation System Efficiency - A measure of the effectiveness of an irrigation system in delivering water to a crop for irrigation and freeze protection purposes. It is expressed as the ratio of the volume of water used for supplemental crop evapotranspiration to the volume pumped or delivered for use.

Impoundment - Any lake, reservoir, or other containment of surface water occupying a depression or bed in the earth's surface and having a discernible shoreline.

Lake Recharge - The withdrawal of water for the purpose of replacing a volume of water removed from a lake system or other water body utilized as a source of water supply or indirectly as a source of wellfield recharge. Lake recharge does not include artificial maintenance of the water level of a surface water body at a desired elevation for aesthetic purposes, but may include augmentation of the volume of water stored within a surface water body that is effecting recharge to an adjacent wellfield.

Landscape Irrigation - The outside watering of shrubbery, trees, lawns, grass, ground covers, vines, gardens and other such flora, not intended for resale, which are planted and are situated in such diverse locations as residential and recreation areas, cemeteries, public, commercial and industrial establishments, and public medians and rights of way.

Leakance - The vertical movement of water from one aquifer to another across a confining zone or zones due to differences in hydraulic head. Movement may be upward or downward depending on hydraulic head potential in source aquifer and receiving aquifer. This variable is typically expressed in units of gpd/ft^3.

Letter Modification - An administrative process that allows for the modification of an existing permit to account for minor changes that do not result in significant change to the terms and conditions of the permit.

Linear Move Irrigation System - A type of self-propelled overhead irrigation system that utilizes laterals which emit water under low pressure at a distance of 3 - 4 feet above the crop at a rate ranging from 4 to 16 gallons per minute.

Listed Species – Those animal species which are endangered, threatened or of special concern and are listed in Sections 68A-27.003, 68A-27.004, and 68A-27.005, F.A.C., and those plant species listed in 50 Code of Federal Regulation 17.12, when such plants are found to be located in a wetland or other surface water.

Lower East Coast Everglades Waterbodies - as used in Subsection 3.2.1.E, is defined as the surface and groundwater from Water Conservation Area 1, 2A, 2B, 3A and 3B, the Holeyland/Rotenberger wildlife management areas, and the freshwater portions of Everglades National Park, as depicted in Figure 3-1.

Maximum Daily Allocation - The maximum quantity permitted to be withdrawn in any single 24 hour period.

Maximum Monthly Allocation - The maximum quantity of water assigned to the permit to be withdrawn during the month in the growing season when the largest supplemental crop requirement is needed by the specific crop for which the allocation is permitted.

Micro-irrigation - The application of small quantities of water on or below the soil surface as drops or tiny streams of spray through emitters or applicators placed along a water delivery line. Micro-irrigation includes a number of methods or concepts such as bubbler, drip, trickle, mist or microspray and subsurface irrigation.

North Palm Beach County /Loxahatchee River Watershed Waterbodies - as used in Subsection 3.2.1.E, is defined as the surface and groundwater from the Grassy Waters Preserve, Water Catchment Area, Pal-Mar and J.W. Corbett Wildlife Management Area, Loxahatchee Slough, Loxahatchee River, Riverbend Park, Dupuis Reserve, Jonathan Dickenson State Park, Kitching Creek, Moonshine Creek, Cypress Creek, and Hobe Grove Ditch, as depicted in Figure 3-2.

Other Surface Waters – Surface waters other than wetlands, as described and delineated pursuant to Rule 62-340.600, F.A.C., as ratified by Section 373.4211, F.S.

Plume - A body of contaminated groundwater originating from a specific source and influenced by such factors as the local groundwater flow pattern, density of contaminant and character of the aquifer.

Portable Guns - Large sprinklers that discharge high volumes of water at high pressures through the air and are moved from location to location irrigating in a circular spray pattern and include truck or tractor mounted units.

Potable Water - Water that is suitable for drinking, culinary, or domestic purposes.

Potentiometric Surface - A surface which represents the hydraulic head in an aquifer and is defined by the level to which water will rise above a datum plane in wells that penetrate the aquifer.

Public Supply Utility - Any municipality, county, regional water supply authority, special district, public or privately owned water utility, or multi-jurisdictional water supply authority, that provides water for use by the general public.

Public Water Supply - Water that is withdrawn, treated, transmitted and distributed as potable or reclaimed water.

Reservation Water Body - Areas within the District as identified in Rules 40E-10.021 and 40E-10.041, F.A.C., for which a water reservation has been established.

Resource Efficiency – The efficient use of water as measured in terms of the net impact on the relevant water storage system. A relevant water storage system will include the surface water and groundwater bodies which are determined by the District to provide storage, using the factors stated in Subsection 2.3.1.C.2.a of this Applicant's Handbook.

Restricted Allocation Area - Areas designated within the District for which allocation restrictions are applied with regard to the use of specific sources of water. The water resources in these areas are managed in response to specific sources of water in the area for which there is a lack of water availability to meet the projected needs of the region from that specific source of water.

Retention - The prevention of stormwater runoff from direct discharge into receiving waters; included as examples are systems which discharge through percolation, exfiltration, filtered bleed-down and evaporation processes.

Retrofit - The replacement or changing out of an existing irrigation system with a different irrigation system such as a conversion from an overhead sprinkler system to a micro-irrigation system.

Runoff - That component of rainfall which is not absorbed by soil, intercepted and stored by surface water bodies, evaporated to the atmosphere, transpired and stored by plants, or infiltrated to groundwater, but which flows to a watercourse as surface water flow.

Saline Water - An aqueous solution with a chloride concentration greater than 250 mg/L and less than that of seawater.

Saline Water Interface - Hypothetical surface of chloride concentration between freshwater and saline water where the chloride concentration is 250 mg/L at each point on the surface.

Seasonal High Water Level - The elevation to which the groundwater or surface water can be expected to rise due to a normal wet season.

Seawater or Saltwater - Groundwater or surface water with a chloride concentration at or above 19,000 mg/L.

Seepage Irrigation System - A means to artificially supply water for plant growth which relies primarily on gravity to move the water over and through the soil, and does not rely on emitters, sprinklers or any other type of device to deliver water to the vicinity of expected plant use.

Semi-Confined Aquifer - A completely saturated aquifer that is bounded above by a semi-pervious layer, which has a low, though measurable permeability, and below by a layer that is either impervious or semi-pervious.

Service Area - The geographical region in which a water supplier has the ability and the legal right to distribute water for use.

Staff Report - A written report prepared by District staff presenting the staff's conclusions and recommendations, based on review of the application.

Staged Drawdown - In dewatering systems, the practice of pumping the source unit to discrete, incremental levels.

Standby Facility - The minimal operation of a withdrawal facility to maintain the mechanical integrity of the pumping apparatus as recommended by the manufacturer or for a limited time period each month.

Supplemental Irrigation Requirement (SIR) – The volume of water, usually expressed in acre-inches, representing the difference between the estimated evapotranspiration of a given crop and the effective rainfall available in a specific geographic area over some prescribed time period and climatic event.

Traveling Guns - Large sprinklers that discharge high volumes of water through the air above the level of the plant being irrigated at high pressures which are self-propelled and move slowly across the area being irrigated, such as lateral move or linear irrigation systems.

Treatment Facility - Any plant or other works used for the purpose of treating, stabilizing, or holding wastewater.

Unconfined Aquifer - A permeable geologic unit or units only partly filled with water and overlying a relatively impervious layer. Its upper boundary is formed by a free water table or phreatic surface under atmospheric pressure. Also referred to as Water Table aquifer.

Upconing - Upward migration of mineralized or saline water as a result of pressure variation caused by withdrawals.

Use of Reclaimed Water – The deliberate application of reclaimed water, in compliance with Florida Department of Environmental Protection and District rules, for a beneficial purpose.

Utility - Any legal entity responsible for supplying potable water for a defined service area.

Wastewater - The combination of liquid and water-carried pollutants from residences, commercial buildings, industrial plants and institutions together with any groundwater, surface runoff or leachate that may be present.

Water Table - The surface of a body of unconfined groundwater at which the pressure is equal to that of the atmosphere; defined by the level where water within an unconfined aquifer stands in a well.

Water Use - Any use of water which reduces the supply from which it is withdrawn or diverted.

Water Well - Any excavation that is drilled, cored, bored, washed, driven, dug, jetted, or otherwise constructed when the intended use of such excavation is for the location, acquisition, development, or artificial recharge of groundwater. This term does not include any well for the purpose of obtaining or prospecting for oil, natural gas, minerals, or products of mining or quarrying; for inserting media to dispose of oil brines or to re-pressure oil-bearing or natural gas-bearing formation; for storing petroleum, natural gas, or other products; or for temporary dewatering of subsurface formations for mining, quarrying or construction purposes. [Section 373.303(7), F.S.].

Wetlands – Those areas that are inundated or saturated by surface water or groundwater at a frequency and a duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soils. Soils present in wetlands generally are classified as hydric or alluvial, or possess characteristics that are associated with reducing soil conditions. The prevalent vegetation in wetlands generally consists of facultative or obligate hydrophytic macrophytes that are typically adapted to areas having soil conditions described above. These species, due to morphological, physiological, or reproductive adaptation, have the ability to grow, reproduce, or persist in aquatic environments or anaerobic soil conditions. Florida wetlands generally include swamps, marshes, bayheads, bogs, cypress domes and strands, sloughs, wet prairies, riverine swamps and marshes, hydric seepage slopes, tidal marshes, mangrove swamps and other similar areas. Florida wetlands do not include

longleaf or slash pine flatwoods with an understory dominated by saw palmetto. The landward extent of wetlands shall be delineated pursuant to Sections 62-340.100 through 62-340.550, F.A.C., as ratified by Section 373.4211, F.S.

1.2 Acronyms and Abbreviations

APT	aquifer performance test
ASR	aquifer storage and recovery
BEBR	University of Florida Bureau of Economics and Business Research
CUP	consumptive use permit
DRI	development of regional impact
ERP	environmental resource permit
ET	evapotranspiration
F.A.C.	Florida Administrative Code
FDEP	Florida Department of Environmental Protection
F.S.	Florida Statutes
gal./flush	gallons per flush
gal./min.	gallons per minute
GPCD	gallons per capita day
GPD	gallons per day
gpd/ft^3	gallons per day per cubic foot
IFAS	University of Florida, Institute of Food and Agricultural Sciences
K	hydraulic conductivity
LORS	Lake Okeechobee Regulation Schedule
MFL	minimum flow and level
mg/L	milligrams per liter
MG	million gallons
MGD	million gallons per day
MGM	million gallons per month
MGY	million gallons per year
MSL	mean sea level
NAVD	North American Vertical Datum (1988)
NGVD	National Geodetic Vertical Datum (1929)
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NTU	Nephelometric Turbidity Unit
NWI	National Wetland Inventory
OFW	Outstanding Florida Water
PSC	Public Service Commission
psi	pounds per square inch
RPC	Regional Planning Council
SWM	surface water management
USDA	United States Department of Agriculture

1.3 Consumptive Use Permit Program Objectives, Organization, and Authorizations

The objective of this Applicant's Handbook is to further specify the general procedures and information used by District staff for review of water use permit applications. All criteria in this Applicant's Handbook applies to processing individual permit applications, and specified criteria applies to processing of notices of intent for noticed general permits. The criteria contained herein are flexible, with the primary goal being to meet District water resource objectives.

In addition, procedures for processing water use permit applications are set forth in Chapters 40E-0 and 40E-1, F.A.C. Rule 40E-1.610, F.A.C., provides procedures for permit renewals and Rule 40E-1.6107, F.A.C., sets forth procedures for permit transfers.

1.4 Permitting Procedures

The permit application will be processed pursuant to Chapters 40E-0 and 40E-1, F.A.C., for individual and general permits. These rules set forth procedures for filing applications, requests for additional information, permit application modification, public noticing of permit applications, and requests for administrative hearings.

1.4.1 Permits Required and Permit Types

The District has established two categories for permits based on the quantity and source of water permitted - individual and standard general. General permits include: 1) general permits by rule and 2) noticed general permits.

Applicants using seawater or reclaimed water to meet their total water needs are not required to obtain water use permits. However, if reclaimed water is discharged into an unlined pond, lake, or surface water management system, thereby commingling the reclaimed water with surface water or groundwater, from which the applicant then uses, diverts, or withdraws the commingled water, a water use permit shall be required to ensure the proposed use is not harmful to the water resources of the area and is consistent with the overall objectives of the District.

1.4.2 Pre-application Consideration

If the application is for a project which involves complex issues or if an applicant requires assistance in completing an application, a pre-application meeting between the applicant and District Staff may be useful. A pre-application discussion may aid in expediting the application evaluation process by identifying items and issues that need to be addressed in more detail. This process allows the applicant to submit a more complete application and may prevent or avoid delays in processing the application.

1.4.3 Third Party Interests

Frequently, other governmental entities, organizations, or affected citizens have an interest in the outcome of a permit action. Third party interests that would be substantially affected by issuance of a requested permit will have the opportunity to request an administrative hearing, pursuant to Sections 120.569 and 120.57(1), F.S., prior to issuance of the permit. In order to obviate any delays in permit issuance, discussions with

such entities regarding their water resource concerns prior to or during permit application review is encouraged. Issuance of a water use permit by the District does not relieve the applicant of the responsibility to obtain all necessary federal, state, local, or other District permits or authorizations.

1.4.4 Competing Applications

Pursuant to Section 373.233, F.S., applications are considered to be competing when Staff evaluation indicates that the proposed use of water by two or more applicants will exceed the amount of water that is available for consumptive use due to water resource availability or interference with existing legal use concerns as defined in this Applicant's Handbook. Competing permit applications will be processed pursuant to Section 373.233, F.S.

1.4.5 Phased Projects

Many large-scale or long-term projects are developed over a number of years through a number of phases of development. The District encourages planning for long-term water needs in order to compare the projected demands of the project with water availability in a region. Applicants for projects that are to be developed in phases should consider their water needs for all phases of the proposed project. However, the District evaluates permit applications based on the demonstrated need of water for the project only through the recommended duration of the permit; therefore, applicants should focus their water use projections for the term of the permit and only for those phases of the project reasonably expected to utilize water under the permit during or prior to the permit expiration date. As additional phases are projected to be constructed, the existing water use permit can be modified to reflect the increasing demand associated with the new phase or phases pursuant to the criteria applicable at the time of the modification. The Permittee cannot rely on receiving permit authorization for unpermitted phases of a project due to issuance of a water use permit for a portion of the phased project.

1.4.6 Environmental Resource Concurrency

For individual permit applications, if the proposed water use is associated with a project for which a modification to an existing surface water management system is required or for which a new surface water management system is required, the water use permit application will not be considered complete until the surface water management (construction) or environmental resource (construction) permit application is deemed complete. If a new or modified surface water management (construction) or environmental resource (construction) permit is required in conjunction with the proposed water use, the individual water use permit may only be issued concurrently with the applicable surface water management (construction) or environmental resource (construction) permit or permit modification. An individual water use permit will not be issued in conjunction with a surface water management or environmental resource conceptual permit without a required construction permit.

1.4.7 Application Support Information

Pursuant to Rule 40E-1.603, F.A.C., additional information may be required to be submitted in support of water use applications for projects located in areas where there

is a lack of available hydrologic information or for projects in which there are concerns regarding water resource availability or potential impacts as a result of proposed withdrawals. The District shall require detailed site-specific information in support of the application in order to satisfy the conditions for permit issuance. The supporting information may include aquifer performance tests, water quality surveys, well inventories, and environmental assessments, as required. The need for supporting information will be based, in part, on the amount of the proposed withdrawal, characteristics of the requested water source in the region, potential for environmental harm, potential for interference with existing legal uses, and proximity of applicable and relevant existing data.

1.4.8 Professional Certification of Supporting Documents

All final plans, calculations, analyses, or other geologic/engineering documents, submitted as part of a permit application are required to be certified by signing and sealing by an appropriate registered professional pursuant to Section 373.117, 373.1175, or Chapter 492, F.S., as appropriate.

1.4.9 Contiguous and Non-Contiguous Parcels

A water user may seek multiple individual water use permits for withdrawals that are intended to serve contiguous areas if withdrawal quantities are monitored and reported from each withdrawal facility or point of diversion if required by Subsection 4.1.1 of this Applicant's Handbook and evaluated for feasibility of using reclaimed water if required by Subsection 2.2.4.B of this Applicant's Handbook.

Applicants with legal control over multiple non-contiguous parcels within a county may apply for one permit encompassing all such parcels, provided that it is shown that the water use for each parcel is in the same water use classification.

If multiple water use classifications, such as drinking water and landscape irrigation, are served by separate withdrawal facilities, a water user may seek separate consumptive use permits for each use.

1.4.10 Proposed Water Uses

Proposed water uses for an individual and noticed general permit must meet the conditions for issuance of permits pursuant to Rule 40E-2.301, F.A.C. Applications for initial permits or permit renewals shall be processed as proposed water uses. Applications for existing unpermitted uses of water shall be processed as proposed water uses. An existing unpermitted use includes a use previously authorized by a permit that has expired due to failure to file an application for renewal prior to the permit expiration date. An application for a permit modification for an increased allocation will be processed as a proposed water use. Withdrawal facilities that have been constructed or that otherwise exist will not be taken into consideration in favor of issuance of a water use permit.

1.4.11 Permit Modifications

Permit modifications will be processed in accordance with Rule 40E-2.331, F.A.C.

1.4.12 Permit Renewals

Applications for permit renewal shall be made pursuant to Rule 40E-1.610, F.A.C. Permits for which renewal applications have been submitted shall remain in effect past the expiration date until final agency action on the application is taken. Permittees are encouraged to apply for renewal at least 90 days prior to the expiration date.

1.4.13 Permit Transfers

Permit transfers will be processed in accordance with Rules 40E-1.6107 and 40E-2.351, F.A.C.

1.4.14 Transport and Use of Water across County Boundaries

Sections 373.016, 373.223(3), and 373.713, F.S., govern the review of water use permit applications for the transport and use of water across county boundaries, including provision of exemptions and limitations on the application of such requirements. The following provides specific guidance as to the applicability of certain statutory exemptions and limitations within these statutes:

A. A transport and use of groundwater across county boundaries pursuant to Section 373.223(3), F.S., does not occur when: 1) a project withdraws groundwater for use on its overlying property and the drawdowns associated the groundwater withdrawals cross county boundaries; or 2) water is withdrawn from an underground water storage unit where it has been stored pursuant to an aquifer storage and recovery project and may, in its stored state, cross county boundaries.

B. Transport and use of water by self-suppliers of water for which the proposed water source and areas of use or application are located on contiguous private properties are exempt from review under the provisions in Section 373.223(3), F.S., including a project whose boundary straddles county borders and water from one part of the project serves another part of the same project in the neighboring county.

C. Transport and use of water across county boundaries by water supply authorities meeting the requirements of Section 373.713(9), F.S., are exempt from Section 373.223(3), F.S.; and

D. The transport and direct or indirect use of water within the areas encompassed by the Central and Southern Florida Flood Control Project is exempt pursuant to Sections 373.016(4)(a) and 373.223(3), F.S.

1.5 Permit Duration

1.5.1 General Duration Provision

When requested by an applicant, a consumptive use permit shall have a duration of 20 years, or as provided by Section 373.236, F.S., if the applicant demonstrates reasonable assurance that the proposed use meets the conditions for issuance for the requested duration; otherwise, permits may be issued for a shorter duration that reflects the time period for which such reasonable assurances can be provided. This determination shall

be made pursuant to requirements in Chapter 40E-2, F.A.C., as applicable, and this Subsection.

1.5.2 Special Duration Factors

A. Unless revoked or otherwise modified, the duration of a water use permit issued pursuant to Chapter 40E-2, F.A.C., is the lesser of:

1. The duration established in Subsections C., D. or E., below;

2. The time period for which the applicant demonstrates that water will be needed to meet the projected demands and during which the conditions for issuance of a permit in Rule 40E-2.301, F.A.C., will be met;

3. The time period for which the applicant demonstrates legal control pursuant to Subsections 2.1.1, 2.1.2, and 2.1.3;

4. For aquifer remediations, the period shall not exceed that required to complete the operation as specified in the Remedial Action Plan approved by the state or local agency having legal jurisdiction over such activities or 20 years, whichever is less;

5. For independent secondary use permits within a diversion and impoundment system, the duration will not exceed the expiration date of the associated diversion and impoundment permit;

6. Where the permittee must implement an action to correct noncompliance with the previous consumptive use permit, the permit duration shall be based on the time period necessary to ensure the success of the mitigative or remedial action; or,

7. For general water use permits, the permit duration shall not exceed 20 years.

B. Sources of Limited Availability. For purposes of the Section, the following are Sources of Limited Availability:

1. Upper East Coast Regional Water Supply Planning Area: Surficial Aquifer System.

2. Lower East Coast Regional Water Supply Planning Area: Biscayne/Surficial Aquifer System to the extent that withdrawals result in induced seepage from the Central and Southern Florida Project, except when stormwater discharge or wet season discharge occurs; Lake Okeechobee; Central and Southern Florida Project; the Caloosahatchee River/Canal; and the Saint Lucie River/Canal.

3. Lower West Coast Regional Water Supply Planning Area: Water Table Aquifer, Lower Tamiami Aquifer, Sandstone Aquifer, mid-Hawthorn Aquifer.

C. The following uses shall receive a 20 year permit, if:

1. For uses from sources other than those listed in Subsections 1.5.2.B. 1 through 3 above, the allocation necessary to meet the 20 year demands is consistent with Chapter 40E-2, F.A.C., as applicable, provided that the demands are realized according to the schedule set forth in the permit, for the duration of the permit; or

2. The applicant is requesting a permit for "back-up" supplies addressing emergency or short-term interruption in service for reclaimed water end users per Subsection 2.2.4.C.1; or,

3. The applicant is requesting renewal of a permit from a source of limited availability identified in Subsection 1.5.2.B, above, and the following conditions are satisfied:

a. For all use classes, the allocation satisfies the requirements of Chapter 40E-2, F.A.C., as applicable, for the duration of the permit; and

b. For public water supply use class, the quantity of water to be allocated for a 20 year duration permit shall not exceed that quantity necessary to meet the demands of the population existing at the time of permit renewal at the per capita rate approved under this Applicant's Handbook;

c. For the irrigation use class, the quantity of water to be allocated for a 20 year duration permit shall not exceed that quantity of water necessary to irrigate historically irrigated acreage, including documented intermittent irrigated acreage, as determined by Subsection 2.3.2.C.1; or,

d. For other use classes, the quantity of water to be allocated for a 20 year duration permit shall not exceed that quantity approved under Chapter 40E-2, F.A.C., as applicable, and shall not exceed the allocation in the permit being renewed.

D. Requests for Allocations in Excess of Subsection 1.5.2.C.3, Permit Modifications, or Initial Permits from Sources of Limited Availability:

The baseline duration under this Subsection shall be five years or as otherwise provided below. The following factors shall be considered and balanced in determining the duration of a permit:

1. Whether the permit will require the permittee to perform mitigative or remedial action for an impact caused or projected to be caused by the water use. Consideration of this factor will lead to a permit duration appropriate for ensuring the success of the mitigative or remedial action;

2. Whether the permittee is proposing to implement innovative and extraordinary water conserving measures that are beyond those generally feasible for the subject use such that the proposed demands are significantly reduced from the source of limited availability as a result of the innovative and extraordinary water conserving measures, including best management practices associated with peak or high efficiency systems. Where the permittee proposes to implement innovative and extraordinary water conservation measures, consideration of this factor will lead to a longer duration than the applicable duration as an incentive for the investment in innovative and extraordinary water conservation;

3. Whether increased impacts of the requested allocation on the source of limited availability will be offset through the implementation of an alternative source. Consideration of this factor will lead to a longer duration;

4. Whether the requested allocation is supplied by a saline water source, consistent with the use of saline water in Subsection 3.4.1; or,

5. Whether the modification of the permit results in no more than a de minimis increase in impact to water resources and existing legal uses, as compared to the existing permit. Consideration of this factor will lead to a duration consistent with the permit being modified.

If only a portion of the requested allocation satisfies the conditions for a permit duration of 20 years or longer, the remaining allocation shall be approved for a shorter duration, as appropriate.

2.0 DEMONSTRATION OF WATER NEED, SOURCES, AND DEMAND

To receive a general or individual permit, an applicant must demonstrate that the proposed water use is a reasonable-beneficial use of water, as required by Section 373.223, F.S. In order to demonstrate that a water use is reasonable-beneficial, the applicant must show "need" for the water in the requested amount. This chapter describes the factors involved in determining whether there is need and for determining the appropriate permit allocation, or "demand," for a particular water use.

2.1 Demonstration of Water Need

Demonstration of "need" requires consideration of several factors, including: 1) legal control over the project site, facilities, and for public water supplies, the proposed service area, and 2) compatibility of the proposed water use with the land use at the project site or area to be supplied water. Demonstration of "demand" is dependent on the specific water use classification requirements set forth in Subsections 2.2 through 2.3.

2.1.1 Legal Control over Project Site

Applicants for irrigation, industrial, commercial, and dewatering general or individual permits must demonstrate the legal right to conduct the water use on the project lands or site. This is demonstrated through property ownership or other property interest, such as a leasehold, in the project site. Applicants are required to provide copies of legal documents demonstrating ownership or control of property. A demonstration of legal control throughout the requested permit duration must be provided. Permit duration shall be based on the time period of the legal interest in the property. The permit will expire upon termination of a non-renewable lease.

2.1.2 Legal Control over Withdrawal Facilities

All applicants for general or individual permits must be able to show legal control to use surface water pumps or groundwater wells associated with the water use throughout the duration of the permit. If a withdrawal facility will be used by an entity other than the entity on whose land the facility is located, such user must demonstrate legal control to access and maintain the facility through an agreement, easement or contract.

2.1.3 Legal Control over Water Supply Uses

An applicant for a general or individual permit proposing to supply water to another entity, such as a public water supplier, must establish need for a water allocation through demonstration of the legal right and obligation to supply the requested allocation. This legal control can be established through service area designations, water sale or delivery contracts, or other proof of such legal obligation. Public water suppliers required to receive a service area certificate or order of exemption from the PSC, shall obtain such designation prior to issuance of a water use permit pursuant to Section 367.031, F.S. The applicant's right to the requested allocation will expire upon termination of the legal obligation to supply water to the receiving entity. Requested water allocations must be supported with detailed demand information and plans of the supply system proposed for the permit duration. The applicant must make a prima facie showing of legal control over the proposed service area. If a prima facie showing is demonstrated by two water suppliers, the service area dispute between such competing water suppliers must be resolved between the parties.

2.1.4 Compatible Land Use

To demonstrate need for the requested allocation, a general or individual permit applicant must provide reasonable assurances that the requested water use classification (e.g., irrigation, dewatering, or industrial) and the water demand projection are compatible with the land use of the project site, or in the case of a public water supplier, with the land use of the area to be supplied water. The land use of the project site or area to be supplied water must be that designated in the applicable local government zoning regulations and comprehensive plan. If the requested water use classification is prohibited due to incompatibility with the land use at the project site or area to be supplied water, the need for the requested allocation has not been demonstrated and staff cannot recommend approval. The applicant is advised that the proposed water use, including the demand projections and water use classification, must be compatible with any DRI or

Development Order issued for the project. Detailed hydrologic data that has been required in the DRI process may be utilized as a submittal in the water use permit application subject to review by the District. The approval of a DRI does not guarantee or ensure issuance of a water use permit.

2.2 Source Identification

District permits are required for all non-exempt existing and proposed uses of fresh and saline sources. Sources are described as surface water or groundwater which can be further identified with the name of the water body and/or aquifer. Applicants using seawater or reclaimed water to meet their total water needs are not required to obtain water use permits. However, if these sources are utilized, in part, to meet the applicant's water demand, the applicant shall identify the quantities obtained from these sources that are used to meet the demand. If a source is not reliable throughout the year, the applicant may request withdrawal quantities from secondary and standby sources of supply, which may be used when the primary supply is limited. The permit will identify the secondary and backup sources and the conditions and time periods for which they are likely to be required.

2.2.1 Multiple Sources

If the use of water is from multiple supply sources, each source should be identified as a primary, secondary or back-up source. The applicant shall provide a breakdown of how the water will be distributed among the multiple sources as part of the application review process. Each of the identified primary sources will receive a separate allocation, the sum of which will not exceed the maximum monthly demand for the projected use.

The secondary sources will be used based upon the need for alternative sources during high stress periods or in the event of temporary interruption of the use of the primary facilities. The secondary sources will receive an allocation based on the rated capacity of the secondary source withdrawal facilities or the maximum monthly demand, whichever is less. The back-up sources will not receive a specific allocation. The use of these facilities will be recognized in the permit based on the routine operation for maintenance purposes as recommended by the pump manufacturer.

2.2.2 Operational Plans

Users that derive water supply from multiple withdrawal facilities or sources shall submit an operational plan as part of the permit application. The plan may include more than one configuration of withdrawals provided each configuration meets the conditions of permit issuance, the total withdrawals of each configuration do not exceed the allocation and each withdrawal configuration represents a normal operation protocol of the use. However, short-term emergency operation plans are not required. Approved operational plans shall be incorporated as a permit condition. Pursuant to Section 3.7, subsequent applicants shall not be allowed to interfere with an approved operational plan. Changes to an approved operational plan involving modifications to the normal operating protocols approved in the permit that would persist throughout the remaining permit duration shall be authorized through the issuance of a modification per Rule 40E-2.331, F.A.C., as

applicable. Short-term changes in operations associated with emergencies or wellfield maintenance will not require modifications of the wellfield operating plan.

2.2.3 Use of Lowest Quality Water for Intended Purpose

Consideration must be given to the availability of the lowest quality water, which is acceptable for the intended use. If a water source of lower quality is available and is feasible for all or a portion of an applicant's use, this lower quality water must be used. Such lower quality water may be in the form of reclaimed water, recycled irrigation return flow, collected stormwater, saline water, or other sources.

2.2.4 Reclaimed Water Reuse Criteria

The encouragement and promotion of water conservation and use of reclaimed water are state objectives and considered to be in the public interest. In Section 373.250, F.S., the Legislature finds that use of reclaimed water provided by domestic wastewater treatment plants, permitted and operated under a reuse program approved by the FDEP is environmentally acceptable and not a threat to public health and safety.

A. Public Water Utilities with Associated Wastewater Treatment Plants

1. Public water supply utilities that control, either directly or indirectly, a wastewater treatment plant, and which have determined, in accordance with Section 403.064, F.S., that use of reclaimed water is feasible, must provide the District with each of the following:

    a. The existing reuse feasibility study or plan applicable to the utility's service area. Examples of such studies or plans include a reuse feasibility study prepared for the Department pursuant to Section 403.064, F.S., or a reuse project plan prepared for the PSC pursuant to Section 367.0817, F.S.

    b. A copy of the schedule of implementation for reuse, including any available information regarding areas to be served, construction of reclaimed water distribution lines and associated capacities.

    c. Documentation of the amount of presently uncommitted reclaimed water supply that is currently generated and is projected to be generated by the treatment plant over the duration of the permit.

    d. Information regarding whether or not a local ordinance concerning use of reclaimed water has been enacted pursuant to Chapter 125 or Chapter 180, F.S., which establishes a mandatory reclaimed water zone. Information should include a copy of the ordinance and applicable maps or legal description that delineates the zone.

2. When a public water supply utility requests the use of water for supplementation, the applicant shall provide reasonable assurance that the use of water for supplementation will: 1) increase the amount of reuse,

thereby resulting in a reduction in the overall use of higher quality sources for non-potable purposes; 2) if applicable, reduce the amount of reclaimed water disposal to the extent practicable; and 3) that the quantity of water requested for supplementation to achieve the requirements in subparagraph 62-40.416(9)(a)1., F.A.C., has been minimized to the extent environmentally, technically, and economically feasible. When using stormwater for supplementation, environmental feasibility may include a consideration of water quality benefits achieved by reducing stormwater discharges.

Pursuant to subparagraph 62-40.416(9)(a)2., F.A.C., the applicant shall submit a plan for the use of the supplemental water in the reclaimed water system. The plan shall demonstrate why the requested quantity of water is needed to reasonably meet demands consistent with Section 2.3; how it will be used efficiently in the system; and, if applicable, how it will be used to expand the system. The plan shall consider the following elements to the extent applicable to the applicant's requested use of supplemental water in the reclaimed water system:

a. Use of lower quality water sources;

b. The appropriate level of certainty to be provided to end users during drought conditions;

c. Reclaimed water interconnects with other reuse utilities;

d. Providing customers with information explaining the need to conservatively use reclaimed water;

e. Regulatory constraints or requirements on discharges;

f. Demand management when using the supplemental water, which can include financial incentives for voluntary use reductions;

g. Creation of additional storage; and

h. Any other measures identified by the applicant to demonstrate the efficient use of supplemental water.

B. Reuse Requirements

Applicants 1) requesting an allocation of at least 100,000 GPD; 2) within a mandatory reuse zone; or 3) requesting multiple noticed general permits for contiguous areas whose combined allocation exceeds 100,000 GPD must evaluate the feasibility of using reclaimed water to meet all or a portion of their needs, as follows:

1. Mandatory Reclaimed Water Zones. For projects located either wholly or in part within areas designated by local ordinance as a mandatory reclaimed water zone and required by such local ordinance to use reclaimed water, applicants will only be allocated that quantity of conventional water necessary to meet remaining reasonable-beneficial demands, if necessary, and a quantity necessary for emergency backup. When an ordinance exists, but reclaimed water supplies are not available at the time of permit application, the District will allocate water from conventional sources of supply and condition the permit to use the reclaimed water when it becomes available. At that time, the permit will be modified to reduce the allocation commensurate with the amount of reclaimed water provided.

2. End User Feasibility Evaluation: The District shall require the use of reclaimed water in place of higher quality water sources when it is readily available and environmentally, economically, and technically feasible. The following criteria are used to demonstrate feasibility:

    a. Environmental Feasibility: Reclaimed water reuse is considered environmentally feasible if the Department has permitted the reuse facility that will provide the reclaimed water supply and has permitted the use or discharge of the reclaimed water to the receiving water body, if applicable.

    b. Technical Feasibility: In performing the technical feasibility portion of the evaluation, the applicant shall contact the applicable reuse utility and request a letter stating that reclaimed water is not available or provide the following information and consider the response provided by the reuse utility in its evaluation:

        i. Whether a reclaimed water distribution line is at the applicant's project boundary.

        ii. If a reclaimed water distribution line is not at the project boundary, then:

            1. Estimate the distance in feet from the applicant's project to the nearest potential connection point to a reuse line.

            2. The date the reuse utility anticipates bringing the connection to the applicant's project boundary.

        iii. If reclaimed water is available at the project boundary, then:

            1. The minimum quantity in gallons per day of reclaimed water supply available from the nearest potential

connection point under a 1-in-10 year drought condition.

2. The reliability of the potential reclaimed water supply (i.e., on-demand 24/7, or bulk-interruptible diurnal or seasonal, length of supply agreement, or other basis).

3. The typical operating pressures at which the reuse utility will provide reclaimed water at the nearest connection point to the applicant's project, including any typical seasonal or other fluctuations in the operating pressure.

4. The water quality parameters of the reclaimed water for the constituents that the applicant has identified as pertinent to the intended use.

Reclaimed water reuse is considered technically feasible if reclaimed water is available at the site of the proposed use to meet all or part of the applicant's water needs as defined herein. In the event the supply of reclaimed water available is not adequate to fully meet the project's 1-in-10 year drought demands, the applicant may request a partial allocation of water from a non-reclaimed water source. However, such partial allocation will not exceed that amount necessary to compensate for the shortfall in reclaimed water supply, in light of total project demands calculated pursuant to this Applicant's Handbook. Available at the project site means the utility has initially provided the distribution facilities at its cost to the project boundary. In the event distribution lines are not provided at the project boundary, the applicant must then provide an assessment of extending the lines to the project as a part of the economic feasibility analysis.

c. Economic Feasibility: If the applicant asserts that reuse is not economically feasible, then the applicant must provide the District with an assessment of the economic feasibility of use of reclaimed water use. In performing the assessment, the applicant shall contact the applicable reuse utility and request a letter stating that reclaimed water is not available or provide the following information and consider the response provided by the reuse utility in its analysis:

i. The reclaimed water rate(s) the reuse utility would charge the applicant (e.g., the cost per/1000 gallons) and any other periodic, fixed, or minimum charges for use of reclaimed water by the applicant.

ii. The reclaimed water availability charges the reuse utility would charge the applicant in lieu of connection to the reclaimed system.

iii. Other one-time charges for the connection to the reuse.

iv. Whether the reuse utility helps fund potential reclaimed customers' costs to connect to the reclaimed line or convert its operation to use reclaimed water.

The applicant's economic feasibility analysis must consider all of the following:

i. Costs associated with purchase of a reclaimed water supply source including: 1) pump and distribution cost; 2) storage costs; 3) monthly rates charged for the reclaimed water supply; and 4) costs associated with risk of loss of reclaimed supply;

ii. Costs associated with development of an otherwise permittable supply source including: 1) well, pump, and distribution; and 2) operational costs including increased fertilizer costs, where applicable, power costs, pumping, and system operation and maintenance costs;

iii. Alteration in the rates charged by the applicant's business to account for costs associated with using reclaimed water; and

iv. Other factors affecting the economic feasibility of using reclaimed water as proposed by an applicant in light of their particular situation.

If the reuse utility fails to respond or does not provide the information within 30 days after receipt of the applicant's request, the applicant shall: 1) provide the District a copy of the applicant's written request and a statement that the reuse utility failed to provide the requested information; and, 2) complete the end user feasibility evaluation with the best available information.

C. Unanticipated Loss of Reclaimed Water Supply

1. Emergency / short-term interruption of service: In order to account for such interruption of service, the reclaimed water end-user may request a permit for a "back-up" supply. The amount of water allocated for such use will be based upon historic reclaimed water treatment plant delivery performance or a 30 day supply, as determined by criteria described in Subsection

2.3.1.C.1, whichever is less. A "back-up" allocation will be issued for a duration of 20 years.

2. Long-term interruption / cancellation of service: The reclaimed water end-user may apply for a temporary or conventional water use permit. Should competition arise between an applicant who has lost its reclaimed water supply source and another applicant, the District shall consider the former reclaimed water end-user who has lost its supply to best serve the public interest under Section 373.233, F.S.

2.3 Demonstration of Demand

The requested allocation to serve the applicant's need for water will be based upon the demonstrated demand.

2.3.1 General Criteria

Section 2.3 identifies the components of demand that must be identified for applicants of individual and general permits for each water use type.

A. Reasonable Demand

Applicants for individual and general permits must identify the quantities needed for each component of demand in order to justify the quantities requested in the permit application. Typically, the requested quantities are based on documented historical information.

The proposed withdrawal of water must be supported by information specified in Section 2.0 of this Applicant's Handbook, demonstrating that the withdrawal quantities are necessary to supply a certain reasonable need or demand. Only that portion of the requested demand that is supported by adequate documentation will be recommended for issuance through the time period specified by the permit duration.

B. Allocation Expressions

Applicants shall request quantities in gallons per day for each component of demand according to the terms listed below. The District will evaluate the quantities requested and identify the quantity allocated in gallons in each permit. The resulting allocation may be in one or more of the following expressions:

1. Annual Allocation

   The annual allocation is determined by calculating the quantity of water to be withdrawn over a 12-month time period under a 1-in-10 year drought condition for the associated use class. Applicants, other than irrigation uses, must determine the annual quantity by adding the quantities required by each component of demand for the particular use. The total demand is then considered along with other factors affecting withdrawals such as treatment losses; other sources of water; conservation practices employed and water purchased, sold, or transferred to determine the annual withdrawal quantity. For irrigation uses, the annual allocation is determined under Subsection 2.3.1.C.

2. Maximum Monthly Allocation
The maximum monthly allocation is the greatest quantity permitted to be withdrawn in any single month. The maximum monthly allocation is determined by identifying the peak month demand under the 1-in-10 year drought condition for the associated use class. For irrigation uses, the maximum monthly allocation is determined under Subsection 2.3.1.C.

3. Maximum Day Allocation
The maximum day allocation is the maximum quantity of water permitted to be withdrawn in any single 24-hour period. This quantity is permitted to account for frost/freeze protection for agricultural water use permits.

C. Irrigation Demand Components

The reasonable need for irrigation water use is equal to the supplemental crop requirement multiplied by the allocation coefficient except when the available water supply is restricted due to adverse resource impacts or the applicant's limited need for or ability to use the water. If the total rated capacity of all existing and proposed withdrawal facilities is less than the calculated demand, the recommended allocation will be based on the lesser value. Applicants shall identify the crop type, net planted acreage, irrigation method, soil type, planting dates, and periods of irrigation.

1. Supplemental Irrigation Requirement
The supplemental irrigation requirement for individual and general permits is the amount of water needed for a particular crop beyond the amount of water provided by effective rainfall. There are several ways to determine this amount:

a. Except as described in Subsection b, below, the supplemental irrigation requirement for all crop types is determined using the Modified Blaney-Criddle method as described in the "Water Use Management System Design and Evaluation Aids: Supplemental Crop Requirement and Withdrawal Calculation". This procedure estimates the potential amount of water lost to evapotranspiration and determines the supplemental irrigation requirement using soil moisture capacity, rainfall, and other variables. The maximum month and annual allocation will be based on the supplemental irrigation requirement for a 1-in-10 year drought condition.

b. If the method described in Subsection a, above, is not applicable due to localized allocation coefficients, soil characteristics, hydrologic conditions, crop type or crop coefficient, the supplemental irrigation requirement may also be determined based on specific reports related to evapotranspiration estimates published by the IFAS or other reliable source, such as the NRCS.

2. Allocation Coefficient

The allocation coefficient for individual and general permits incorporates the type of irrigation and its efficiency. The supplemental irrigation requirement will be multiplied by the net irrigated acreage and the appropriate allocation coefficient listed in Table 2-1 in determining the allocation requirements, if the alternative allocation coefficient described in the next paragraph is not utilized.

Applicants may request an allocation coefficient different than the criteria outlined in the previous paragraph. In determining which allocation coefficient is appropriate, District staff will consider factors such as: site-specific soil characteristics, evapotranspiration and effective rainfall, depth to background water level, height of groundwater mound, irrigation field boundary conditions, or other site-specific information as it relates to increased resource efficiency.

TABLE 2-1
Allocation Coefficient Multiplier

Irrigation System Type	Allocation Coefficient Multiplier
Micro-irrigation	
Drip	1.18
Micro-sprinkler	1.18
Overhead Sprinkler	
Linear Move	1.33
Solid Set Sprinkler	1.30
Traveling Gun	1.40
Portable Gun	1.50
Nursery Container	3.60
Subirrigation	
Seepage, Furrow	2.00
Semi-Closed Flow-Through	2.00
Crown Flooding	2.00

a. Resource Efficiency: Resource efficiency shall be evaluated by using the following factors: evaporation, runoff to areas other than the relevant water storage system, runoff and infiltration back into the relevant water storage system, aquifer recharge potential gained through the retention/detention of stormwater, the recycling of irrigation return flow, related environmental and operational factors such as the ability to maintain historical surface water and groundwater levels and, the ability to conserve the water resource.

b. Irrigation System Efficiency: The most efficient irrigation system shall be considered to be that which minimizes water lost to evaporation, relative to other irrigation systems in a region. Irrigation system efficiency shall be based on ratings published in Efficiencies of Florida Agricultural Irrigation Systems (Smajstrla et al. IFAS Bulletin 247). Applicants may demonstrate that a different factor is applicable for a particular system. This factor may be based on information provided by the manufacturer of the system. The irrigation system efficiency associated with water that is conveyed over large distances before being utilized for irrigation purposes is determined based upon a combined efficiency factor incorporating the efficiency of the system delivering the water to the point of

diversion into an irrigation system and the efficiency of the irrigation system itself. The combined irrigation system efficiency is calculated based upon the appropriate allocation coefficient identified in Table 2-1 and a multiplying factor of 1.5 to account for conveyance losses. If the applicant does not agree with the use of the 1.5 multiplying factor, another value shall be used if the applicant provides sufficient documentation which supports the use of a different value.

c. Standard Irrigation Systems: The accepted standard irrigation system for specific crop types will be required of all initial consumptive use applicants whose irrigation systems are not constructed. As new information is made available or new technologies are developed, irrigation standards for other crop types will be established by rule. Upon permit renewal, the irrigation standard will be required of acreage added to existing, permitted projects; when the existing water use permit contains irrigated acreage for which the allocation was not used and is proposed to be used or for that part of the irrigation system which is being retrofitted. The following two standards are incorporated into this rule.

i. The accepted irrigation methodology for citrus projects is a microirrigation system such as drip, micro-sprinkler, or other system capable of meeting the equivalent irrigation system efficiency of a micro-irrigation system.

ii. The accepted irrigation methodology for nursery container projects is a micro-irrigation system, overspray irrigation water recovery system, or other specific design elements capable of achieving the equivalent efficiency of a micro-irrigation system.

D. Drainage Districts

Applicants for an individual or general permit who are dependent users pursuant to Subsection 2.3.2.C.2.A and are supplied water by a permitted Drainage or Water Control District do not need to be permitted separately for supplemental quantities unless there is a change in the withdrawal source for which the Drainage or Water Control District has no authority or permission to use. The allocation of the supply from the additional source will be authorized through the issuance of a separate permit specific to the new source classification.

2.3.2 Criteria for Use Classes

Applicants for water use permits must demonstrate that the quantities requested represent reasonable water needs specific to the use class.

A. Agriculture and Nursery Use

For irrigation, livestock, and other agricultural water uses, reasonable need and water conservation is demonstrated by providing information on the types and planted acreage of crops to be irrigated, planting dates and length of crop growing season, the irrigation system or systems utilized, frost/freeze protection, soil type, the type and number of livestock, and other specific use information. The reasonable demand for agricultural water use is composed of one or more demand components, depending on the specific agricultural use. Where more than one use is served by the same allocation, i.e., improved pasture irrigation and livestock watering, the allocation shall represent the sum of the components. Supplement irrigation demands calculated pursuant to this subsection and Subsection 2.3.1.C meet water conservation requirements.

1. Demand Components

The supplemental irrigation requirement for agricultural and nursery uses is calculated as specified in Subsection 2.3.1.C of this Applicant's Handbook.

2. Frost/Freeze Protection

Freeze protection quantities for general and individual permits may be identified based on the number of acres to be protected and the type of freeze protection utilized. If the rated capacity of existing and proposed withdrawal facilities is less than the calculated freeze protection value, the total rated capacity of the existing and proposed withdrawal facilities will be the basis for the recommended maximum daily allocation for freeze protection. The freeze protection allocation will be made on the basis of a 24-hour maximum daily requirement per freeze event. The following values will be utilized for freeze protection calculations unless alternative, reasonable acceptable agricultural practices can be documented by the applicant.

Flood: 0.10 MGD/acre
Sprinkler: 0.16 MGD/acre
Micro-sprinkler: 0.05 MGD/acre

The allocation calculated for freeze protection shall not be used to determine if the proposed use qualifies for a general or individual permit.

3. Micro Irrigated Citrus

The annual allocation for micro irrigated citrus will be calculated using methodology and coefficients described in Subsection 2.3.1.C. The maximum month allocation will be defined by the highest month value for full evapotranspiration for either March, April or May, as determined using the methodology in Section 2.3.2. In the event that the allocation calculated by this methodology is insufficient to meet the supplemental irrigation requirements of an applicant's grove under a 1-in-10 year drought condition, the applicant may apply for an allocation in excess of the allocation calculated by Section 2.3.2. In such circumstances, the applicant must affirmatively demonstrate the need for a higher allocation by provision of information such as: site specific soil hydrologic characteristics, depth to the water table, salinity of irrigation water (when additional water is needed to flush salts from

the soil), calibrated historic pumpage data, or the results from an onsite irrigation efficiency evaluation conducted by a qualified irrigation auditor, such as a Mobile Irrigation Lab. In the event the irrigation water exceeds 1200 milligrams per liter total dissolved solids, the maximum month allocation will be increased to include 1 inch of water for the purposes of flushing accumulated salts from the soil.

4. Improved Pasture Irrigation

Authorization of water use for improved pasture shall be given if the applicant documents that an irrigation system exists or is proposed and is capable of delivering the requested amount. For proposed systems, a schedule for implementation of the irrigation system is required. The applicant will be required to document the amount of improved pasture acreage reasonably expected to be irrigated in any given growing season as the basis for the net irrigated acreage. In determining the reasonable irrigation allocation for improved pasture, the following specific requirements shall apply:

Overhead sprinkler irrigation: The allocation will be based on the number of-acres of pasture grass that will be irrigated, the type of irrigation equipment utilized and its efficiency (Table 2-1), and the methodologies and crop coefficients for pasture grass as described in Subsection 2.3.1.C.

Subirrigation: The allocation will be based on the amount of water needed to maintain water levels of the irrigation canals that comprise the water delivery system. The applicant shall calculate the demands based on the number of acres pasture grass that will be irrigated using the methodologies and crop coefficients for pasture grass as described in Subsection 2.3.1.C. The irrigated acreage shall be determined from the extent to which the water is distributed over the land. Irrigation systems constructed with lateral ditch spacing of 60 to 400 feet are considered to provide irrigation to all the acreage incorporated within the system (U.S.D.A. Florida Conservation Service Florida Irrigation Guide, August 1982). Applicants may provide site specific information on soil and pasture grass type to support lateral spacing greater than 400 feet. For irrigation systems that consist of main ditches without laterals, or laterals with a spacing greater than is sufficient to provide irrigation to all the pasture grass, the irrigated acreage will be calculated by multiplying the length of the ditches by the effective irrigation area as determined by soil and turf type.

Applications for the irrigation of unimproved pasture will not be approved.

5. Other Agricultural Needs

The reasonable need for other agricultural uses, such as cooling of animals or product, spray tanks, non-potable shop needs, or disease control spray stations, is determined based on supporting information provided by the applicant for a general or individual permit. The supporting information must demonstrate that the requested allocation is a reasonable-beneficial use.

a. Livestock: The reasonable need for livestock use for individual and general permits is determined by multiplying the estimated total number of animals by gallons needed per day per animal as estimated by IFAS or other sources directly related to specific industry process requirements. Unless the applicant can demonstrate that a different factor is appropriate for their particular needs, the livestock water use will be determined using the values identified in Table 2-2.

TABLE 2-2
Livestock Water Needs

Animal	Use per Animal (gpd)
Dairy Cattle	150
Beef Cattle	12
Horses	12
Hogs	2
Sheep	2
Turkeys	1
Chickens	0.1

b. Aquaculture: The reasonable need for aquaculture is determined by the number and volume of ponds and tanks and their filling and recirculation requirements and other factors that may contribute to maintaining necessary water levels or water quality. An applicant for a general or individual permit must demonstrate that the requested allocation is a reasonable-beneficial use.

B. Dewatering

Dewatering activities that require a water use permit include withdrawals of water for construction activities, mining operations, and minor uses such as exploratory testing, short-term Remedial Action Plans, and APTs. There are three types of District permits for dewatering projects that are primarily based on the duration and volume of water associated with the project. As summarized in Table 2-3, one permit is for short duration dewatering projects and the others are for long-term projects. The dewatering duration for a project is considered by Staff to be the period of time necessary to complete all dewatering for the project. An applicant is not eligible for multiple general permits by rule for a single project or different phases of a project.

1. General Permit by Rule for Short-Term Dewatering Permits

Criteria for general permits by rule for short-term dewatering are found in Subsection 40E-2.061(2), F.A.C.

2. Dewatering Individual Permits

Dewatering individual permits apply to projects that exceed the thresholds and criteria described in Subsection 40E-2.061(2), F.A.C. Two types of individual dewatering permits are available from the District. For projects where all the

dewatering activities are defined at the time of the permit application, the applicant may apply for a Standard Individual Permit. For long-term, multi-phased projects, with undefined activities or no contractor at the time of the permit application, the applicant may apply for a Master Individual Permit.

Applicants for all individual dewatering permits must satisfy the conditions of issuance (Rule 40E-2.301, F.A.C.). In order to provide reasonable assurances that water reserved in Rule 40E-10.041, F.A.C., will not be withdrawn, all water from the dewatering activity shall be retained onsite. If the applicant demonstrates that retaining the water onsite is not feasible, the project shall be modified to demonstrate, pursuant to Subsection 3.11, that reserved water will not be withdrawn. The applicant may elect to begin dewatering for a single period of only 90 days in areas of the project, that meet the general permit by rule criteria specified in Subsection 40E-2.061(2), F.A.C., once an application for an individual dewatering permit has been submitted to the District.

The applicant must provide the information required in paragraphs a. through i. below, as applicable. If required, the applicant shall provide estimates of the maximum monthly and annual dewatering withdrawals for the project and shall be required to submit records of monthly withdrawals for each dewatering pump to the District. Staff shall not specify maximum monthly or annual withdrawal volumes in the recommended permit conditions. Permit applications for a dewatering permit must:

a. Provide reasonable assurances that the project will not cause harm to the resource, existing legal uses, offsite land uses, and wetland environments or cause harmful saline water intrusion or movement of pollutants, as described in Chapter 3 of this Applicant's Handbook. If the potential for harm exists, the applicant shall redesign the dewatering activities, including recharge trenches or storage areas to offset the potential drawdown impacts of the proposed activity;

b. Demonstrate that the requested allocations represent reasonable dewatering needs. These needs are generally demonstrated by providing information on the water budget for the operation, including all sources and losses of water utilized in the dewatering process. The water budget should demonstrate where and in what quantities water is generated to accomplish the dewatering, including any associated losses, and where and in what quantity water is stored, recharged, disposed, or reused. If processing of materials is associated with the dewatering, a separate water budget describing these activities is required. The water budget may be in the form of a spreadsheet or a flow diagram that indicates all water sources and losses;

c. Identify the areal extent and depth of the proposed excavation, the depth of dewatering, and the areal extent of the drawdown of the Water Table aquifer associated with the proposed dewatering;

d. Provide reasonable assurances that all dewatering water will be retained on the project site, unless the applicant demonstrates that it is not technically feasible to retain the dewatering water onsite. If any offsite discharge is requested due to demonstrated technical infeasibility of onsite retention, the applicant must provide the following information with the permit application:

i. Documentation of authorization that allows the applicant to discharge directly into the receiving water body and/or adjacent lands (e.g., NPDES or ERP permit), and a demonstration that the receiving water body or adjacent lands are capable of accepting the dewatering discharge;

ii. An operational plan which demonstrates that the discharge to the receiving water body will meet all applicable State Water Quality standards prior to discharge;

iii. An operational plan which demonstrates that the discharge to protected wetlands will not contain turbidity levels in violation of State Water Quality standards (must be less than 29 NTU above background levels) prior to discharge;

iv. A monitoring plan which includes, at a minimum, proposed sampling locations and daily turbidity measurements of the discharge and background conditions in the receiving body and/or wetland; and

v. A contingency plan which includes procedures for ceasing dewatering operations and correcting the situation until monitoring demonstrates water quality standards are met.

e. Demonstrate that reserved water will not be withdrawn pursuant to paragraph 40E-20.301(1)(k), F.A.C., by retaining all water onsite;

f. Provide reasonable assurances that fresh dewatering water will not be discharged to saline tidal waters, unless the applicant demonstrates that it is not technically feasible to prevent discharge to saline water and requests specific authority from the District for discharge. Saline dewatering water, as defined in this Applicant's Handbook, may be discharged to tidewater;

g. Provide an operational plan which describes how stormwater will be handled during dewatering operations;

h. For Standard Individual Permits, the applicant shall specify all proposed dewatering activities for the project in terms of depth, duration, and areal extent of dewatering and proposed routing of dewatering water, the estimated magnitude and extent of drawdown, proposed recharge/storage areas, and the potential for harm. The applicant may proceed with all dewatering activities once the permit has been approved.

i. For Master Individual Permits, due to project uncertainties, the applicant may not be able to specify all aspects of the proposed dewatering activities at the time of the permit application. In order to receive a master dewatering permit, the applicant must meet all conditions of issuance and specify the depth, duration, and areal extent of dewatering, the proposed routing of dewatering water, the estimated magnitude and extent of drawdown, proposed recharge/storage areas, and the potential for harm for "typical" dewatering activities for the project. In addition, the applicant shall provide an estimated project schedule showing dewatering activities and calculated estimated maximum monthly and annual dewatering withdrawals. After approval of the permit, the applicant shall be required by permit condition to supply site-specific dewatering plans for each proposed dewatering activity to the District for review and approval at least two weeks prior to dewatering. The applicant may not initiate dewatering prior to receiving written notification from District Staff, that the proposed dewatering activity is consistent with the approved "master" permit.

Individual dewatering applications will be reviewed concurrently with ERP or SWM construction permit applications, and the dewatering application will not be considered complete until both applications are complete. An applicant may request that the dewatering permit include a later "start" date to coincide with the actual start of dewatering activities at the project. Staff will recommend a permit expiration date, based on the proposed "start" date. Any temporary dewatering water holding areas must be constructed and operated using sound engineering practices to protect public health, safety, and welfare and, as necessary, dewatering activities must meet all applicable ERP or SWM criteria.

TABLE 2-3
Dewatering Permits

PERMIT REQUIRED	MAXIMUM DAILY PUMPAGE	TOTAL PROJECT PUMPAGE	DURATION	COMMENTS
General Permit by Rule for Short-Term Dewatering Subsection 40E-2.061(2), F.A.C.	5 MG	100 MG	Up to 1 Year	No potential for resource impacts. No offsite discharge unless an aquifer performance test.
Standard Individual Permit Chapter 40E-2, F.A.C. Applicant's Handbook Subsection 2.3.2.B.2.h	No limitation	No limitation	Up to 20 Years	Standard permit for defined projects. No allocations assigned.
Master Individual Permit Chapter 40E-2, F.A.C. Applicant's Handbook Subsection 2.3.2.B.2.i	No limitation	No limitation	Up to 20 Years	Permit for phased projects, projects with undefined activities, or no contractor at time of permit application. No allocations assigned.

C. Diversion and Impoundment

This subsection contains criteria for calculating the allocation for diversion and impoundment systems and the criteria for users within diversion and impoundment systems to obtain consumptive use rights.

A diversion and impoundment permit is required for projects, excluding District operated facilities, that divert surface water through a pump or operable water control structure, or divert a combination of surface water and groundwater to a conveyance canal network system which the applicant has legal control to operate and maintain for the purposes of providing for the reasonable-beneficial demands of secondary users and consumptive and non-consumptive uses.

Users of surface water maintained through operation of a diversion and impoundment system are considered secondary users of the diversion and impoundment system. The District recognizes dependent and independent secondary users as the two categories of surface water users within a diversion and impoundment system that may attain water rights through the permitting process. The distinction between these two categories is related to the manner in which the secondary user attains its water right. Unless exempt, such secondary users must obtain a consumptive use right through an independent permit or by incorporation into the diversion and impoundment permit. Criteria for each of these methods are set forth below.

1. Demand Calculations

Reasonable demand calculations for diversion and impoundment systems will be based on the following factors: the extent (length, cross sections, and depth) of the canal network used to deliver the water associated with the diversion and impoundment operation; land use classifications within the area served by the diversion and impoundment system; surface water demands directly withdrawn from the diversion and impoundment system; seepage losses; water necessary to maintain groundwater elevations for the purpose of aquifer recharge and saltwater intrusion prevention; evaporation losses from the canal surfaces; and established control elevations during 1-in-10 year drought events.

For permit renewals in which no changes are proposed over historic operations, the demands may be determined from historic pumpage records, consistent with the criteria in Subsection 3.1.1. For modifications where the proposed allocation is increasing, the demands shall be determined with the use of models consistent with the criteria in Subsection 3.1.2, using the applicable efficiency and conservation measures for each use type served by the project while considering cycling of water from project to project within the system.

In addition to the requirements of the application, diversion and impoundment applicants must submit: 1) a map identifying the location of all secondary users of their system, including irrigated acreage and land use type; upon permit modification this map must be updated to reflect changes in secondary users of the diversion and impoundment system; and 2) copies of the agreements executed with dependent secondary users pursuant to Subsection 2.3.2.C.2.a, below.

2. Conditions of Issuance for Secondary Users of a Diversion and Impoundment System

a. Dependent Secondary Users are users of surface water from a diversion and impoundment system that have elected to obtain their water right through the diversion and impoundment permittee's permit, as evidenced by a legal agreement in compliance with the following:

i. Agreement that the secondary user will comply with water shortage restrictions imposed by District rule or order issued pursuant to Chapter 40E-21, F.A.C.,

ii. Agreement that the secondary user will comply with all applicable water conservation standards required in the diversion and impoundment permit;

iii. Agreement that the secondary user will notify the diversion and impoundment permittee of any changes in water use demands or sources;

iv. Agreement that the secondary user will continue to evaluate the feasibility of using reclaimed water in accordance with the requirements contained within the diversion and impoundment permit;

v. Agreement that the secondary user will mitigate harm to the resources or existing legal uses caused by the secondary user;

vi. Agreement that the secondary user will submit a map identifying their system's location, irrigated acreage, and land use type; and

vii. Agreement that the dependent secondary user will comply with the above stated conditions and applicable conditions within the diversion and impoundment entities' consumptive use permit or be subject to potential District enforcement action pursuant to Chapter 373, F.S.

b. Independent Secondary Users are users of surface water from a diversion and impoundment system that have obtained their water right through a separate consumptive use permit from the District. The District will utilize the applicable demand calculation criteria for the use class associated with the secondary use to determine the proposed project's demand, contained in this Applicant's Handbook. Site specific resource evaluation must be conducted as required by Section 3.0. Impact evaluation associated with the diversion and impoundment system's withdrawal from the regional system will not be required. Resource impact evaluations must be conducted as required by Section 3.0. In addition, the requested allocation must be consistent with the diversion and impoundment permit as evidenced by demonstration of legal access to the diversion and impoundment system and by demonstration that the proposed secondary use will not cause the diversion and impoundment permittee to exceed its permitted allocation.

D. Industrial/Commercial/Power Plants

Applicants must demonstrate that the quantities applied for relate to reasonable processing and manufacturing needs. The applicant shall demonstrate need for the water by providing information on the water balance for the operation, including all sources of water and losses of water utilized in production processes, personal/sanitary needs of employees and customers, treatment losses, and unaccounted uses.

1. Water Conservation Requirements Plans

All individual applicants for a commercial, power plant, or industrial water use permit must submit a water conservation plan at the time of permit application. The conservation plan shall be prepared and implemented for the permittee's proposed use and, at a minimum, incorporate the following mandatory components:

a. An audit of the amount of water used in the applicant's various operational processes. For new permittees, an audit will not be required as a condition of permit issuance; however, such audit must be conducted within two years of permit issuance.

The following measures will be required within the first year of permit issuance or audit completion if found to be cost effective in the applicant's audit:

i. Implementation of a leak detection and repair program;

ii. Implementation of a recovery/recycling or other program providing for technological, procedural or programmatic improvements to the applicant facilities; and,

iii. Use of processes to decrease water consumption.

b. Develop and implement an employee awareness and consumer education program concerning water conservation.

c. Procedures and time-frames for implementation shall be included in the conservation plan.

2. Demand Components

Applicants for industrial/commercial uses must identify the demand for each of the following components:

a. Process requirements - water lost in processing and manufacturing where water is an input in the process. This quantity is determined through the calculation of a water balance. The water balance demonstrates where water is generated and in what quantities, where water is used in manufacturing or processing and the associated losses, and where and in what quantities water is disposed of or reused. The balance may be in the form of a spreadsheet or a flow diagram that indicates all water sources and losses. All sources of water that input to the activity must be listed.

b. Other uses - determined by calculating the total withdrawal quantity minus the quantity for the uses identified above. Other uses include

lawn and landscape irrigation, outside use, air conditioning and cooling, water lost through leaks, and unaccounted uses.

3. Pollution Remediation

An Industrial Water Use Permit is required for remediation projects that include groundwater or surface water withdrawals. The application for a pollution remediation use must include a copy of an approved state or federal remedial action plan. The volume of water to be withdrawn shall be consistent with the remedial action plan. The applicant must demonstrate that the treated water is discharged in a manner that is ultimately returned to the aquifer or is otherwise put to a reasonable-beneficial use, unless such discharge is technically or environmentally infeasible or is otherwise not practicable. Technical infeasibility exists if there is no reasonable access or capacity of permeable surface upon which the aquifer recharge could take place. Environmental infeasibility exists when there is no reasonable way of providing compatible quality discharge water to the receiving water, consistent with primary State Water Quality standards.

E. Landscape/Recreation Use

1. Water Conservation Requirements Plans

Applicants for landscape and golf course irrigation projects shall develop a conservation program incorporating the following mandatory elements. This conservation program must be submitted at the time of permit application.

a. The use of Florida-Friendly landscaping principles for proposed projects and modifications to existing projects where it is determined that Florida-Friendly landscaping is of significant benefit as a water conservation measure relative to the cost of Florida-Friendly landscaping implementation and meets the requirements of section 373.185(2)(a)-(f), F.S.

b. The installation and use of rain sensor devices, automatic switches or other automatic methods that have the capability to override the operation of the irrigation system when adequate rainfall has occurred is required. Systems which use soil moisture sensors to determine irrigation requirements are not required to also install rain sensors.

c. The limitation of all lawn and ornamental irrigation to the hours and days specified in Rule 40E-24.201, F.A.C., or alternative landscape irrigation conservation measures adopted by local government ordinance in accordance with Rule 40E-24.301, F.A.C.

2. Demand Components

The supplemental irrigation requirement for landscape and golf course irrigation projects shall be calculated pursuant to Subsection 2.3.1.C.1.

F. Public Water Supply

In order to accurately calculate demand, public water supply noticed general or individual permit applicants must meet the criteria included in Subsection 2.1 and identify the demand for each of the uses listed in this section. Information required to demonstrate reasonable demand for each component includes the number, type, and size of service connections; past pumpage records; projected population data for the service area; data on the specific uses; and data specific to the forecasting models used. Demand quantities shall be based on raw water demand or that volume of water necessary to be withdrawn from existing or proposed sources. The quantities must be expressed in average gallons per day for each component of demand.

Where metering, billing, or other record-keeping methods do not provide accurate use estimates, the applicant must provide the best estimates for each use type and must document the estimation method used.

In applications where a portion of the demand is derived from large use customers who redistribute water (e.g., a county utility sells water to a municipality), the applicant must obtain and report demand information from each customer. This information is required to demonstrate that the quantities applied for are supported by reasonable demand. Per capita use guidelines and water use conservation plans described below apply to redistributing water customers as well as the applicant.

1. Water Conservation Requirements

In addition to any required conservation measures pursuant to an applicable adopted MFL recovery or prevention strategy, all public water supply utilities applicants shall develop and implement a standard water conservation plan described in Subsection 2.3.2.F.1.a or a goal-based water conservation plan described in Subsection 2.3.2.F.1.b. The proposed water conservation plan shall allow no reduction in, and increase where environmentally, technically, and economically feasible, overall utility-specific water conservation effectiveness. The applicant may use publications and materials from Conserve Florida, the Alliance for Water Efficiency, or other similar industry guidance in development and supporting the selection of measures in its conservation plan and in demonstrating that increases in water use efficiency were achieved through water conservation.

The elements and implementation schedule for the water conservation plan shall be developed by the applicant. The District shall review and approve the plan submitted by the applicant as part of the public water supply permit. In reviewing the applicant's proposed plan for sufficiency, the District will consider whether the elements and sub-elements proposed to be implemented in the plan, taken as a whole, will promote effective conservation. The water conservation plan shall be subject to the schedule and reporting requirements specified in the permit. If implementation of the plan fails to demonstrate progress toward increasing water use efficiency, the permittee shall request a permit modification, if necessary, to revise the plan to address the deficiency.

a. Standard Water Conservation Plan

The applicant shall implement each of the following five elements as necessary to achieve efficient use to the extent economically, environmentally, and technically feasible. The applicant will explain how its proposed plan will effectively promote water conservation.

i. A water conservation public education program. A program shall consist of one or more sub-elements. The applicant will consider education sub-elements such as those listed below. Implementation of these sub-elements may be achieved through collaboration with other entities, including the District. For each educational sub-element included in the applicant's program, the applicant shall identify the frequency, duration, and implementation schedule for the sub-element.

1. Water conservation public service announcements;
2. Water conservation speakers, posters, literature, videos, and/or other information provided to schools and community organizations;
3. Public water conservation exhibits;
4. Water conservation articles and/or reports provided to local news media;
5. A water audit customer assistance program to address indoor and outdoor water use;
6. Water conservation information provided to customers regarding year-round landscape irrigation conservation measures;
7. Water conservation information posted on the supplier's website;
8. The construction, maintenance, and publication of water efficient landscape demonstration projects;
9. Water conservation information provided in customer bills or separate mailings; and,
10. Other means of communication proposed by the applicant.

ii. An outdoor water use conservation program. The applicant shall consider the following sub-elements.

1. The adoption of an ordinance or condition of service limiting lawn and landscape irrigation that is provided to the District, and is either no less stringent than or consistent with the irrigation restrictions adopted by the District.

2. The adoption of an ordinance or condition of service requiring the use of Florida-Friendly landscaping principles, Florida Water Star, or other generally accepted water conservation programs, guidelines, or criteria that address outdoor water conservation.
3. The adoption of an ordinance or condition of service consistent with Section 373.62, F.S., relating to automatic landscape irrigation systems.
4. The provision of a landscape irrigation audit program for businesses and residents, including the provision of information to assist customers in implementing the recommendations of the audit. The applicant shall provide a description of the program including implementation details and the content of the audits to be provided.
5. An education element focusing on outdoor conservation as part of the water conservation public education program required by Subsection 2.3.2.F.1.a.i.
6. Any other conservation measures or programs proposed by the applicant designed to reduce outdoor water use.

iii. The selection of a rate structure designed to promote the efficient use of water by providing economic incentives. The rate structures may include, but not be limited to, increasing block rates, seasonal rates, quantity based surcharges, and/or time of day pricing as a means of reducing demands. The District shall afford the utility wide latitude in adopting a rate structure in accordance with section 373.227(3), F.S.

iv. A water loss reduction program, if water losses exceed 10% as calculated pursuant to Subsection 2.3.2.F.2.

v. An indoor water conservation program. The applicant will consider indoor conservation sub-elements such as those listed below. Implementation of these sub-elements may be achieved through collaboration with other entities, including the District. For each indoor conservation sub-element included in the applicant's program, the applicant shall provide the frequency, duration, and implementation schedule for the element.

1. Plumbing retrofit rebates;
2. Faucet aerator and showerhead giveaways;

3. An education element focusing on indoor conservation as part of the water conservation public education program required by Subsection 2.3.2.F.1.a.i; and,
4. Other indoor conservation measures proposed by the applicant.

b. Goal-Based Conservation Plan

A public water supply applicant may propose a goal-based water conservation plan in lieu of a standard water conservation plan. A goal-based plan allows the applicant to demonstrate effective water conservation by selecting plan elements that are different from those in the standard water conservation plan, but which are appropriate to the applicant's service area. A permittee operating under a standard conservation plan pursuant to this rule, or conservation plan required by a permit issued prior to this rule's effective date, may request to convert its current conservation plan to a goal-based plan through a letter modification.

A goal-based water conservation plan prepared pursuant to Section 373.227(4), F.S., shall contain the following:

i. A description of water conservation measures selected for implementation and an implementation schedule for each measure; and,

ii. An explanation of why the alternative elements included in the goal-based plan are appropriate to achieve effective water conservation in the applicant's service area if any of the five elements of the standard water conservation plan are not selected for inclusion in the goal-based plan.

If a public water supply applicant provides reasonable assurance that the goal-based plan will achieve efficient water use by meeting the above criteria, the District shall consider the goal based plan to achieve effective water conservation at least as well as a standard water conservation plan.

c. In order to promote significant water savings beyond that required to achieve efficient water use in the permit, a public water supply permittee implementing a standard water conservation plan or a goal-based water conservation plan shall receive a permit extension for quantifiable water savings attributable to water conservation when the following conditions are met:

i. The permittee is in compliance with the conditions of its permit.

ii. The permittee demonstrates quantifiable water savings exceeding those required in the permit. Acceptable methods

for quantifying water savings include reductions in residential per capita, gross per capita, per service connection use, or the use of treated potable water for outdoor irrigation. The quantification method used to establish the currently permitted allocation.

iii. The permittee demonstrates a need for the conserved water to meet the projected demand for the term of the extension.

iv. The permittee demonstrates water savings sufficient to qualify for at least a one-year permit extension.

v. The permit extension shall provide only for the modification of the duration of the permit and shall not be used to increase the quantity of the allocation.

vi. The permittee demonstrates that increases in efficiency were achieved through water conservation and not as a result of population changes, economic or other factors unrelated to conservation. In the absence of factors unrelated to conservation, if the permittee demonstrates timely implementation of its District-approved conservation plan, then the water savings shall be attributed to implementation of the conservation plan.

vii. The specific duration of the extension will be calculated based on the quantity of water saved through conservation and the demonstration of water demand based on projected growth, as calculated at the time of the extension request. A permittee may request an extension no sooner than 5 years after issuance of the original permit, and no more frequently than every 5 years thereafter.

viii. For permits with a duration of 5 years or less, a permittee may request an extension no sooner than one year prior to the original permit expiration date.

ix. An allocation having a duration of 5 years pursuant to Subsection 1.5.2.D shall not be granted a permit extension under this section.

x. Multiple permit extensions may be requested to reflect additional water saved over the term of the permit. However, in no case shall the cumulative duration of all extensions exceed ten years from the original permit expiration date.

The permittee may request the extension through a letter modification request.

2. Demand Components

All public water supply applicants for an individual or general permit must identify the demand for the following components:

a. Residential Use - at a minimum, shall be divided into single-family residential use and multi-family residential use;

b. Other metered uses - include all uses other than residential accounted for by meter;

c. Unaccounted uses - the total water system output minus all accounted uses above. Unaccounted use includes unmetered use, water lost through leaks, water used to flush distribution lines, fire-fighting, and other unidentified uses. This quantity should not exceed 10 percent of total distribution quantities. Applicants with unaccounted use greater than 10 percent are required to address the reduction of such use through the formation of a formal leak detection program;

d. Treatment and Distribution Losses - In some circumstances, not all water that is withdrawn is actually used. This circumstance may be a result of losses in the system during distribution, or because the water must undergo a treatment process before it is usable. This component should only be calculated when such losses are significant. Some water treatment technologies, such as desalination or sand filtration, may cause significant portions of the withdrawn water to be unusable. In such cases, the applicant shall be required to indicate the withdrawal quantity treated, the percent product (usable) water, the percent reject (unusable) water, and the manner in which the reject water will be disposed;

e. Large User's Agreements - for those utilities which provide water to other entities through large user's agreements or other similar contracts, the quantity of water delivered to each end user (both average and peak day) and the duration of the water service delivery shall be identified. For those utilities which purchase supplemental water from another utility, the volume of water historically purchased (or contracted to be purchased for proposed uses) for both an average and maximum daily basis and the duration of the contract shall be provided.

3. Per Capita Daily Water Use

Per capita daily water use is a guideline used to measure the reasonable withdrawal requests of public water supply applicants for an individual or general permit. Per capita water use includes population-related withdrawals associated

with residential, business, institutional, industrial, miscellaneous metered, and unaccounted uses. The average per capita daily use rate is calculated for the last five years or period of record, whichever is less, by dividing the average daily water withdrawals for each year of record by the permanent or seasonally adjusted population served by the utility for the same period of time. The per capita use rate that is most representative of the anticipated demands, considering the water conservation plans required by criteria in Subsection 2.3.2.F.1, shall be identified and used for water demand projection purposes. The historical demand patterns may not always be appropriate for projection purposes. This may occur when there are current large users whose growth is not related to population, or when future development may take on characteristics very different than those of present development. In such cases, alternative per capita estimates, such as a design per capita based on dwelling unit type, population characteristics, seasonality of the population and comparison with adjacent similar developments, shall be presented accompanied by necessary documentation. If no historical water use data exists or in the case of proposed developments, a design per capita use shall be used based on the above alternative criteria. Per capita daily water use greater than 200 gpcd must be supported with additional information explaining the rate of use.

4. Maximum Monthly Peaking Ratio: Public Water Supply

The recommended maximum monthly allocation for a public water supply noticed general or individual permit is based on the average monthly demand for the duration of the permit times the maximum monthly to average monthly peaking ratio.

Listed below are methodologies used to calculate the maximum monthly to average monthly peaking ratio depending on the available data. Extensive non-domestic use may cause variations in methodologies.

a. In cases where several years of pumpage records are available, the maximum monthly peaking ratio is calculated for each year. The ratio is generally the average of the peaking ratios of the last three years of record, unless changes in the historic water use patterns require the use of a more representative timeframe (such as when there is a projected significant increase for commercial/industrial demands or the applicant enters into a new large user agreement).

b. For proposed developments, a ratio between 1.3 and 1.7 will be used, depending upon the operation of the utility, although engineering documents justifying a different ratio will be considered.

c. When a utility operates more than one treatment plant and the plants operate independently (no interconnections), the maximum monthly peaking ratio must be determined for each treatment plant and its associated wellfield(s).

5. Population Estimates and Data

In service areas without significant seasonal population fluctuations, the use of permanent population estimates is appropriate. In service areas where there are significant seasonal population changes, the general or individual permit applicant shall estimate the seasonal population for use in conjunction with permanent population in the calculation of per capita daily water demand. The applicant is advised that if significant seasonal population fluctuations are not accounted for, per capita water daily water use may be over-estimated. Permanent and seasonal (if applicable) population growth must be projected for the requested duration of the permit, on a yearly basis, for the area served by the application.

When population estimates are required for years in between published or referenced estimates, the applicant must interpolate the data. The applicant may assume that population increases in equal increments in the years between established estimates.

Population data should be derived from the prevailing Comprehensive Land Use Plan developed under Part II, Chapter 163, F.S. If the applicant's population estimate varies from the Comprehensive Plan, other accepted sources of population data to validate the variance include the following: 1) BEBR; 2) RPC; 3) County Planning Departments; or 4) the District's Planning Department.

6. Health Review

The applicant for a public water supply general or individual permit is advised that permits or certifications regarding water quality may be required by other governmental agencies, such as the FDEP and Department of Health, for public health purposes.

G. Aquifer Storage and Recovery Systems

ASR systems shall be permitted in conjunction with the applicable use type.

Demand Components

Impact evaluations shall be based on the reasonable demand for water associated with the proposed ASR system. The reasonable demand for ASR water will be based on the volume of water needed for recovery by the ASR system considering losses related to the initial volume stored for recovery.

Reasonable Demand: The allocation for the proposed project without ASR shall be calculated using methods contained in Section 2.0 for the appropriate use class such that the total project allocation with the ASR component provides for the 1-in-10 year drought demands of the project. The final allocation for the project will be adjusted, if necessary, for storage losses based on the nature of the demand for water as described as follows.

1. For projects with water demands that are expected to increase over the duration of the permit, the incremental demands shall be calculated in five-year increments. The volume of water calculated at the end of each five-

year period (Q) is available for seasonal storage during that five-year cycle. For each of the five years, the amount of water stored combined with the amount of water used shall not exceed the annual average permitted volume of the fifth year (Q). This allows the user to store both the unused portion of the allocation and the seasonal component of the demand. By the end of the five year cycle, a sufficient buffer zone in the storage horizon should be built up to provide for efficient recovery of the seasonal demand component. However, should the applicant demonstrate through past ASR performance or documentation of unique aquifer characteristics of the storage horizon (such as high permeability and poor confinement) that high losses of the stored freshwater occur, a supplemental allocation to account for the losses may be requested. The amount of supplemental water needed to account for the ASR losses shall be evaluated as to the overall efficiency of the water supply system. In the event that the volume of water lost during injection and storage is large (30% or more), the applicant shall evaluate and implement options to reduce the losses to an acceptable level.

2. For projects that will achieve the build out demand within five years of permit issuance or which have demands that are not expected to increase, the reasonable demand shall be determined by the seasonal shift in demand combined with a supplemental allocation to account for losses should site specific characteristics of the storage horizon warrant.

For projects where the site specific characteristics of the storage horizon result in the need for additional allocation to cover storage losses, the applicant shall quantify the losses and request an adjustment in the annual allocation to account for reasonable storage losses. The losses shall be based on the degree to which the recovered water, combined with the conventional supply, produces a water quality that is usable for the permitted demand based on federal, state and local water quality standards.

3.0 WATER RESOURCE EVALUATIONS

Section 373.223, F.S., provides a three-pronged test for evaluating each proposed water use: 1) the use must be reasonable-beneficial; 2) must not interfere with any existing legal use of water; and 3) must be consistent with the public interest. Reasonable assurances that the proposed water use from both an individual and cumulative basis meets this three-pronged test are provided, in part, by the applicant's compliance with the Conditions for Issuance, set forth in Rule 40E-2.301, F.A.C.

This Applicant's Handbook is intended to ensure that each permit application is based on consistent, reliable technical evaluations conducted using accepted industry or professional standards. When determining whether the applicant has provided reasonable assurances the conditions for permit issuance are met, the District will consider the projected impact of the proposed withdrawal, along with impacts from any existing legal uses and other pending applications for a consumptive use permit under conditions, up to and including a 1-in-10 year drought event. These assurances can be provided through applicable historic monitoring data or modeling data, as defined below.

If the criteria described in Section 3.0 are not met, applicants may consider reduction of withdrawal quantities, a pumpage rotation schedule, mitigation, change in withdrawal source or other means to bring the proposed use into compliance with the technical criteria.

The impact of withdrawals on the applicant's surface water management system must be evaluated and submitted with the water use permit application. The cumulative withdrawals as a result of the water use request must be evaluated in conjunction with the cumulative drainage effects of the surface water management system.

3.1 Data Collection, Evaluation, and Modeling Impact Evaluations

In support of an application for a water use permit, applicants shall submit data and modeling, as applicable.

3.1.1 Monitor Data

Monitor data in support of a permit application shall be accurate and verifiable, and collected at the represented withdrawal rates requested in the permit application during: 1) at least a 1-in-10 year drought, as defined by the yearly total rainfall accumulation for regulatory rainfall stations (pursuant to SFWMD, Part B Water Use Management System Design and Evaluation Aids, Part V, Supplemental Crop Requirement and Withdrawal Calculation, within Volume 3, Permit Information Manual for Water Use Permit Applications); or 2) 90 days without effective recharge.

Pumpage data collected from a calibrated accounting method authorized in the previous permit is considered accurate and verifiable.

Water level and quality data collected pursuant to permit conditions must provide a sufficient basis to determine if conditions of permit issuance will be met. Additional assurances will be required in cases where the monitor data does not represent the conditions of the resource as affected by the past withdrawals. An example would include wetland photographs without corresponding hydrologic data necessary to determine the withdrawal impacts on wetland hydroperiod, or water quality data from monitor wells that have collapsed or are constructed into zones that do not relate to potential for salinity movement.

The use of historic monitor data to prove conditions of permit issuance are met may be applied to permit renewals and to that portion of a modification that represents the historic use that was monitored. Additional assurances will be required in cases where a modification renders the historic data non-representative. An example would include the use of a new source of supply, a significant relocation of the points of withdrawal, or an increase in the allocation.

Other relevant information regarding the actual use of water or impact of the actual use of water will be considered. Such information could include identification of irrigated acreage that occurred over time, wellfield operations, and the use of a state approved

functional assessment of wetland or other surface waters, to determine impacts of prior consumptive uses.

3.1.2 Modeling Data

Applicable modeling data may consist of basic analytic impact assessments or calibrated numeric system simulation models. The modeling impact assessments shall be conducted for the proposed withdrawal alone, as well as the proposed withdrawal combined with all other permitted uses and pending applications within the cone of depression of the proposed use. The cone of depression is defined by the 0.1 foot drawdown contour for the proposed withdrawal from the water table aquifer and the 1.0 foot contour for the proposed withdrawal from a confined aquifer.

For an ASR system, the applicant shall identify the area of influence based on the volume of water calculated in Subsection 2.3.2.G. The area of influence of an ASR system shall address two factors: 1) the area affected by the pressure change resulting from the injection and removal of stored water; and 2) the orientation of the stored freshwater and associated buffer zone.

Applicants proposing an impact offset [Subsection 62-40.416(7), F.A.C.] or substitution credit [Subsection 62-40.416(8), F.A.C.] must demonstrate that the conditions for permit issuance are met, in part, through the submittal of assessments described in Subsection 3.1.2, below. Subsections 62-40.416(7) and (8), F.A.C., are incorporated by reference in Subsection 40E-2.091(3), F.A.C.

A. Basic Impact Assessment

Basic analytic impact assessments utilize an approved analytic equation(s), such as the Theis or Hantush-Jacob equation, applied to the requested maximum month allocation that simulates continued withdrawal for 90 days without recharge (which is considered for purpose of these simulations to be equivalent to a 1-in-10 year drought condition). Aquifer characteristics derived from approved APT or specific capacity tests (SFWMD, Part B Water Use Management System Design and Evaluation Aids, Part II Aquifer Performance Test) located within one mile of the project site are acceptable. If more than one set of aquifer characteristics data exists within one mile of the site, the value measured closest to the proposed project will be used unless the applicant can demonstrate that hydrogeologic conditions at the project site are not represented by such data. If the location of the nearest site where aquifer characteristics were measured is greater than one mile from the project site, the average of the nearest three APT or specific capacity test sites is acceptable providing that two of the three values are within one standard deviation of the mean. If this is not the case, the applicant shall demonstrate that the conditions of permit issuance are met for the highest and lowest values of the three sites, or the applicant may opt to conduct an APT or specific capacity test at the site.

The use of numeric models such as Modflow without calibration is acceptable under the following configurations: 1) the model represents the aquifer or aquifer system as no more than two layers; 2) each layer uses a single value for transmissivity/permeability, storage/storativity and a single value is used for leakance between the layers; 3) the

simulation time is 90 days with no recharge; and 4) surface water recharge features are not represented. The modeling shall include separate runs using the highest and lowest measured values of transmissivity/permeability, storage/storativity, and leakance from the region, based on published data and pump test values calculated as described above. The selected high and low aquifer values will be approved provided they significantly overestimate the withdrawal impacts that would occur on the site. The use of a numeric model without calibration is acceptable for representing seepage irrigation systems where the applicant models the portion of the irrigation water that returns to the water table aquifer, provided the model is configured as described in this paragraph and the change in the water table elevation predicted by the model is field verified with water level data from at least one water table piezometer located adjacent to the irrigated field.

B. Calibrated Numeric Simulation Models

For complex systems that cannot be accurately evaluated pursuant to Subsection 3.1.2.A, above, the applicant may provide assurances that the conditions for issuance will be met through a calibrated numeric simulation model, as described herein. District approved numeric system simulation models are used to simulate withdrawals from complex aquifer systems, such as multiple layered aquifers with varying degrees of hydraulic conductivity, integrated surface and groundwater systems, and withdrawals that involve density dependent flows or transport of contaminants.

Staff will approve simulations that utilize documented model codes that have undergone professional peer review and accurately represent the physical system. In order to demonstrate that a model is representative of the physical system, the applicant shall calibrate the model. An acceptable calibration method shall be identified between the applicant and District staff while taking into consideration the range of water levels across the model domain, location of available water level monitor data, and the degree to which the monitor data accurately reflects area groundwater conditions versus sporadic influences of local pumpage. Whenever possible, the numeric models should be calibrated to within $\pm$ 1 foot for at least three monitor wells distributed randomly within the model domain for each month of the simulation period.

For the purpose of model calibration, when using monitor data that has daily measurements, the applicant shall average those daily values for each month. For monitor wells in which a single measurement was made for the month, in determining whether the calibration is acceptable, the pumpage and rainfall conditions immediately preceding or during the single sampling event shall be considered.

Model calibrations will be conducted using monthly time steps for a calibration timeframe of at least 18 months. The applicant may select the calibration period for the model based on availability of representative time variant data. When long term water level monitoring data is not available, the applicant shall calibrate the model to site specific pump test data. This calibration shall be based on a comparison of actual pump test water level changes with calculated water level changes derived from the model. The pump test shall be run for a sufficient time for the water levels to approach equilibrium for the production zone and the surficial aquifer.

The simulation model run shall be conducted using monthly time steps starting with a minimum of three months of average annual demand and rainfall, followed by twelve months of 1-in-10 year drought conditions, followed by a minimum of six months of average annual demand and rainfall. The applicant shall utilize SFWMD, Part B Water Use Management System Design and Evaluation Aids, Part V, Supplemental Crop Requirement and Withdrawal Calculation, within Volume 3, Permit Information Manual for Water Use Permit Applications, to determine the 1-in-10 year drought and average rainfall conditions for the purpose of evaluating drought recharge rates.

When District staff evaluates a calibrated model for approval, the range of parameters used in the model will be checked against published ranges of values for each parameter evaluated in order to determine the reasonableness of the values used in the model. Calibrations that are achieved using parameters outside of the range of acceptable values for south Florida will not be accepted. Steady state numeric models are not acceptable for the purposes of providing reasonable assurances.

The location of all actual measured time invariant parameters used to estimate each data array shall be identified and documented for each layer in the model. Data arrays without at least three (3) actual measured values will require a sensitivity analysis to be conducted that evaluates the range of potentially acceptable values for the parameter in question. If a model is submitted that does not meet the calibration criteria, the applicant may collect additional data and revise the model. If a model is not calibrated to an acceptable level it will not be acceptable for providing reasonable assurances.

3.2 Source Specific Criteria

3.2.1 Restricted Allocation Areas

Due to concerns regarding water availability, the following geographic areas are restricted with regard to the utilization of specific water supply sources. These areas and sources include the following:

A. Lake Istokpoga/Indian Prairie Canal System

No additional surface water will be allocated from District controlled surface water bodies over and above existing allocations. No increase in surface water pump capacity will be recommended.

B. C-23, C-24 and C-25 Canal System

No additional surface water will be allocated from District canals C-23, C-24 and C-25, or any connected canal systems that derive water supply from these District canals, over and above existing allocations. No increase in surface water pump capacity will be recommended.

C. L-1, L-2 and L-3 Canal System

No additional surface water will be allocated from District canals L-1, L-2 and L-3 over and above existing allocations. No increase in surface water pump capacity will be recommended.

D. Pumps on Floridan Wells

No pump shall be placed on a flowing Floridan well in Martin or St. Lucie County, except under the following guidelines:

1. If the pump was in place and operational prior to March 2, 1974, and is still in place or a replacement pump with a similar capacity is in place;

2. The proposed pump is installed for the purpose of increasing pressure in attached piping (e.g., drip or micro-jet irrigation systems) and not for the purpose of increasing flow over and above that flow which naturally emanates from the well. The determination of the appropriate pump capacity must occur after well construction and measurement of the actual natural flow rate. Prior to any pump installation, the Permittee shall provide measurements of flow from each well using calibrated flow equipment. The method of accounting, calibration data, corrections for well losses, proposed pump information, and the basis for the requested flow rate shall be submitted to District Staff for review and approval;

3. The applicant conducts and provides the results of a study, approved by District staff, which shows that pump installation and subsequent withdrawals will not interfere with any presently existing legal use, as defined in Section 3.7;

4. The proposed pump is installed to temporarily assist in producing the permitted allocation associated with freeze protection pursuant to Subsection 2.3.2.A.2; or,

5. The proposed pump is installed to temporarily assist in meeting allowable withdrawals for the duration of a water shortage declared pursuant to Chapter 40E-21, F.A.C.

E. Lower East Coast Regional Water Availability

In addition to all other applicable consumptive use statutory and rule provisions, the following restrictions shall apply when allocating water by permit for water use withdrawals within the Northern Palm Beach County Service Area and Lower East Coast Service Areas 1, 2 or 3.

Subsection 3.2.1.E is a component of recovery strategies for MFLs for the Everglades and the Northwest Fork of the Loxahatchee River, as set forth in Chapter 40E-8, F.A.C., and assists in implementing the objective of the District to ensure that water necessary for Everglades restoration and restoration of the Loxahatchee River Watershed is not allocated for consumptive use upon permit renewal or modification under this rule.

1. The additional restrictions in this section shall only apply to applications for new or modified permits or for permit renewals.

2. Except as provided in this section, an applicant must demonstrate, pursuant to the impact evaluation provisions in Subsection 3.1.2, the requested allocation will not cause a net increase in the volume or cause a change in timing on a monthly basis of surface water and groundwater withdrawn from the Lower East Coast Everglades Waterbodies or the North Palm Beach County/Loxahatchee River Watershed Waterbodies (which are hereinafter referred to as the "Waterbodies") over that resulting from the base condition water use.

The evaluation of water withdrawn from Waterbodies under this section shall address the impacts of the proposed use on surface water and groundwater from: a) integrated conveyance systems that are hydraulically connected to the subject Waterbodies and are tributary to or receive water from such Waterbodies; and b) the Waterbodies. Integrated conveyance systems that are hydraulically connected to the subject Waterbodies include primary canals used for water supply including, but not limited to, the Central and Southern Florida Project Canals, and secondary and tertiary canals that derive water from primary canals.

3. The "base condition water use" shall be as provided below, but in no case shall exceed the withdrawal permitted to the applicant as of April 1, 2006:

   a. For the public water supply use class, the maximum quantity of water withdrawn by the applicant from the permitted source during any consecutive twelve month period during the five years preceding April 1, 2006. If a permit allocation existing as of April 1, 2006 contains an allocation based on a conversion of a water treatment system, the base condition water use shall be increased to account for the additional volume used as if the modified treatment system was operational as of April 1, 2006;

   b. For the irrigation use class, the quantity of water calculated using Subsection 2.3.1.C to meet demands for the following: 1) the number of acres actively irrigated by the applicant over the duration of the irrigation permit existing as of April 1, 2006; or 2) if the irrigation project, or a portion thereof, has not yet been constructed pursuant to a required surface water management construction permit or environmental resource permit as of April 1, 2006, the number of acres authorized to be irrigated by such project when constructed, consistent with a water use permit existing as of April 1, 2006;

   c. For the diversion and impoundment use class, the demands of the applicant calculated pursuant to Subsection 2.3.2.C for the physical conditions of the diversion and impoundment system as of April 1, 2006; or,

d. For other use classes, the quantity of water withdrawn by the applicant during the twelve months preceding April 1, 2006.

In determining the base condition water use, pursuant to Subsections a. through d. above, the District shall consider and allow adjustments if the applicant demonstrates that such use is not representative of normal operations due to unanticipated conditions affecting the actual quantity of water withdrawn, such as extreme climatic conditions or equipment failure. Only uses conducted consistent with the existing consumptive use permit conditions shall be considered in identifying the base condition water use. The base condition water use shall not exceed that permitted as of April 1, 2006.

The base condition water use shall include water made available through implementation of offsets, alternative water supplies, or terminated or reduced base condition water uses, specifically required by permit condition to prevent increased water from being withdrawn from the subject Waterbodies. Under these circumstances, the applicant shall demonstrate that such actions were implemented and function as required by the permit.

4. Applicants shall conduct a preliminary evaluation to determine whether the proposed use has the potential for increasing the withdrawal of water from the Waterbodies over the applicant's base condition water use. Such preliminary evaluations may include a basic analytic impact assessment described in Subsection 3.1.2.A or other acceptable evaluation pursuant to Section 3.1.

If based on a preliminary evaluation the proposed use has the potential for increasing the withdrawal of water from the Waterbodies, the following two evaluations will be compared to identify any changes in location, timing and volume of the withdrawals from the Waterbodies:

a. A quantification of the withdrawal of surface water and groundwater from the Waterbodies under the base condition water use; and

b. A quantification of the withdrawal of surface water and groundwater from the Waterbodies under the requested allocation.

In conducting this evaluation, the applicant shall consider the timing of the withdrawals as they affect the Waterbodies, i.e., the public water supply use class requires water throughout the year based on seasonal demand trends of the service area, versus the agriculture use class which uses water based on growing cycles of the particular crop.

When evaluating the effects of the proposed use on the Waterbodies, the applicant shall evaluate the resource efficiency of the use, i.e., the public

water supply class demands are based on the demands of the service area and the type of treatment, and generally do not provide return flow to the source at the location of the withdrawal; whereas, the agricultural use class demands are based on the crop type, irrigation method and soil conditions, and typically provide some component of recharge at or near the point of withdrawal. The location component is evaluated based on the distance of the withdrawal from and the specific individual area of the subject Waterbodies as depicted in Figures 3-1 and 3-2, e.g., Water Conservation Area 1, 2A, or 2B, or the Northwest Fork of the Loxahatchee River or Loxahatchee Slough.

5. If the comparison of the evaluations identified in Subsection 3.2.1.E.4, above, identifies an increase in the volume or change in timing of water requested to be withdrawn from the Waterbodies, the applicant shall do one or more of the following:

   a. Certified project water. Identify that additional water from the Waterbodies has been made available through implementation of a project for water resource development, as defined in Section 373.019(24), F.S., and such water has been certified as available by the Governing Board, as defined in Section 1.1.

   b. Offsets. Propose, identify a schedule for implementation, and construct and operate adequate offsets to eliminate the projected increase in volume or change in timing of withdrawals from the Waterbodies over the base condition water use. An offset will be approved if it prevents an increase in volume or change in timing of surface and groundwater withdrawn from the Waterbodies over the base condition water use. Offsets include the use of impact offsets [Subsection 62-40.416(7), F.A.C.], recharge systems and seepage barriers that meet the above requirement;

   c. Alternative water supply. Propose, identify a schedule for implementation, and construct and operate alternative water supplies, as defined in Section 373.019(1), F.S. An alternative water supply will be approved under this rule if it is adequate to meet the reasonable increased demands without causing an increased volume or change in timing of the withdrawal from the Waterbodies over the base condition water use;

   d. Terminated or reduced base condition water use. Identify terminated or reduced base condition water uses as stated below. The request will be approved if the applicant demonstrates that the requested allocation does not cause an increase in volume or change in timing of withdrawals from the Waterbodies over the applicant's base condition water use due to the reduction or elimination of other base condition water uses that existed on April 1, 2006. The applicant

must demonstrate that water is available by providing documentation of the implementation of a substitution credit [Subsection 62-40.416(8), F.A.C.] or other modification or termination of the historic consumptive use permit prior to issuance of the proposed permit under this rule; or,

e. Available wet season water. Identify water is available during the wet season as set forth below. The wet season water will be approved if the applicant demonstrates that water is available under the conditions described below during the wet season, provided the applicant demonstrates that such water is not required to achieve the restoration benefits to the Waterbodies pursuant to the Comprehensive Everglades Restoration Plan, North Palm Beach County Comprehensive Water Management Plan, and the Acceler8 program. Water available under these conditions shall be limited to the wet season discharges that are projected to persist following implementation of the entire Comprehensive Everglades Restoration Plan, North Palm Beach County Comprehensive Water Management Plan, and the Acceler8 program.

i. Available surface water discharges during the wet season shall be identified based on best available information at the time of permit application evaluation used to quantify surface water flows from or to the restored Waterbodies, as reflected in the Comprehensive Everglades Restoration Plan, North Palm Beach County Comprehensive Water Management Plan, and the Acceler8 program, in their entirety;

ii. Available wet season surface water discharges will be identified based on 1-in-10 drought conditions during May 1st through November 1st, as determined by annual rainfall statistics measured from gauges that are proximal to the applicant's point of withdrawal defined in Part B Water Use Management System Design and Evaluation Aids, Part IV Supplemental Crop Requirement and Withdrawal Calculation; and,

iii. Wet season surface water requested by the applicant must be derived within the same hydrologic area where the available surface water is identified.

The District will assist the applicant in identifying the best available information necessary to make the determination of wet season water availability. Offsets, alternative water sources and terminated or reduced base condition water uses implemented after April 1, 2006 shall be considered in addressing requested increases in

withdrawals from Waterbodies under this section. Notwithstanding, as stated in Subsection 3.2.1.E.3, water made available from the permitted source through offsets, alternative water supplies and terminated or reduced base condition water uses implemented consistent with permit conditions to prevent increased water from being withdrawn from the subject Waterbodies, shall be considered in the base condition water use.

6. Consistent with Subsection 3.2.1.E.5 above, the applicant may obtain an allocation for additional water from the Waterbodies over the applicant's base condition water use, as identified below:

a. Certified project water. Water certified by the Governing Board as available for consumptive use through operation of a water resource development project, as provided in Section 3.2.1.E.5.a;

b. Temporary allocation. Water temporarily required to meet the applicant's reasonable demands while implementing an alternative water supply pursuant to Subsection 3.2.1.E.5.c or while implementing an offset identified pursuant to Subsection 3.2.1.E.5.b. The permit will be conditioned with dates and milestones for development of the alternative water supply or offset. A temporary allocation shall be reduced to be consistent with this subsection when the alternative source is projected to be available, consistent with permit conditions. The temporary allocation shall be adjusted, as necessary, to reflect the offset on the Waterbodies when the offset is projected to be available, consistent with the permit conditions.

The permit conditions governing the quantity and time period for the temporary allocation shall be based on expected due diligence of the applicant, as determined by applying the factors in Subsections 3.2.1.E.6.b i. through iii., below, to implement the alternative water supply or offset in an expeditious manner, not to exceed five years unless specifically approved by the Governing Board. The time period shall be determined considering the following factors:

i. The projected time period for design, receipt of necessary authorizations, and construction of the alternative supply or offset;

ii. The timing of demands to be met from the alternative supply or offset;

iii. Other factors that indicate the reasonable period required to develop the alternative supply or offset.

c. Water made available through implementation of offsets or the termination or reduction of base condition water use withdrawals. Water made available through implementation of offsets pursuant to Subsection 3.2.1.E.5.b or water made available through the termination or reduction of other users' base condition water use withdrawals pursuant to Subsection 3.2.1.E.5.d, consistent with permit conditions; or,

d. Available wet season water. Water available during the wet season, provided the applicant demonstrates that such water is not required to achieve the restoration benefits to the Waterbodies pursuant to the Comprehensive Everglades Restoration Plan, North Palm Beach County Comprehensive Water Management Plan, and the Acceler8 program pursuant to Subsection 3.2.1.E.5.e. Pursuant to permit conditions, additional surface water withdrawals will be permitted only when flood control regulatory releases are being made, and not when water supply deliveries are being made, from the Waterbodies.

7. Applicants must meet the requirements of any established MFL and water reservation, if applicable.

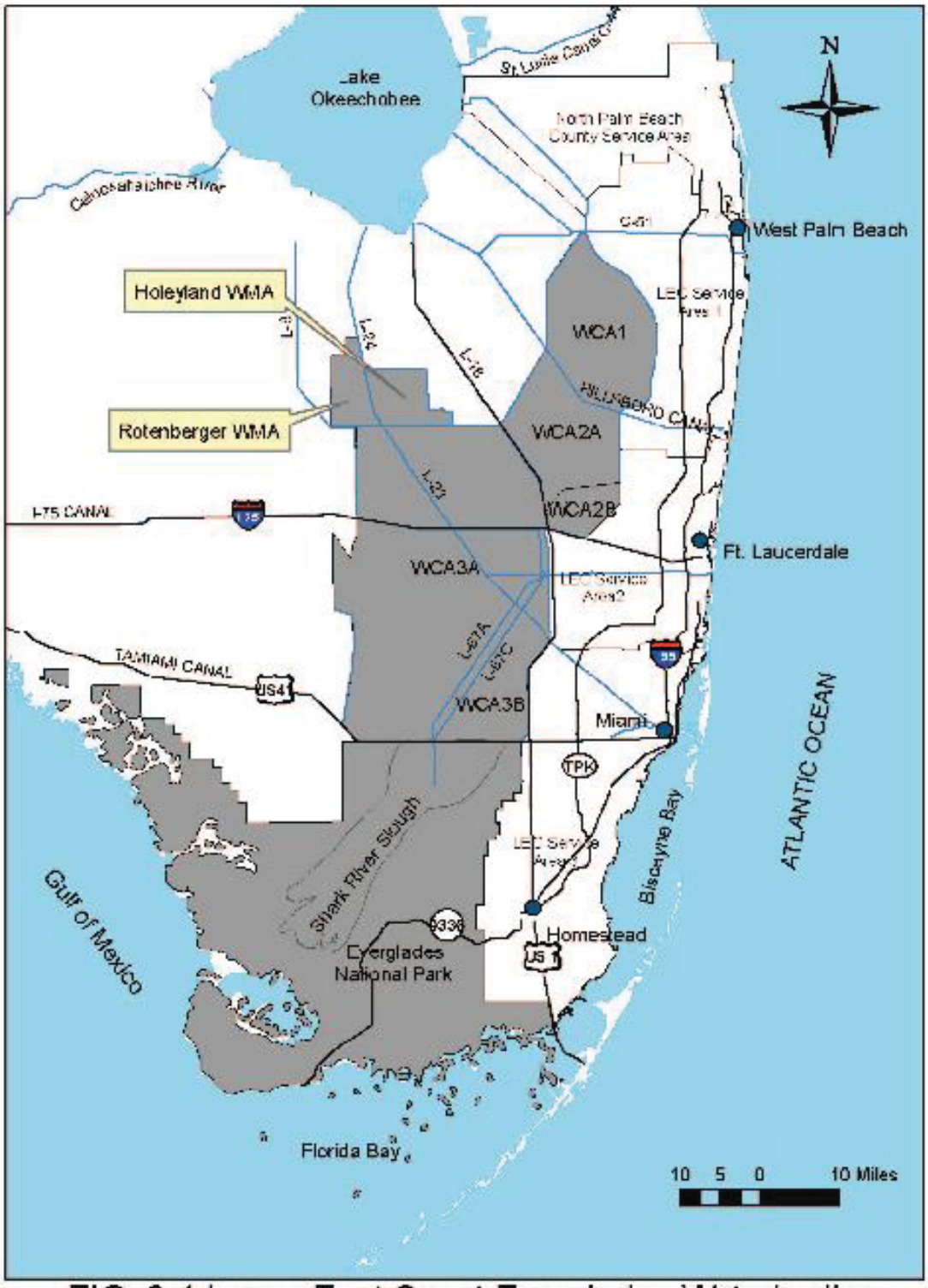

FIG. 3-1:Lower East Coast Everglades Waterbodies and Major Integrated Conveyance Canals

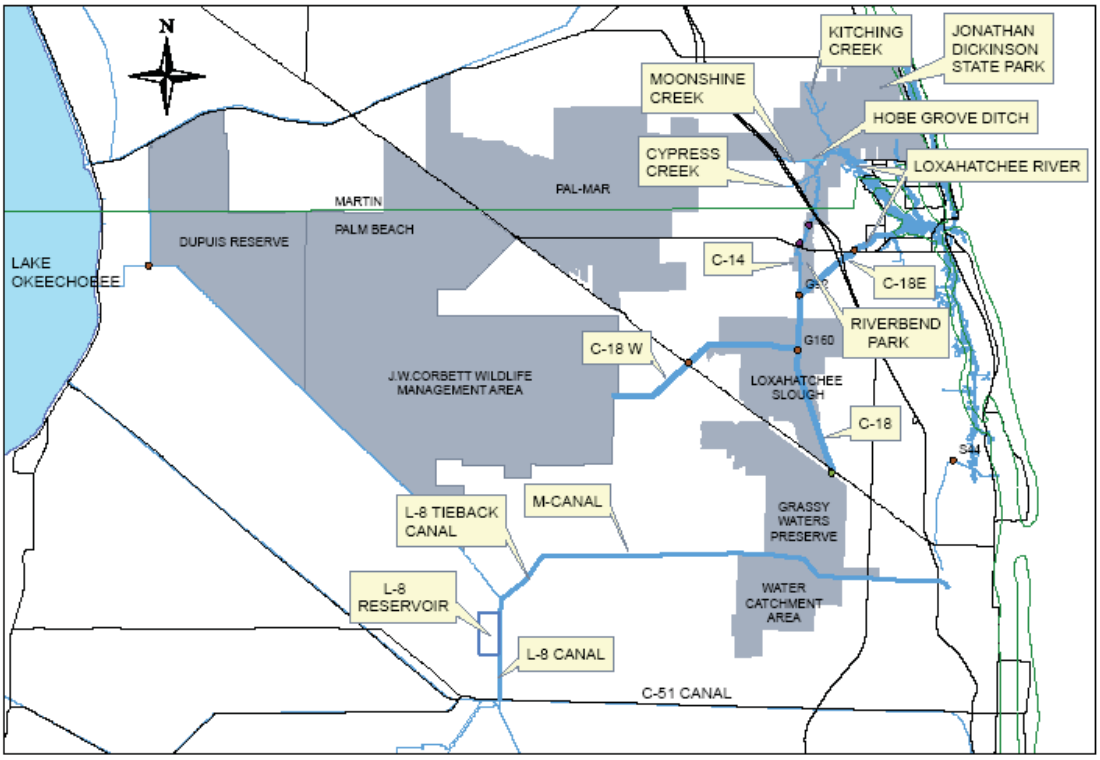

FIG. 3-2: North Palm Beach County/Loxahatchee River Watershed Water Bodies and Major Integrated Conveyance Canals

5 2.5 0 5 Miles

F. Lake Okeechobee Service Area Water Availability

The following restrictions shall apply when allocating surface water derived from the Lake Okeechobee Waterbody for consumptive use within the Lake Okeechobee Basin as depicted in Figure 3-3. This rule is a component of the recovery strategy for MFLs for Lake Okeechobee, as set forth in Chapter 40E-8, F.A.C., to address lower lake management levels and storage under the U. S. Army Corps of Engineers' interim Lake Okeechobee Regulation Schedule (LORS), adopted to protect the public health and safety (April 28, 2008). Compliance with this rule along with the other criteria contained in this Applicant's Handbook implements the objectives of the District to protect the public health and safety, to prevent interference among legal users of Lake water, to be consistent with the MFL recovery strategy as defined in Rule 40E-8.421, F.A.C., and to ensure that water necessary for Everglades restoration is not allocated for consumptive use.

1. The rule applies to applications for new projects, existing unpermitted projects, modifications to existing projects, and permit renewals for existing projects located within the Lake Okeechobee Basin as depicted in Figure 3-3, that propose to use surface water from the "Lake Okeechobee Waterbody," defined as:

a. Lake Okeechobee as identified in Subsection 40E-8.021(12); or,

b. Integrated conveyance systems that are hydraulically connected to and receive water from Lake Okeechobee such as the Caloosahatchee River, the St. Lucie Canal, or secondary canal systems that receive Lake Okeechobee water for water supply purposes via gravity flow or by pump.

This section does not apply to groundwater withdrawals such as withdrawals from wells, mining, and dewatering, or to projects that request to use a volume of water less than or equal to 3 MGM from the Lake Okeechobee Waterbody.

2. Except as otherwise provided in this section, an applicant must demonstrate the requested allocation will not cause a net increase in the volume of surface water withdrawn from the Lake Okeechobee Waterbody over the entire "base condition water use" as defined in Subsections 3.2.1.F.2 a. through d., below. In determining the base condition water use, pursuant to Subsections 3.2.1.F.2 a. through d. below, the District shall consider and allow adjustments if the applicant demonstrates that such use is not representative of normal operations due to unanticipated conditions affecting the actual quantity of water withdrawn, such as extreme climatic conditions or equipment failure.

a. Public Water Supply Use Class: the maximum quantity of water withdrawn by the applicant from the Lake Okeechobee Waterbody during any consecutive twelve month period between April 1, 2001 and January 1, 2008, consistent with the conditions of the existing permit. If a permit allocation existing on January 1, 2008 contains an allocation based on a conversion of a water treatment system, the base condition water use shall be increased to account for treatment losses of the new treatment plant as if the treatment system was operational during the above stated time interval;

b. Irrigation Use Classes: the quantity of water calculated using Subsections 2.3.1.C and 3.9.1 considering:

i. The maximum number of acres actively irrigated by the applicant between April 1, 2001 and January 1, 2008 along with the associated crop type and irrigation method used. When determining the numbers of acres actively irrigated, data regarding historic crop plantings will be evaluated however short-term reductions in historic plantings caused by disease or poor market conditions are not to be used in determining the actively irrigated acreage; or,

ii. If the irrigation project, or a portion thereof, has been authorized but not yet constructed pursuant to the conditions of a surface water management construction or environmental resource permit or authorization existing on January 1, 2008, the base condition water use will be calculated based on the number of acres and crop type identified in the environmental resource and water use permit or authorization in place as of January 1, 2008;

c. Diversion and Impoundment Use Class: the demands of the applicant calculated pursuant to Subsection 2.3.2.C for the physical conditions of the diversion and impoundment system as of January 1, 2008. In situations where historic uses were supplied by the diversion and impoundment project but not expressly identified or incorporated in the diversion and impoundment permit, the base case condition water use will be as calculated to include the historic demands served by the diversion and impoundment project between April 1, 2001 and January 1, 2008, consistent with the conditions of the existing permit;

d. Other Use Classes: the maximum quantities of water withdrawn by the applicant (annual and maximum month) between April 1, 2001 and January 1, 2008, consistent with the conditions of the existing permit.

3. Applicants shall provide reasonable assurances that the requested allocation will not cause a net increase in the volume of surface water withdrawn from the Lake Okeechobee Waterbody over the entire base condition water use. This demonstration is provided when the following criteria are met on a project by project scale as calculated pursuant to Subsection 3.2.1.F.2, above:

a. Permit Renewals: Those projects which timely seek re-issuance of a previous permit without modifications.

b. Modifications that Maintain or Reduce Base Condition Water Use Calculated Pursuant to the Existing Permit: Examples of such modifications include changes to withdrawal facilities, irrigated acreage, crop type within the permitted use class, or irrigation efficiency that results in an allocation that is equal to or less than the project's base condition water use calculated pursuant to the existing permit. In the event that the modification results in a use that is less than the project's base condition water use, the applicant will be required to calculate the reduction from the project's base condition water use associated with the requested modification.

c. New Projects, Existing Unpermitted Projects, or Modifications Requesting Base Condition Water Use in Excess of the Amount Calculated Pursuant to the Previous Permit: Except for those uses as identified in Subsection 3.2.1.F.4 as an incompatible use, allocations will be provided from the following sources:

i. Certified Project Water. Water provided from an operational water resource development project, as defined in Section 373.019(24), F.S., that has been certified by the Governing Board for allocation to consumptive uses, as defined in Section 1.8;

ii. Lake Okeechobee Waterbody Withdrawals Offset by Alternative Sources. An alternative source of water that is demonstrated to replace the volume, including timing, of water proposed to be withdrawn from the Lake Okeechobee Waterbody over the base condition water use. Examples of offsets include recharge provided by reclaimed water applied to provide recharge to the Waterbody in equal or greater amounts than the proposed increase over the base condition water use;

iii. Alternative Water Supply. Water provided from a source not restricted under this section such as groundwater, reclaimed wastewater or stored stormwater; or,

iv. Unassigned, Terminated, or Reduced Base Condition Water Use. The requested allocation is for available base condition water use calculated pursuant to Subsection 3.2.1.F, above, that was not authorized by an existing permit (i.e. "unassigned"), permitted base condition water use that has been made available through a permit which was terminated after January 1, 2008, or water made available pursuant to a modification made after January 1, 2008 which reduced the permitted base condition water use of an existing permit. In the event of competition for allocation of available base condition water use, those projects that seek an allocation of water in volumes equal to or less than that which was previously permitted to that project and/or used by that project shall be a positive consideration when determining which project best serves the public interest. Prior to February 28, 2010, the Governing Board reserves the right to restrict the re-allocation of terminated base condition water use if it determines that such water is demonstrated to improve the performance of an MFL waterbody under recovery in terms of shortening the frequency or duration of projected MFL

violations or improve the performance of meeting a restoration target as defined in an approved District restoration plan or project while also considering if alternative water supplies are available, whether the proposed use is ancillary to an agricultural use and other relevant public interest considerations. On or after February 28, 2010, the Governing Board reserves the right to restrict the re-allocation of unassigned, terminated, or reduced base condition water use, if it determines that such water is demonstrated to improve the performance of an MFL waterbody under recovery in terms of shortening the frequency or duration of projected MFL violations or improve the performance of meeting a restoration target as defined in an approved District restoration plan or project while also considering if alternative water supplies are available, whether the proposed use is ancillary to an agricultural use and other relevant public interest considerations.

4. Incompatible Use Type: Requested allocations for new public water supply uses that exceed 3 MGM or increases in existing uses above the project's base condition water use calculated pursuant to Subsection 3.2.1.F.2.a, above, shall not be permitted from the Lake Okeechobee Waterbody.

5. Requests for temporary increases over the project's base condition water use from the Lake Okeechobee Waterbody shall be granted to accommodate increased demands during a reasonable time period while alternative sources are constructed provided all other consumptive use permit criteria are satisfied. The duration of the temporary increase shall be determined based on a construction schedule for the alternative source to be implemented with due diligence and defined in permit conditions. Additionally, the permit shall include requirements to reduce the allocation to the base condition water use in accordance with this construction schedule.

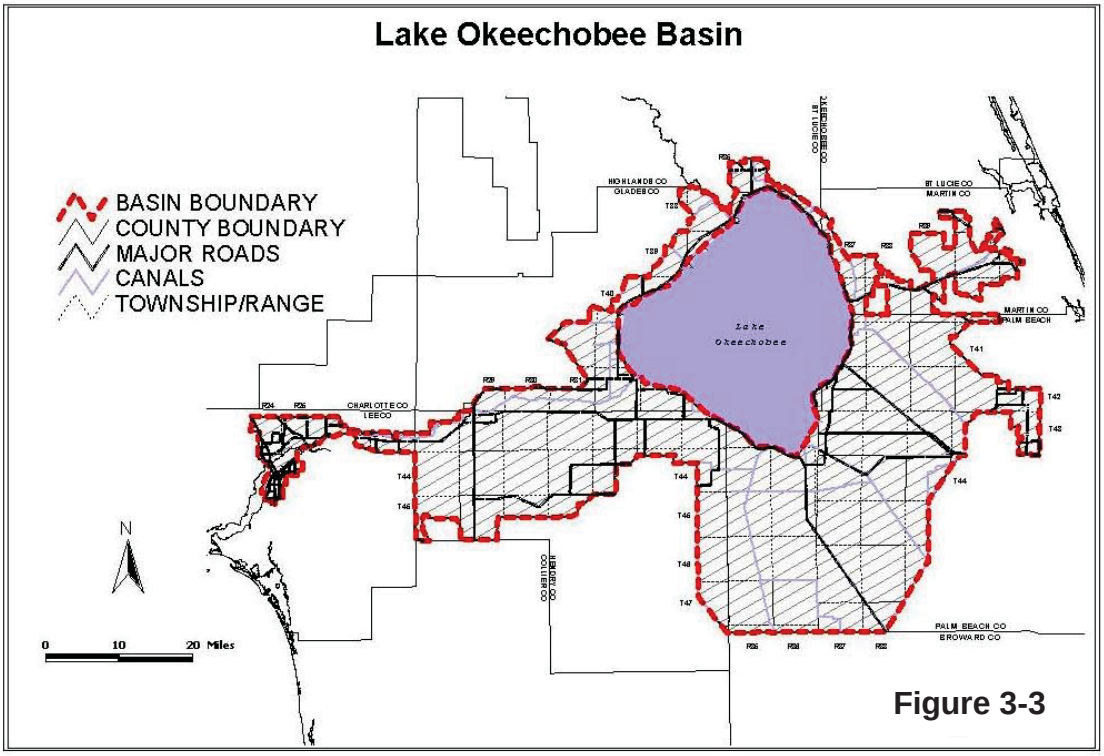

Figure 3-3

3.2.2 Area of Special Concern

If the District determines that the application is in an area of special water concern because of either limitations on water availability or other potentially adverse impacts associated with the proposed withdrawal, then:

A. Allocation of water shall be restricted or denied for irrigation purposes when reclaimed water is available and is economically, technically and environmentally feasible;

B. Irrigation shall be restricted to the use of a micro-irrigation system or the irrigation allocation limited to the quantity of water equivalent to the efficiency achieved by a micro-irrigation system; or,

C. Monitoring programs shall be imposed to delineate the cone of depression surrounding a withdrawal.

3.3 Evaluation of Impacts to Water Resources

This Section establishes the standards and thresholds for protection of wetlands and other surface waters from harm pursuant to the condition for permit issuance in Rule 40E-2.301, F.A.C., including ensuring a water use shall not be harmful to the water resources of the area and is otherwise consistent with the overall objectives of the District. The standards and thresholds specified herein shall apply to all water uses, including

applications for the initial use of water and modifications and renewals of consumptive use permits, and authorized water uses, herein referred to as the "water use". In its evaluation of the applicant's water use, the District shall consider the extent of hydrologic alterations caused by the applicant's water use, except as otherwise provided herein.

To provide reasonable assurances of compliance with the condition of issuance in Rule 40E-2.301, F.A.C., an applicant must demonstrate that hydrologic alterations caused by the water use shall not adversely impact the values of wetland and other surface water functions so as to cause harm to the:

A. Abundance and diversity of fish, wildlife and listed species; and,

B. Habitat of fish, wildlife, and listed species.

For the purposes of this Section, an adverse impact to the value of wetland and other surface water functions in violation of the above shall constitute "harm."

This Section requires assessment of whether impacts of a water use constitute harm. If a water use would cause harm, then the applicant must comply with the elimination or reduction of harm provisions pursuant to Subsection 3.3.5, and mitigation requirements of Subsection 3.3.6.

Impacts to wetlands and surface water bodies associated with wetland enhancement, restoration, creation, preservation or other mitigation permitted pursuant to Part IV of Chapter 373, F.S., or other wetland regulatory program implemented by a local, regional, or federal governmental entity, shall be considered under this Section.

Impacts on wetlands and other surface waters not caused by the water use, including, but not limited to, impacts caused by existing surface water management activities, drainage, water table lowering, roads, levees and adjacent land uses, are not considered under this Section.

The hydrologic characteristics resulting from construction or alterations undertaken in violation of Chapter 373, F.S., or District rule, order or permit shall be evaluated based on historic, pre-violation conditions, as if the unauthorized hydrologic alteration had not occurred.

3.3.1 Wetlands and Other Surface Waters

A. Delineation

Wetlands and other surface waters within the area of influence of the water use, delineated pursuant to Rules 62-340.100 through 62-340.600, F.A.C., as ratified by Section 373.4211, F.S., are subject to this subsection, except as provided in Subsection 3.3.1.B, below.

In accordance with Subsection 62-340.300(1), F.A.C., reasonable scientific judgment shall be used to evaluate the existence and extent of a wetland or other surface water,

including all reliable information, such as visual site inspection and aerial photo interpretation, in combination with ground truthing. In addition, relevant information submitted pursuant to Chapter 62-340, F.A.C, in support of an ERP/SWM Permit shall be considered. Field delineations of wetlands and other surface waters boundaries shall be required if such boundaries are in dispute.

In determining the location and category of wetlands and other surface waters, the applicant may consult several sources of information for guidance, as part of the information identified in Subsection 3.3.2. This includes the staff reports of previously issued ERP and SWM Permits for the site and adjacent sites, NWI Maps, Land Use/Land Cover maps, NRCS soils maps, formal and informal wetland determinations conducted by the District, and wetland maps produced by local governments. District staff may inspect the site to confirm the location, categorization and delineation of wetlands and surface waters, and other site specific information. Site specific topographical data including elevations of hydrologic indicators, wetland boundary and bottom elevations shall be required in the event that the categorization of a wetland or other surface water is in question. In the event that access to offsite wetlands or other surface waters has been denied by the property owner, the District and the applicant shall mutually agree on a method of establishing the locations, categorizations and delineations of the offsite wetlands or other surface waters.

B. Exclusions

Harm to the following wetlands and other surface waters shall not require elimination or reduction of harm and mitigation, under this Section:

1. Isolated wetlands one half (1/2) acre or less in size unless:

    a. The wetland or other surface water is used by threatened or endangered species; [Nothing herein is intended to relieve an applicant of the obligation to comply with the Florida Fish and Wildlife Conservation Commission (FWC) rules pertaining to listed species, and with the Federal Endangered Species Act.]

    b. The wetland or other surface water is located in an area of critical state concern designated pursuant to Chapter 380, F.S.; or,

    c. The wetland or other surface water is connected by standing or flowing surface water at seasonal high water level to one or more wetlands, where the combined wetland acreage is greater than one half acre.

2. Wetlands or other surface waters which have been authorized to be impacted to the extent established in a construction approval through an ERP or a SWM Permit issued under Part IV of Chapter 373, F.S.

3. Constructed water bodies including borrow pits, mining pits, canals, ditches, lakes, ponds, and water management systems, not part of a permitted

wetland creation, preservation, restoration or enhancement program. However, consideration of the design functions of water management systems shall be considered by Section 3.6, Existing Offsite Land Uses.

4. Wetlands or other surface waters to the extent they have been specifically authorized to be impacted or mitigated pursuant to Subsections 3.3.5, 3.3.6, or 3.3.7 in a consumptive use permit, unless the applicant proposes additional impacts.

3.3.2 Permit Application Submittals

The following shall be included in the applicant's submittal:

A. For purposes of determining whether the wetland or other surface water is excluded under Subsection 3.3.1.B., the applicant shall provide supporting documentation, including a scaled map and recent aerial photograph marked with the wetland or other surface water location and reason for being excluded under Subsection 3.3.1.B. If it is demonstrated that the wetland or other surface water is excluded under Subsection 3.3.1.B., no additional information submittals shall be required under this Section.

B. For wetlands or other surface waters that are not excluded under Subsection 3.3.1.B, scaled maps and recent aerial photographs that identify:

1. The area of influence of the water use;

2. In accordance with Subsection 3.3.1.A., the locations of all wetlands and other surface waters that occur within the area of influence of the water use, including wetlands and other surface waters located outside the applicant's property boundaries;

3. The locations of existing and proposed withdrawal facilities; and,

4. The categorization of each wetland or other surface water located within the area of influence of the water use as described in Subsection 3.3.3.

C. Information about the current condition of the wetlands and other surface waters and the hydrology.

D. Information regarding the potential impact of the water use on the wetland or other surface water in its current condition.

E. Information regarding site specific considerations required to be submitted pursuant to Subsection 3.3.4.C.

F. Where there is potential for harm, information required to determine the extent of elimination or reduction of harm pursuant to Section 3.3.5 and mitigation required

under Subsection 3.3.6, including an assessment of the use of the wetlands and other surface waters by listed species.

G. A monitoring plan to assess the effects of the water use, if required. A monitoring plan shall be required when necessary to provide continued verification that no harm is occurring due to the water use, such as when the cumulative impacts of water uses approach the numeric thresholds in Subsection 3.3.4.B or when the applicant elects to use an alternative simulation condition or evaluation methodology pursuant to the narrative standard of Subsection 3.3.4.A.

H. If the applicant asserts the exclusions in Subsections 3.3.1.B.2 or 3.3.1.B.4 or considerations in Subsection 3.3.7 apply to wetlands or other surface waters within the cone of influence of the proposed water use, the applicant must provide appropriate information supporting this assertion, including relevant information from the permit file.

3.3.3 Categorization of Wetlands and Other Surface Waters

Wetlands and other surface waters subject to consideration under this Subsection are grouped into three categories based on their normal hydrologic characteristics and their susceptibility to harm as a result of hydrologic alteration from water use withdrawals. Normal hydrologic characteristics are defined as the hydropattern that would occur without the impact of any authorized or unauthorized water uses.

In cases where existing surface water management "works" have permanently altered the normal hydrologic characteristics of the wetland or other surface water, the categorization shall be based on the resulting hydrology caused by the permanent alteration. Alterations that can effect wetland hydrology include canals, ditches, roads, structures or levees. The hydrologic characteristics resulting from construction or alterations undertaken in violation of Chapter 373, F.S., or District rule, order or permit, shall be evaluated based on historic, pre-violation conditions, as if the unauthorized hydrologic alteration had not occurred.

Wetlands and other surface waters are subject to evaluation under this Section, in accordance with the following:

Category 1: Natural lakes, deep ponds, rivers, streams, deepwater slough systems, coastal intertidal wetlands, and cypress strands that are permanently flooded throughout the year, except in cases of extreme drought. These include "permanently flooded" and "intermittently exposed" surface waters in the NWI maps.

Category 2: Seasonally inundated wetlands including cypress domes, emergent marshes, cypress strands, mixed hardwood swamps, or shrub swamps and exhibit standing water conditions throughout most of the year. These include "semi-permanently flooded" or "seasonally flooded" wetlands in the NWI maps.

Category 3: Temporarily flooded and saturated wetlands including wet prairies, and shallow emergent marshes, as well as seepage slopes, bayheads, hydric hammocks, and

hydric flatwoods. These include "temporarily flooded" and "saturated" wetlands in the NWI maps.

This subsection shall be applied on a case by case basis to categorize wetlands and other surface waters based on their normal hydrologic characteristics and susceptibility to harm as a result of hydrologic alterations from water use withdrawals.

3.3.4 "No Harm" Standards and Thresholds

To demonstrate that no harm will occur to wetlands and other surface waters, reasonable assurances must be provided by the applicant that the narrative standard for Category 1, 2 and 3 wetlands and other surface waters in Subsection 3.3.4.A is met.

For Category 2 wetlands, demonstration that the narrative standard is met shall be achieved through complying with the numeric threshold set forth in Subsection 3.3.4.B, unless such threshold is deemed by the District to be inapplicable due to the site specific considerations identified in Subsection 3.3.4.C. Site specific considerations may render the numeric threshold inapplicable. In these cases, the applicant shall demonstrate that harm as defined in the narrative standard in Subsection 3.3.4.A will not occur, notwithstanding the numeric threshold.

The analysis for determining harm shall include an assessment of the projected hydrologic alterations caused by the water use and a cumulative assessment encompassing other existing legal uses, and resulting impact on the wetlands and other surface waters. In circumstances of cumulative contributions to harm, an applicant shall only be required to address its relative contribution of harm to the wetlands and other surface waters.

In the evaluation of the applicant's water use, the District shall consider the extent of hydrologic alterations to wetlands and other surface waters caused by the applicant's water use based upon analytical or numerical modeling, or monitoring data, as required by Subsection 3.1.1 and this subsection.

The determination of harm shall consider the temporary nature of water use drawdowns and seasonal application of certain water uses. Such consideration includes a determination of whether the hydrologic alteration is constant or if it recovers seasonally.

A. Narrative Standard

For Category 1, 2, and 3 wetlands and other surface waters, an applicant shall provide reasonable assurances that hydrologic alteration caused by the water use shall not adversely impact the values of wetland and other surface water functions so as to cause harm to the:

1. Abundance and diversity of fish, wildlife and listed species; and,

2. Habitat of fish, wildlife, and listed species.

B. Numeric Thresholds for Category 2 Wetlands

Unless site specific considerations identified pursuant to Subsection 3.3.4.C exist indicating the following numeric threshold for Category 2 wetlands is not applicable, the water use shall not be considered harmful when the modeled drawdown resulting from cumulative withdrawals in the unconfined aquifer beneath all portions of the wetland is less than 1.0 feet.

Water use withdrawals shall be modeled based on a maximum monthly allocation simulated for 90 days without recharge and as otherwise directed under Subsection 3.1.2. If the applicant chooses to use an alternative simulation condition, the narrative standard in Subsection 3.3.4.A shall apply.

C. Site Specific Considerations

Site specific information shall be submitted by the applicant, if requested by the District or if otherwise deemed relevant by the applicant, for determining whether the narrative standard in Subsection 3.3.4.A is met, including whether the numeric threshold in Subsection 3.3.4.B is applicable. The applicant shall provide site specific information on the local hydrology, geology, actual water use or unique seasonality of water use, including, but not limited to:

1. Site specific hydrologic or geologic features that affect the projected drawdown shall be evaluated, including the existence of clay layers that impede the vertical movement of water under the wetland, preferential flow paths, seepage face wetlands that receive high rates of inflow, or the effects of soil depth and type on moisture retention, to the degree that actual field data support how these factors affect the potential for impacts of the water use on the wetland or other surface water.

2. If the applicant asserts that the actual water use has not caused harm to wetlands or other surface waters, site specific information on the condition of the wetlands or other surface waters in question must be provided in conjunction with pumpage records or other relevant evidence of actual water use to substantiate the assertion. Applicable monitoring data as described in Subsection 3.1.1 shall be submitted, if available.

3. Other relevant factors or information in assessing the potential for harm to wetlands and other surface waters, such as the condition, size, depth, uniqueness, location, and fish and wildlife utilization, including listed species, of the wetland or other surface water.

3.3.5 Elimination or Reduction of Harm

To the extent that harm is determined, the applicant shall modify the project design or water use, to the extent practicable, to eliminate or reduce harm to protected wetlands and other surface waters.

Modifications to the project or water use include developing alternative water supply sources, modification of pumpage, relocation of withdrawal facilities, implementation of water conservation measures and creation of hydrologic barriers.

A proposed modification that is not technically capable of being implemented, not economically viable, or adversely affects public safety through the endangerment of lives or property, is not considered "practicable." In determining whether a proposed modification is practicable, consideration shall be given to:

A. Whether the wetlands and other surface waters have been impacted by authorized activities other than the water use (such as development, adjacent land use, drainage activities, operations of Works of the District, or an ERP or SWM Permit), and will continue to be impacted by such activities;

B. The cost of the modification for elimination or reduction of harm compared to the environmental benefit such modification would achieve, including consideration of existing infrastructure; and,

C. As applicable for permit renewals, the considerations provided in Subsection 3.3.7.

The District shall not require the applicant to implement design modifications to reduce or eliminate harm when the ecological value of the functions provided by the wetlands and other surface waters to be adversely affected is low based onsite specific analysis, and the proposed mitigation will provide greater long term ecological value.

3.3.6 Mitigation of Harm

Upon determination by the District that elimination or reduction of harm is not practicable, the District shall consider proposals for mitigation. Mitigation is required to offset the harm to the functions of wetlands and other surface waters caused by the water use as described herein.

In certain cases, mitigation cannot offset impacts sufficiently to yield a permittable project. Such cases often include activities that harm OFWs, habitat for listed species, or wetlands or other surface waters not likely to be successfully recreated.

Mitigation shall not be required for impacts to wetlands and other surface waters previously mitigated through federal, state or local permit authorizations, such as other consumptive use permits, ERPs, or SWM Permits.

The District shall assess the condition of the wetland or other surface water as it exists at the time of the application submittal when determining mitigation requirements.

For permit renewals, mitigation requirements shall also be determined based on the provisions in Subsection 3.3.7.

Application of Environmental Resource Permit Provisions in Determining Mitigation Requirements

A. In the application of Section 3.3, the following ERP provisions within the Environmental Resource Permit Applicant's Handbook, Volume I (General and Environmental), regarding mitigation, shall be applied:

Subsection 10.2.2.3 regarding Assessment of Impacts;
Subsection 10.3.1 regarding Types of Mitigation, specifically Subsections 10.3.1.1, 10.3.1.3, and 10.3.1.8;
Subsection 10.3.2 regarding Guidelines for the Amount of Mitigation;
Subsection 10.3.3 regarding Mitigation Proposals;
Subsection 10.3.4 regarding Monitoring Requirements for Mitigation Areas;
Subsection 10.3.5 regarding Protection of Mitigation Areas;
Subsection 10.3.6 regarding Mitigation Success; and,
Subsection 10.3.7 regarding Financial Responsibility for Mitigation.

The above sections are incorporated by reference in Rules 62-330.010 and 40E-2.091, F.A.C.

B. Mitigation to offset the proposed harm shall be provided within the same drainage basin as the proposed harm, unless the applicant demonstrates that mitigation proposed outside of the drainage basin can fully offset the harm. Drainage basins, for purposes of this section, are set forth in Figure 10.2.8-5 of the Environmental Resource Permit Applicant's Handbook, Volume I (General and Environmental), incorporated by reference in Rules 62-330.010 and 40E-2.091, F.A.C.

C. In determining whether mitigation proposed outside of the drainage basin fully offsets the harm, consideration shall be given to the effect on the values of the remaining wetland and other surface water functions within the drainage basin, if the harm is mitigated outside of the drainage basin.

3.3.7 Consideration of Elimination or Reduction, and Mitigation of Harm, for Consumptive Use Permit Renewals

In addition to the considerations in Subsections 3.3.5 and 3.3.6, for renewal of a consumptive use permit, the determination of whether elimination or reduction, and mitigation, will be required for impacts to wetlands or other surface waters not identified or expressly authorized to be impacted by the previous consumptive use permit, shall be made considering the following:

A. The existing wetland and surface water functions;

B. The degree to which the wetland or other surface water functions are reasonably expected to recover if the withdrawal is reduced or eliminated;

C. The projected impacts on the existing functions of the wetlands or other surface waters from continuing the water use;

D. Whether the wetland or other surface water is connected by standing or flowing surface water to, or is part of, an OFW, Aquatic Preserve, state park, or other publicly owned conservation land with significant ecological value; and,

E. As part of the fish and wildlife utilization considerations in Subsections A, B, and C, above, special consideration shall be given to whether the wetland or other surface water is used for resting, nesting, breeding, feeding or denning by listed species.

3.4 Saline Water Intrusion

A water use permit application will be denied if the application requests freshwater withdrawals that would cause harm to the water resources as a result of saline water intrusion. Harmful saline water intrusion occurs when:

A. Withdrawals result in the further movement of a saline water interface to a greater distance inland toward a freshwater source except as a consequence of seasonal fluctuations; climatic conditions, such as drought; or operation of the Central and Southern Flood Control Project, secondary canal systems, or stormwater systems.

B. Withdrawals result in the sustained upward movement of saline water. Sustained upward movement is the level of movement that persists when the withdrawals have ceased. When the saline interface occurs beneath the point of withdrawal, the maximum amount of pumpage from any well shall be constrained as follows:

$$Q = \frac{2\pi}{3} (b-l)^2 \frac{\Delta\rho}{\rho} K$$

Where: Q is the maximum safe yield of well
b is the thickness of freshwater
l is the distance between top of aquifer and well screen
p is the density of freshwater
$\Delta\rho$ is the change in density of freshwater
K is the hydraulic conductivity of the aquifer

In order to provide reasonable assurances that harmful saline water intrusion will not occur, the applicant shall demonstrate that:

1. A groundwater divide (mound of freshwater) greater than one foot higher than the potentiometric head at the saline water source exists between the withdrawal point and the saline water source (defined by the location of the 250 mg/L isochlor); or,

2. A hydrologic analysis of groundwater flow demonstrates that there will be no further net inflow of groundwater from the saline water source toward the

withdrawal point; except as a consequence of seasonal fluctuations; climatic conditions, such as drought; or operation of the Central and Southern Flood Control Project, secondary canal systems, or stormwater systems, or,

3. Other evidence shows saline water intrusion will not cause harm to the wellfield and water resource, if pumpage is allowed or increased. Should the applicant's proposed withdrawals occur in an area where the saline water interface is unstable (as demonstrated by increases in measured chloride concentration levels within the influence of the proposed use), the applicant shall determine the cause of the saline movement and the extent of future movement through the duration of the permit and shall demonstrate that the proposed withdrawal will not cause harmful saline intrusion through the duration of the permit.

3.4.1 Use of Saline Water

The District encourages the use of the lowest water quality for the use intended, while also providing for the long-term protection of the water resources. The use of saline water is permitted by the District as a source of supply for all uses. The use of saline water may cause limited increases in salinity but not to the extent of interfering with any presently existing legal use of water, otherwise harming water resources, or rendering the resource no longer usable by the permittee. In order to provide reasonable assurances that harmful increases in salinity will not occur in violation of this section, the applicant must demonstrate that:

A. The quality of the proposed source will be adequate for the intended use throughout the duration of the permit;

B. The proposed use will not cause harm to presently existing legal use of water as defined in Section 3.7 of this Applicant's Handbook; and,

C. The proposed use of water will not cause harm to freshwater sources that come in contact with saline water as a result of the proposed use. Under the following conditions, the use of saline water will not be considered harmful to the receiving water body under this subsection:

   1. The affected receiving water body is non-productive or low yielding in nature (hydrologic conductivity of less than 10 feet per day);

   2. The saline source water will discharge directly to tide after use;

   3. The saline source water will be diluted to less than 200 mg/L chloride concentration prior to use; or,

   4. The impacts of the saline water use are compatible with surrounding land uses.

Any use of saline water that comes into contact with freshwater as a result of the proposed use will require a detailed water quality monitoring program as a permit condition. This rule is not intended to allow the District to consider disposal of concentrate resulting from desalination of saline water in determining compliance with the consumptive use permit conditions for issuance.

3.5 Pollution of the Water Resources

The issuance of a water use permit shall be denied if the withdrawals would cause significant degradation of surface water or groundwater quality through the induced movement of pollutants into a water resource that is not polluted. Significant water quality degradation may result from altering the rate or direction of movement of pollutants, as evidenced by the predicted influence the water withdrawals would have on inducing movement of the pollutants or as indicated by a sustained increase in background levels in pollutant concentrations.

3.6 Existing Offsite Land Uses

3.6.1 General Considerations

Pursuant to paragraph 40E-2.301(1)(b), F.A.C., an applicant must demonstrate that the proposed withdrawal will not cause harm to offsite land uses, as defined in this Section. This Section does not establish a property right in water; but prohibits harm from a consumptive use withdrawal to certain land uses that are dependent upon water being on or under the land surface based on the considerations set forth below.

3.6.2 Specific Considerations

Whether a particular offsite land use is considered under this Section depends on whether there is a reasonable expectation that water will continue to exist on or under the land surface. When determining whether there is a reasonable expectation in the occurrence of water for a particular offsite land use, the District will consider: 1) the historic natural and artificial hydrologic variations on the property; 2) the purpose and nature of the water or water source, such as surface water management or water quality treatment; and 3) the practicability of protecting the land use without supplementation (for example, restricting consumptive uses from impacting water levels in a cow pond versus supplementing water levels in the cow pond with another water source). This Section is not intended to protect wetlands and other surface waters, which are protected against harm pursuant to paragraph 40E-2.301(1)(c), F.A.C., and Section 3.3.

Only land uses that existed prior to the initiation of the consumptive use are protected under this Section. When a permit modification is considered under this Section, only the land use existing at that time of the pending application is considered. The responsibility to mitigate for harm to an offsite land use only extends to offsite land uses that predate the request for modification and only applies to harm projected to occur due to the requested modification. For permit renewals, the applicant is required to demonstrate that the allocation being renewed will not cause harm to land uses that existed at the time the allocation or portions of the allocation were first authorized either through an original permit or permit modification, consistent with the above provisions.

The following offsite land uses are protected from harm caused by a consumptive use withdrawal under this Section, when consistent with the considerations identified above:

A. Significant reduction in water levels on the property to the extent that the designed function of the water body and related surface water management improvements are damaged; not including aesthetic values. The designed function of a water body is that identified in the original permit or other governmental authorization issued for the construction of the water body. In cases where a permit was not required, the designed function shall be determined based on the purpose for the original construction of the water body (e.g., fill for construction, mining, or drainage canal).

B. Damage to agriculture, including damage resulting from reduction in soil moisture resulting from consumptive use; or,

C. Land collapse or subsidence caused by reduction in water levels associated with consumptive use.

The applicant must identify those land uses that are potentially impacted from the withdrawal, such as sinkhole prone areas, seepage irrigated crop lands, and surface water management systems. The applicant must demonstrate that the resulting change in water levels related to the proposed consumptive use will not cause harm, as described above.

In order to receive protection under this rule, the impact on a land use must be the result of a consumptive use withdrawal. Impacts to land use can occur as a result of many different activities, such as drainage activities, reduced rainfall, regional trends, and other non-consumptive use related influences. Impacts from these non-consumptive use influences will not be protected or mitigated for under this Section. Sufficient technical and scientific proof of the cause and effect of the alleged land use impact must exist, demonstrating that associated consumptive use harms the offsite land use.

If the applicant cannot provide reasonable assurance that a proposed withdrawal will not harm an offsite land use, the applicant must submit a mitigation plan. The mitigation plan shall identify actions necessary to mitigate once the impact has occurred, or is imminent. Such actions must be sufficient to provide water consistent with the authorized use and will require a permit modification if required by Rule 40E-2.331, F.A.C. As necessary to offset the harm, mitigation will include pumpage reduction, replacement of the impacted individual's equipment, relocation of wells, change in withdrawal source, or other means. The permittee shall mitigate harm to offsite land uses that was caused in whole or in part by the permittee's withdrawals, consistent with the approved mitigation plan. The mitigation plan will require a permittee to mitigate immediately, or upon the actual occurrence of harm. The determination of when mitigation is required is based upon the likelihood that the harm is projected to occur.

3.7 Interference with Existing Legal Users

To obtain a water use permit the applicant must provide reasonable assurance that it will not interfere with any existing legal use of water, pursuant to Section 373.223(1)(b), F.S. In general, an applicant must provide reasonable assurances that the proposed withdrawal of water, together with other exempt or permitted withdrawals within the cone of influence of the proposed withdrawal, will not result in interference with existing legal uses.

3.7.1 Definition of "Existing Legal Use"

The determination of whether a water use is an existing legal use in relation to the proposed withdrawal must be made under this analysis. Existing legal uses are protected from interference from other existing legal uses established subsequent to the establishment of the existing legal use. An existing legal use is defined by the terms and permit conditions authorizing the withdrawal, if any. A use of water not permitted nor exempt pursuant to Part II of Chapter 373, F.S., is not an existing legal use.

The following criteria describe application of the existing legal use protection when permit modifications or renewals occur:

A. When a permit modification is considered under this rule, only the existing legal uses existing at that time of the pending application are considered existing legal uses. The responsibility to mitigate for interference to an existing legal use only extends to interference to existing legal uses that predate such request and only applies to impacts that occur due to the requested modification.

B. For permit renewals, the applicant is required to demonstrate that the allocation being renewed will not interfere with existing legal uses that existed at the time the allocation, or portions of the allocation, were first authorized either through an original permit or permit modification, consistent with the above provisions.

C. Individual uses served by a permitted diversion and impoundment permit, are considered to be existing legal uses for purposes of this rule. However, interruption of service to uses served by a diversion and impoundment project, when such interruption is due to project operations of the diversion and impoundment project, shall not be considered interference under this Section.

3.7.2 Definition of Interference with Existing Legal Use

Interference to an existing legal use is defined as an impact that occurs under hydrologic conditions equal to or less severe than a 1-in-10 year drought event that results in the:

A. Inability to withdraw water consistent with provisions of the permit or exempt use, such as when remedial structural or operational actions not materially authorized by existing permits must be taken to address the interference;

B. Change in the quality of water pursuant to primary State Drinking Water Standards to the extent that the water can no longer be used for its authorized purpose, or when such change is imminent; or,

C. Inability of an existing legal user to meet its permitted demands without exceeding the permitted allocation.

D. If the proposed use is an ASR system, the applicant shall identify all existing legal uses within the area of influence and provide reasonable assurance that the operation of the proposed ASR system will not cause interference per the criteria contained in Subsections 3.7 and Subsection 3.10.

3.7.3 Mitigation Requirements for Interference with Existing Legal Uses

If the applicant cannot provide reasonable assurance that a proposed withdrawal will not interfere with existing legal uses, the applicant must submit a mitigation plan. The mitigation plan shall identify actions necessary to mitigate for interference once the impact has occurred, or is imminent. Such actions must be sufficient to provide water consistent with the authorized use and will require a permit modification if required by Rule 40E-2.331, F.A.C. As necessary to offset the interference, mitigation will include pumpage reduction, replacement of the impacted individual's equipment, relocation of wells, change in withdrawal source, or other means.

Once the permit is issued, the permittee shall mitigate interference with existing legal uses that was caused in whole or in part by the permittee's withdrawals, consistent with the approved mitigation plan. The mitigation plan will require a permittee to mitigate immediately, or upon the actual occurrence of an interference. The determination of when mitigation is required is based upon the likelihood that the interference is projected to occur.

3.8 Otherwise Harmful

The issuance of a permit shall be denied if the withdrawal or use of water would otherwise be harmful to the water resources.

3.9 Minimum Flows and Levels

Applications for consumptive use permits for water uses that directly or indirectly withdraw water from MFL water bodies must meet the criteria in this section, in addition to all other conditions for permit issuance in Chapters 40E-2 or 40E-20, as applicable. Applications that meet the criteria contained in this section are considered to comply with paragraph 40E-2.301(1)(l), F.A.C. Consumptive use permit applications shall be reviewed based on the recovery or prevention strategy approved at the time of permit application review.

3.9.1 Evaluations for MFL Water Bodies Subject to a Recovery Strategy

Evaluations for direct or indirect withdrawals from MFL water bodies that are subject to a recovery strategy:

A. Permit Renewals

A request for renewal of an existing permitted allocation, which directly or indirectly withdraws water from a MFL water body, shall meet the requirements of this section if: 1) the impact of the withdrawal of water will be corrected through implementation of a recovery strategy; and 2) the level of impacts from the allocation approved in the expiring permit are no greater under the requested renewal.

If the level of certainty under the expiring permit is changed to a 1-in-10 year level of certainty by rule (e.g., a golf course irrigation level of certainty changed from a 1-in-5 to a 1-in-10 year level of drought) the levels of impact from the withdrawal of water under the expiring permit shall be normalized to a 1-in-10 drought level of certainty in order to evaluate the impact of the withdrawal of water.

B. New or Modified Permits – Direct Withdrawals.

A request for a new or increased permit allocation which directly withdraws water from a MFL water body, shall meet the requirements of this section, if:

1. Sufficient additional water has been made available for the new or increased portion of the requested allocation via certification of a project or project phase of the recovery strategies, as certified by the District, pursuant to paragraph 40E-8.421(1)(e), F.A.C. Water made available from a certified project or project phase of a recovery strategy for new or increased uses will be allocated based on the criteria in this Applicant's Handbook and Chapter 40E-2, F.A.C.; or,

2. The request incorporates a District approved alternative measure or source that prevents additional impacts to the MFL water body from the new or increased portion of the requested allocation. An example of an acceptable alternative measure is an aquifer storage and recovery system, which stores excess water during the wet season in order to minimize new or increased withdrawals during the dry season. The permit conditions shall require the District approved alternative measure or source to be operating or otherwise available concurrently with the new or increased use.

C. New or Modified Permits – Indirect Withdrawals

A request for a new or increased permit allocation which indirectly withdraws water from a MFL water body, shall meet the requirements of this section, if the new or increased use is consistent with the recovery strategy as delineated in the applicable regional water supply plan.

3.9.2 Evaluations for MFL Water Bodies Subject to a Prevention Strategy

Evaluations for direct or indirect withdrawals from MFL water bodies that are subject to a prevention strategy:

A. Permit Renewals

A request for renewal of an existing permitted allocation that directly or indirectly withdraws water from a MFL water body shall meet the requirements of this section if the level of impacts from the allocation approved in the expiring permit are no greater under the requested renewal. If the level of certainty under the expiring permit is changed to a 1-in-10 year level of certainty by rule (e.g., a golf course irrigation level of certainty changed from a 1-in-5 to a 1-in-10 year level of drought) the levels of impact from the withdrawal of water under the expiring permit shall be normalized to a 1-in-10 drought level of certainty in order to evaluate the impact of the withdrawal of water.

B. New or Modified Permits

A request for a new or increased permit allocation that directly or indirectly withdraws water from a MFL water body, shall meet the requirements of this section if the request is consistent with the prevention strategy(ies) as delineated in the applicable regional water supply plan.

3.9.3 Maximum Developable Limits

Reasonable assurances shall be provided that the proposed use shall not cause harmful drawdowns so as to mine semi-confined freshwater aquifers on the Lower West Coast. The potentiometric head within the Lower Tamiami aquifer, Sandstone aquifer and mid-Hawthorn aquifer shall not be allowed to drop to less than 20 feet above the top of the uppermost geologic strata that comprises the aquifer at any point during a 1-in-10 drought condition. This criteria must be met except in areas closer than 50 feet from any existing pumping well. Reasonable assurances shall consider actual measured water level data for the affected area for the most recent 1-in-10 drought condition combined with the calculated drawdowns for all permits issued since that drought located within the area of influence of the requested allocation combined with the requested allocation.

3.10 Aquifer Storage Recovery Systems

Applicants for ASR systems authorized per Rule 40E-5.041, F.A.C., shall demonstrate that the provisions of Rule 40E-2.301, F.A.C., are met during: 1) diversion of the water for storage; 2) the time period in which the water is introduced into an aquifer for storage and stored within the aquifer; and 3) recovery of the stored water. Unless otherwise noted in Subsection 2.3.2.G or below, the criteria used to demonstrate that the provisions of Rule 40E-2.301, F.A.C., are met are contained in applicable sections in this Applicant's Handbook.

The applicant shall demonstrate that the diversion of water for storage in an ASR system shall not cause harm to the water resource as outlined in Rule 40E-2.301, F.A.C., during the wet and dry seasons. As part of this demonstration, the applicant shall provide reasonable assurances that the wet season demands for the ASR diversions do not cause harm to wetlands and other surface waters or harmful saline water intrusion. The applicant shall identify the area of influence based on the volume of water calculated under Subsection 2.3.2.G, above. The area of influence of an ASR system shall address two factors: 1) the area affected by the pressure change resulting from the injection and removal of stored water; and, 2) the orientation of the stored freshwater and associated

buffer zone. The applicant shall identify all existing legal uses within the area of influence and provide reasonable assurance that the operation of the proposed ASR system will not cause interference per the criteria contained in Subsection 3.7.

3.11 Water Reservations

3.11.1 Picayune Strand and Fakahatchee Estuary

An applicant shall provide reasonable assurances that the proposed use will not withdraw water reserved under Subsections 40E-10.041 (1) and (2), F.A.C., except water uses less than 100,000 gallons per day associated with land management or public access/recreation which are permittable. Compliance with the following criteria constitutes reasonable assurances that water reserved in Subsections 40E-10.041 (1) and (2), F.A.C., will not be withdrawn. Water not reserved under Subsections 40E-10.041 (1) and (2), F.A.C., shall be allocated pursuant to Subsections 3.11.1 A and B, below.

For this section, the following definitions apply:

> Direct Withdrawals from Groundwater: Water pumped from a well(s) constructed within the boundaries of the Picayune Strand or Fakahatchee Estuary into the water table or unconfined portions of the Lower Tamiami aquifer.
>
> Indirect Withdrawals from Groundwater: 1) a groundwater withdrawal from a well(s) constructed outside the boundaries of Picayune Strand and Fakahatchee Estuary into the water table or Lower Tamiami aquifer that results in a 0.1 foot or greater drawdown in the water table aquifer at any location underlying the Picayune Strand or the Fakahatchee Estuary, as determined by an evaluation conducted pursuant to Subsection 3.1.2.A; or 2) a groundwater withdrawal that causes a water table drawdown of 0.1 foot or greater underlying any canal identified in Figure 3-4, as determined by an evaluation conducted pursuant to Subsection 3.1.2.A.
>
> Direct Withdrawals from Surface Water: Withdrawal of surface water from facilities physically located within the Picayune Strand or Fakahatchee Estuary boundaries.
>
> Indirect Withdrawal from Surface Water: Withdrawal of surface water from any canal identified in Figure 3-4.

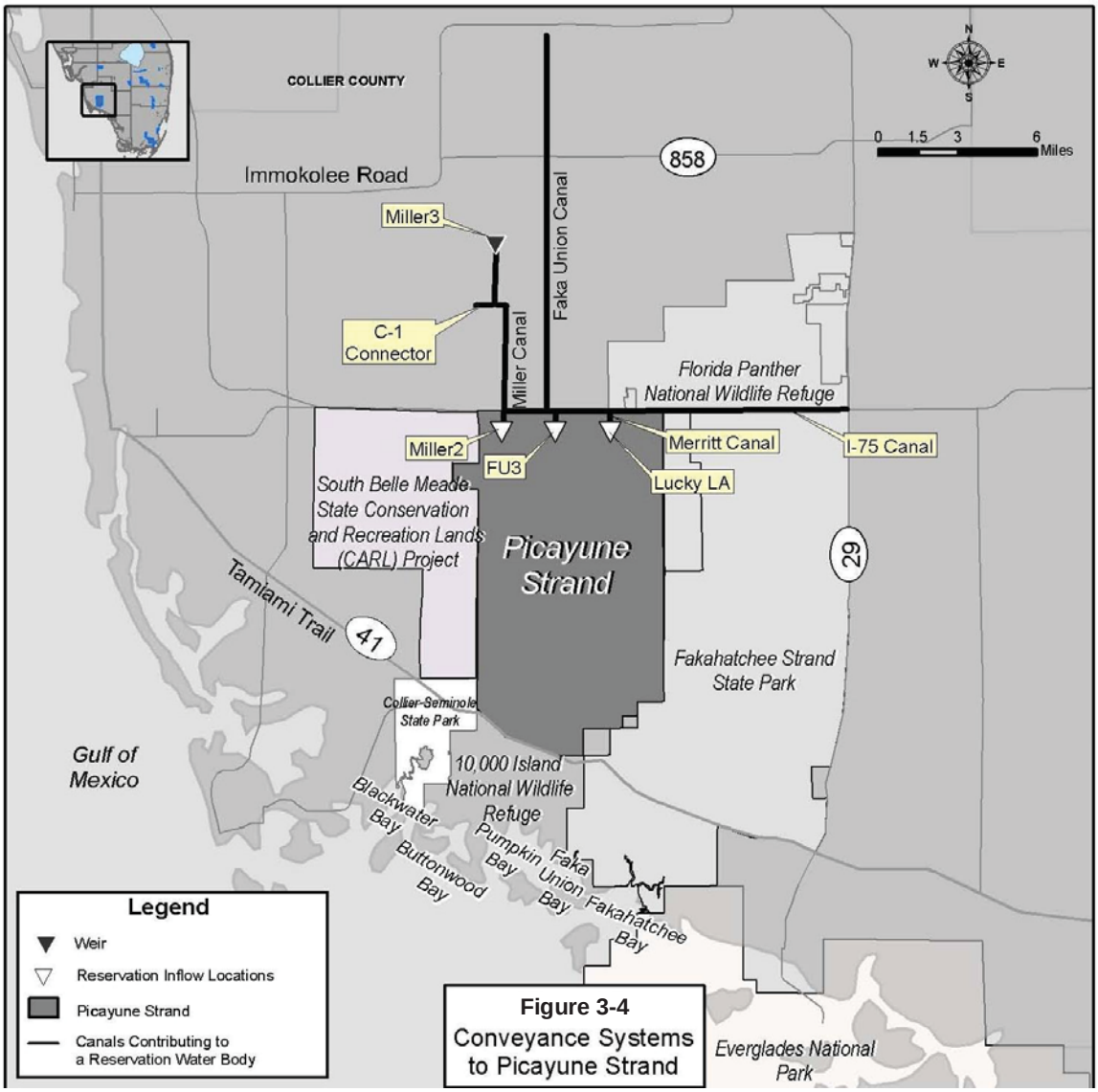

Figure 3-4
Conveyance Systems to Picayune Strand

A. The following uses do not withdraw reserved water:

1. Withdrawals from the Sandstone aquifer, Mid-Hawthorn aquifer or the Floridan Aquifer Systems;

2. Withdrawals authorized by Subsection 40E-2.061(2), F.A.C. (General Permit by Rule for Short-Term Dewatering);

3. A renewal of a water use authorized by a permit existing on July 2, 2009. If the level of certainty under the permit being renewed is changed to a 1-in-10 year level of certainty pursuant to Subsection 2.3.1.C (e.g., a golf course irrigation level of certainty changed from a 1-in-5 to a 1-in-10 year level of drought), the resulting 1-in-10 year allocation shall be authorized;

4. A permit modification that does not change the source, increase the allocation or change withdrawal locations, such as replacement of existing wells with similar construction and at similar locations, crop changes that do not change the allocation or timing of use, or decrease in allocation;

5. A permit modification that does not result in a direct or indirect withdrawal as demonstrated through an analysis conducted consistent with Subsection 3.1.2.A. When a modification to an existing permit is requested, the 0.1 foot threshold for determining a direct or indirect withdrawal will be applied to the effect of the modification only. The change in the drawdown solely associated with the applicant's proposed modification is calculated at the location of the 0.1 foot drawdown contour associated with the existing permit. If the change in drawdown associated with the proposed modification is less than 0.1 foot, the applicant's modification does not withdraw reserved water;

6. A proposed new use that does not result in a direct or indirect withdrawal as demonstrated through an analysis conducted pursuant to Subsection 3.1.2.A;

7. A proposed new use with a direct or indirect withdrawal and no greater impact, including changes in timing, on a reservation water body than the terminated or reduced permit existing on July 2, 2009 within the same project site. This evaluation will be conducted pursuant to Subsection 3.1.2;

8. A proposed new use or proposed modification of a permit with an indirect withdrawal that does not withdraw reserved water from the Picayune Strand or the Fakahatchee Estuary. The determination that reserved water is not withdrawn shall be demonstrated by conducting the Model Impact Evaluation in Subsection 3.11.1.B, below.

B. Model Impact Evaluation.

If required by Subsection 3.11.1.A, above, the applicant shall demonstrate water reserved for the Picayune Strand and Fakahatchee Estuary will not be withdrawn by conducting the following Model Impact Evaluation. A pre-application meeting between the applicant and District staff is strongly recommended to be conducted prior to initiating model development.

1. Defining Scope of Model Evaluation
   a. For groundwater withdrawals, identify the cone of influence of the proposed withdrawal per Subsection 3.1.2.A. Based on this analysis, the applicant shall identify which reservation inflow locations (set forth in Figures 1-2 and 1-3 in Chapter 40E-10, F.A.C.) and conveyance system(s) identified on Figure 3-4 are potentially influenced by the proposed withdrawal.

b. For surface water withdrawals, identify the reservation inflow locations, reservation water body (set forth in Figures 1-2 and 1-3 in Chapter 40E-10, F.A.C.), and conveyance system(s) identified on Figure 3-4 that are potentially influenced by the proposed withdrawal.

2. Conditions of Model Development

a. Boundary Conditions: The model domain and resolution of grid cell size shall be identified using professional standards for model development considering the area of influence, while avoiding boundary condition biases. At a minimum, boundaries shall be situated sufficiently distant from the area of interest or in such a manner as to prevent non-representative impacts from specified boundary conditions on predicted stages and/or flow in the area of interest.

b. Surface water and groundwater interactions: Surface water and groundwater model codes that have undergone professional peer review and are representative of the physical system being simulated shall be used. Where integrated surface water and groundwater models are applied, time steps will be selected with consideration given to the resolution of the available data and the resolution necessary for quantifying flow volumes. Surface waters and overland flow time steps not exceeding 4 hours in length, canal flows time steps not exceeding 3 minutes, and groundwater time steps not exceeding 6 hours in length shall be considered acceptable. Alternative time steps may be used providing they produce an acceptable calibration as described in Subsection 3.11.1.B.2.f. For the purposes of model calibration, the time steps used for simulating stages shall be averaged and flows shall be summed to produce daily values for comparison to measured data.

c. Hydrologic Conditions: Rainfall and evapotranspiration shall be simulated based on data collected from 1988 through 2000 for the model domain.

d. Land Use/Water Use: The model shall simulate 2000 land use existing on December 31, 2000 within the model domain (as identified in Subsection 3.11.1.B.2.a, above). The water use withdrawal data used for the model calibration shall reflect actual use during the period of 1988 through 2000. In the case of irrigation type uses, a supplemental crop irrigation module from the model code selected per Subsection 3.11.1.B.2 shall be acceptable for calculating variable demands.

e. Project Features and Operations: Model simulations shall include project features and operations of the Picayune Strand Restoration

Project utilized to simulate the flows identified in Rule 40E-10.041, F.A.C.

f. Model Calibration: To calibrate the model, the model output shall be compared to the affected flow probability distribution(s) in Rule 40E-10.041 and surface water, groundwater stage, and flow data from monitoring sites located within the model domain. The model shall be considered calibrated when surface water and groundwater stage and flow are calibrated as required by Subsections i., ii., and iii., below, and the resulting flow probability distribution curves from the applicant's model are consistent with the magnitude and timing of flows in the flow probability distribution curves identified in Rule 40E-10.041, F.A.C., for the time period including 1988 through 2000. In the event that the simulated model output for a monitoring site(s) or the flow probability distribution(s) does not meet these criteria, the applicant shall provide a justification of the deviation. If such justification adheres to documented physical conditions in the field and comports with professionally accepted principles of hydrology, the monitoring sites or flow probability distribution(s) that do not meet the criteria shall be accepted.

i. Groundwater Stage Data: The mean error determined by comparing the model calculated groundwater stage as described in Subsection 3.11.1.B.2.b with the corresponding measured data shall not exceed 1.0 foot for the time period including January 1, 1995 through December 31, 1999. If the mean error is exceeded at a monitoring location, the groundwater calibration shall be considered acceptable when the absolute mean error of all the groundwater monitoring locations within the model domain do not exceed 1.0 foot and the deviation between the model simulation value and the measured value is explained as set forth in Subsection 3.11.1.B.2.f.

ii. Canal Stage Data: The average mean error determined by comparing the model simulated surface water stages as described in Subsection 3.11.1.B.2.b with the corresponding measured data should not exceed 0.3 foot for the time period including January 1, 1995 through December 31, 1999.

iii. Flow Data: The mean error determined by comparing the model simulated surface water flow as described in Subsection 3.11.1.B.2.b with the corresponding measured data shall not exceed ten percent for the time period including January 1, 1995 through December 31, 1999.

3. Impact Evaluation

Once the model is calibrated, applicants shall demonstrate that water reserved for the Picayune Strand and Fakahatchee Estuary will not be withdrawn, based on the following:

a. "Without scenario." All existing legal uses at the effective date of the rule shall be represented using the allocation in the permit. For the purposes of this evaluation and Subsection b, below, the annual allocation shall be distributed on a monthly basis based on the use type. For a public water supply use type, the monthly distribution shall be calculated based on the measured monthly pumpage divided by the annual total pumpage using the average of the three most recent representative years. Representative years shall not include years with water shortage restrictions, years with plant failures or other years that are not representative of normal pumpage. For an irrigation use type, the monthly distribution shall be determined using the Blaney-Criddle distribution calculated for each project pursuant to "Part B Water Use Management System Design and Evaluation Aids" of the Volume III, Permit Information Manual for Water Use Applications referenced in this Applicant's Handbook, the annual allocation and the associated monthly distribution shall be simulated using the calibrated model developed in accordance with the criteria identified in Subsection 3.11.1.B.2 in order to generate a daily flow data for each represented inflow location identified in Subsection 3.11.1. These data shall be presented as daily hydrographs as well as seasonal and period of record flow probability curves.

b. "With Scenario:" The "with scenario" includes all existing legal uses at the time of the evaluation of the application and the proposed use and pending applications for which the evaluation under this subsection is being conducted. The annual allocation and the associated monthly distribution shall be simulated using the calibrated model developed in accordance with the criteria identified in Subsection 3.11.1.B.2 in order to generate a daily flow data for each represented inflow location identified in Subsection 3.11.1. These data shall be presented as daily hydrographs as well as seasonal and period of record flow probability curves.

c. The resulting flow volume distributions of the "with" and "without" scenarios shall be compared to determine whether the proposed use withdraws reserved water. Withdrawals of reserved water occur when the simulated flow volume probability curve(s) of the "with scenario" differs in flow distribution when compared to the "without scenario" at any of the inflow locations identified in Subsection 3.11.1.B.1

4. Alternative Model Evaluations

Applicants may propose alternative modeling evaluations in order to provide reasonable assurances that the proposed project does not withdraw water reserved under Rule 40E-10.041 F.A.C. Such modeling shall evaluate the impacts of the proposed project on the reservation water body under a representative range of hydrologic conditions for which the water reservations have been established (e.g. wet, average, dry hydrologic conditions). Proposed alternative modeling evaluations shall be submitted in writing to the District for review and comment prior to conducting such modeling either in a pre-application meeting or as part of the permit application. District staff shall approve those model approaches which utilize documented model codes that have undergone professional peer review and accurately represent the physical system; are calibrated consistent with the criteria contained in Subsection 3.11.1.B.2.f i., ii., and iii. or other appropriate criteria; accurately represents impacts to inflows of reserved water into the reservation water body as described in Rule 40E-10.041 F.A.C.; and represents existing legal uses and the proposed project withdrawals.

5. Reduced or Terminated Permit Impacts

If an existing legal use at the effective date of the rule has been reduced or terminated and results in increased inflows that result from the reduced or terminated use into the reservation water body, the applicant may seek an allocation that withdraws such increased inflows at any of the inflow locations identified in Subsection 3.11.1.B.1. provided that the waters reserved in Rule 40E-10.041, F.A.C., are not reduced as demonstrated through an analysis conducted pursuant to Subsection 3.11.1.B.3 or 4. The quantity of increased inflow shall be available for allocation unless the Governing Board determines that allocation of the water is not consistent with the public interest under Subsection 373.223(1)(c), F.S.

In the event these criteria cannot be met, the applicant shall modify the application to otherwise meet the requirements of this Section.

3.11.2 North Fork of the St. Lucie River

The North Fork of the St. Lucie River water reservation, as stated in Rule 40E-10.051, F.A.C., protects Comprehensive Everglades Restoration Plan project water needed for protection of fish and wildlife within the North Fork of the St. Lucie River. Applications deemed complete prior to the conditions identified in Subsection 40E-10.051(1), F.A.C., and which otherwise satisfy the requirements of Chapter 40E-2, F.A.C., as applicable, are determined not to use the water reserved pursuant to Rule 40E-10.051, F.A.C.

3.11.3 Nearshore Central Biscayne Bay

An applicant shall provide reasonable assurances that the proposed use will not withdraw water reserved under Subsection 40E-10.061(1), F.A.C. Compliance with the following criteria constitutes reasonable assurances that water reserved in Rule 40E-10.061,

F.A.C., will not be withdrawn. Water not reserved under Rule 40E-10.061, F.A.C., shall be allocated pursuant to this subsection.

For this section, the following definitions apply:

Direct withdrawal: Withdrawal of surface water from facility intakes physically located within the surface water column of Nearshore Central Biscayne Bay as depicted on Figure 3-1 in Chapter 40E-10, F.A.C. No direct withdrawals shall be authorized pursuant to this rule.

Indirect withdrawal: Withdrawal of surface water from facility intakes physically located within the surface water column of any canal reach identified in Figure 3-1 in Chapter 40E-10, F.A.C.

The following uses do not withdraw reserved water:

A. Withdrawals of groundwater;

B. Withdrawals authorized by Rule 40E- 2.061, F.A.C. (General Permits by Rule) and dewatering operations that: 1) will not exceed a maximum of 10 mgd, with a maximum of 1,800 mg total pumpage; and 2) will not exceed a total duration of one year for the entire project;

C. Renewals of indirect withdrawals authorized by a permit existing on July 21, 2013;

D. A permit modification involving an indirect withdrawal authorized by a permit existing on July 21, 2013 that does not change the source, increase the allocation or change withdrawal locations, such as replacement of existing surface water pumps or intakes, crop changes that do not change the allocation or timing of use, or decrease in allocation;

E. A new indirect withdrawal with no greater allocation and impact, including changes in timing, than a terminated or reduced permit that was existing on July 21, 2013 and occurs upstream of the same coastal structure; and,

F. Indirect withdrawals which do not withdraw reserved water as defined in Rule 40E-10.061 F.A.C.

3.11.4 Caloosahatchee River (C-43) West Basin Storage Reservoir

The Caloosahatchee River (C-43) West Basin Storage Reservoir Water Reservation, as stated in Subsection 40E-10.041(3), F.A.C., protects Comprehensive Everglades Restoration Plan project water needed for the protection of fish and wildlife within the Caloosahatchee River. Applications deemed complete prior to the conditions identified in Subsection 40E-10.041(3), F.A.C., and which otherwise satisfy the requirements of Chapter 40E-2, F.A.C., as applicable, are determined not to use the water reserved pursuant to Subsection 40E-10.041(3), F.A.C.

4.0 MONITORING REQUIREMENTS

To ensure continuing compliance with the conditions of permit issuance, monitoring and reporting activities shall be required as special permit conditions pursuant to Section 5.0 of this Applicant's Handbook. The details of all required monitoring plans shall be submitted by the applicant for District review and approval as part of the water use permit application and shall be a condition of permit issuance. The permit will require implementation of the approved monitoring programs.

4.1 Withdrawal Quantity

The following subsections identify the withdrawal quantity monitoring requirements for withdrawal facilities within the District.

4.1.1 Water Flow Monitoring and Calibration

Proper accounting for water use is essential to establish that the use is a reasonable-beneficial use of the resource and in the public interest. In addition, proper accounting of the various water uses enables the District to better estimate water use and to implement water shortage plans.

All Permittees with an average daily allocation of greater than 100,000 gallons, or irrigation water users located within the South Dade County Water Use Basin (as designated in Figure 21-11, Chapter 40E-21, F.A.C.), with an average daily allocation of greater than 300,000 gallons, are required to monitor and report withdrawal quantities from each withdrawal facility or point of diversion. In addition, all permittees that obtain multiple noticed general permits for contiguous areas whose combined average daily allocation exceeds 100,000 gallons (300,000 gallons within the South Dade County Water Use Basin) are required to monitor and report withdrawal quantities from each withdrawal facility or point of diversion.

If applicable, permittees shall submit the following forms electronically or at the address provided on the form. Alternatively, the permittee may submit documentation with the information required by the forms below.

Form No.	Form Title
1378	Water Use Pumpage Form, incorporated by reference in Rule 40E-2.091,F.A.C.
1389	Crop (Freeze) Protection Form, incorporated by reference in Rule 40E-2.091, F.A.C.

A reliable, repeatable water use accounting system must be identified to monitor water usage from all withdrawal facilities, in accordance with permit conditions. The District considers a reliable water use accounting method to be accurate within +/- 10 percent of the actual flow. For pumped systems, acceptable water use accounting systems include flowmeters, or clocks which totalize pump operation. For gravity flow systems, acceptable methods include the use of rated water control structures. Water control structure rating curves certified by a professional engineer shall be submitted at the time of permit

application and updated at a minimum of the five years as required in the permit conditions. Rating curves for water control structures shall consider multiple headwater/tailwater conditions indicative of their site specific conditions. Irrigation quantities will be calculated based on the measured headwater/tailwater conditions to the water control structure rating curves and submitted to the District at the frequency specified in the permit conditions.

Applicants must submit documentation of the water use accounting method and calibration method as a part of the permit application. Prior to the use of any authorized facility, the approved water use accounting method must be operating and the initial calibration submitted to the District. Recalibration results for the water use accounting method shall be submitted to the District every five years from the date of last calibration.

If applicable, permittees shall submit the following forms electronically or at the address provided on the form. Alternatively, the permittee may submit documentation with the information required by the forms below.

Form No.	Form Title
1387	Flow Meter Accuracy Calibration Report Form, incorporated by reference in Rule 40E-2.091,F.A.C.
1388	Alternative Method Calibration Report Form, incorporated by reference in Rule 40E-2.091, F.A.C.

Withdrawal quantities for each permitted withdrawal facility shall be calculated monthly and reported to the District semi-annually, unless otherwise conditioned on a greater frequency due to the potential for resource harm. Permittees, whose full demands are met through a combination of their own withdrawals or other sources, such as reclaimed water or water sales agreements, shall report the monthly totals supplied from sources other than their own withdrawals, unless the use of those sources are reported to another state agency, in which case the District shall obtain the water use information from said agency.

For special districts with withdrawal facilities that supply several individual users, such as diversion and impoundment systems and sub-basins within the Everglades Agricultural Area Water Use Basin which collectively derive their water supply from District operated structures, the water use shall be monitored at the primary withdrawal facilities. Individual surface water users within such systems do not need to submit individual pumpage reports, unless otherwise required by a water shortage order or as a part of a District permit compliance action.

The District advises diversion and impoundment applicants and surface water users within such systems that retaining accurate records of the types of crops, irrigated acreage, and duration of irrigation of such crops is relevant information for assessing system efficiency. In the event the District determines the diversion and impoundment system is inefficiently using water, then the District, at a minimum, will require the diversion and impoundment system or surface water users within such systems, as

appropriate, to implement additional monitoring and conservation measures. Inefficient use of water by a diversion and impoundment permittee includes consideration of such factors as withdrawals in excess of the permit conditions in a drought condition less severe than a 1-in-10 year drought event and use of water in excess of that quantity of water calculated pursuant to Section 2.3.2. Such additional measures could include internal surface water quantity withdrawal monitoring or irrigation system efficiency assessment by a mobile irrigation lab.

For those special districts in which water is passed through the project, the permittee may be required to report the volumes of water that flow out of the project if necessary to quantify the water consumed by the project.

4.1.2 Water Loss

The implementation of leak detection programs by utilities with unaccounted-for water losses of greater than 10% is required. Such leak detection program must include water auditing procedures, in-field leak detection efforts and leak repair. The program description should include the number of man-hours devoted to leak detection, the type of leak detection equipment being used and an accounting of the water saved through leak detection and repair. It is the policy of the District to encourage public water supply systems to have no more than 10% unaccounted-for water losses.

4.2 Water Quality

The following subsections identify water quality monitoring requirements within the District.

4.2.1 Saline Water Monitoring

The purpose of saline water monitoring is to ensure that harmful saline water intrusion, whether lateral from a surface or groundwater saline source, vertical from an aquifer containing lower quality water, or a combination of both, does not occur. Saline water monitoring is accomplished by routine sampling of the discharge water from production wells or from separate monitor wells. However, in areas of known saline water movement, separate monitor wells are required to be designed and constructed expressly for the purpose of saline water intrusion monitoring. The dissolved chloride concentration and the referenced water level elevation shall be measured. Frequency of measurements may be weekly, monthly, or quarterly, and will be identified in the permit conditions. The data shall be reported using Form No. 1377, Water Quality Report Form, incorporated by reference in Rule 40E-2.091, F.A.C. Alternatively, the permittee may submit documentation containing the information required by the Water Quality Report Form.

Applicants for individual permits shall submit a saline water monitoring program for review and approval when:

A. The withdrawal facility is within one mile of a saltwater body including canals and tidal creeks;

B. The withdrawal facility is located seaward of the 250 mg/L chloride line mapped at the base of the aquifer or located seaward of a line between two adjacent salinity control structures;

C. The land on which the withdrawal facility is located is between the Intracoastal Waterway and the Atlantic Ocean; between a tidal creek and the Atlantic Ocean; between a tidal creek and the Gulf of Mexico; or between the Intracoastal Waterway and the Gulf of Mexico;

D. Saline water is located either above or below the producing zone;

E. A history of saline water intrusion or increasing chloride concentrations exists for either groundwater or surface water in the vicinity of the withdrawal facility;

F. Staff evaluation indicates that, at projected withdrawal rates, saline water intrusion may occur to the extent that the existing treatment process will no longer be capable of producing potable water;

G. Staff evaluation indicates that, at projected withdrawal rates, saline water intrusion may occur in neighboring withdrawal facilities; or,

H. Staff evaluation indicates saline water may come in contact with a freshwater source as a result of the proposed use.

Guidelines for establishing a saline water monitoring program, as well as sampling, sample handling, and analysis guidelines, are available from the District.

4.2.2 Pollution Source Monitoring

The purpose of pollution source monitoring is to ensure withdrawals do not cause harmful movement of contaminants in violation of state water quality standards. Movement of contaminants consistent with a state approved remediation plan is not considered harmful. In order to effectively monitor a pollution source, separate monitor wells must be installed and monitored to evaluate withdrawal effects on movement of the pollution. The applicant shall submit a pollution source monitoring program identifying chemical constituents, monitoring frequencies, and well construction details and locations to the District for review and approval when the project's withdrawals have the potential for a direct influence on a contaminant plume.

4.3 Hydrologic and Ecologic Monitoring

The following subsections identify hydrologic and ecologic monitoring requirements that are deemed necessary to ensure wetlands and other surface waters, offsite land uses, existing legal users, and the water resources of the District are not harmed by the withdrawal.

4.3.1 Water Level Monitoring

The purpose of water level monitoring programs is to ensure existing legal uses, offsite land use, and water resources, are not harmed by lowered water levels. Applicants shall submit a water level monitoring program to the District for review and approval when:

A. A saline water monitoring program or a pollution source monitoring program is required (see Subsections 4.2.1 and 4.2.2);

B. A wetland hydrobiologic monitoring program is required (see Subsection 4.3.2); or,

C. Uncertainty in computer modeling or data exists to define the drawdown resulting from withdrawals from groundwater or surface water sources and to ensure that existing legal uses, offsite land use, water resources, and wetland and surface water functions are not harmed by withdrawals.

4.3.2 Wetland and Other Surface Waters Monitoring

Wetland monitoring shall be required to ensure that harm to wetland and other surface waters does not occur. Monitoring shall consist of various types of data collection, such as groundwater and surface water levels, surface water quality, biological parameters, ground and aerial photography, rainfall, pumpage, and land cover assessments. Guidelines for establishing a wetland hydrobiologic monitoring program are available from the District. The applicant shall submit a wetland hydrobiologic monitoring program to the District for review and approval when the impacts of the proposed use, either individually or cumulatively with other permitted users, produces drawdowns approaching the applicable drawdown criteria in Section 3.3.

4.3.3 Aquifer Storage and Recovery Systems Monitoring

An ASR monitoring program will be required in the event there is a potential for interference with an existing legal user or harm to the water resources. Such a monitoring program will include monitor well(s) to measure aquifer pressure and water quality. In addition, monitoring of the quantities of water that is stored and recovered shall be measured and reported for permitted ASR systems.

4.4 Compliance Reports

Except for permits issued pursuant to Subsection 373.236(6), F.S., permits issued for a duration of 20 years or longer shall require submittal of a compliance report under Subsection 373.236(4), F.S., once every ten years, when necessary to maintain reasonable assurances that the conditions for issuance can continue to be met. Permits issued for greater than 20 years pursuant to Subsection 373.236(6), F.S., shall require submittal of a compliance report once every five years. The report shall include sufficient information to maintain reasonable assurance that the permittee's use can continue, for the remaining duration of the permit, to meet the conditions for issuance set forth in the rules existing when the District issued the permit.

In accordance with Subsection 373.236(4), F.S., after reviewing this report, the District will modify the permit if required to ensure that the use of water authorized by the permit

can continue to meet the conditions for issuance set forth in the rules existing when the District issued the permit. As required by Sections 120.569 and 120.60, F.S., the District shall provide notice of intent to modify the permit. For all water use classes, when economic conditions or population growth rates result in the actual water use being lower than permitted water use, a modification to reduce the permitted allocation shall only be made by the District when there is no reasonable likelihood that the allocation will be needed during the permit term. For agricultural water use permits for irrigation, reductions in actual use compared to permitted consumptive use that are due to weather events, crop diseases, nursery stock availability, or changes in crop type shall not result in a permit modification by the District to reduce the permitted allocation during the term of the permit. Additionally, in order to incentivize conservation of water, if actual water use is less than permitted water use due to documented implementation of water conservation measures, the permitted allocation shall not be modified by the District due to these circumstances during the term of the permit.

Nothing in this subsection shall be construed to alter the Districts' authority to reduce permitted consumptive use under circumstances not addressed by this section, nor be construed to alter the water conservation requirements of the permit for the duration of the permit.

5.0 PERMIT CONDITIONS

Water use permits shall be conditioned, as necessary, to ensure that the permitted use continues to meet the conditions for issuance in Rule 40E-2.301, F.A.C. There are two categories of permit conditions that will be applied to water use permits. Standard Conditions contain general information and operational constraints that generally apply to all water uses unless waiver or modified by the District upon a determination that the conditions are inapplicable to the use authorized by the permit. Not all special conditions are imposed on each permit as they vary among use classes, sources, geographic locations, and other permit-specific factors.

5.1 Standard Permit Conditions

5.1.1 Overall Compliance/Notification

All water uses authorized by this permit shall be implemented as conditioned by this permit, including any documents incorporated by reference in a permit condition. The District may revoke this permit, in whole or in part, or take enforcement action, pursuant to Section 373.136 or 373.243, F.S., unless a permit modification has been obtained to address the noncompliance.

The Permittee shall immediately notify the District in writing of any previously submitted material information that is later discovered to be inaccurate.

5.1.2 Other Permits Required

The Permittee is advised that this permit does not relieve any person from the requirement to obtain all necessary federal, state, local and special district authorizations.

5.1.3 Change of Ownership/Legal Control

The Permittee shall notify the District in writing within 30 days of any sale, transfer, or conveyance of ownership or any other loss of permitted legal control of the Project and/or related facilities from which the permitted consumptive use is made. Where Permittee's control of the land subject to the permit was demonstrated through a lease, the Permittee must either submit a new or modified lease showing that it continues to have legal control or documentation showing a transfer in control of the permitted system/project to the new landowner or new lessee. All transfers of ownership are subject to the requirements of Rule 40E-1.6107, F.A.C. Alternatively, the Permittee may surrender the consumptive use permit to the District, thereby relinquishing the right to conduct any activities under the permit.

5.1.4 Water Shortage

Nothing in this permit should be construed to limit the authority of the District to declare a water shortage and issue orders pursuant to Chapter 373, F.S. In the event of a declared water shortage, the Permittee must adhere to the water shortage restrictions, as specified by the District. The Permittee is advised that during a water shortage, reports shall be submitted as required by District rule or order. The Permittee is advised that during a water shortage, pumpage, water levels, and water quality data shall be collected and submitted as required by District orders issued pursuant to Chapter 40E-21, F.A.C.

5.1.5 Property Rights Not Conveyed

This permit does not convey to the Permittee any property rights or privileges other than those specified herein, nor relieve the permittee from complying with any applicable local government, state, or federal law, rule, or ordinance.

5.1.6 Inspection

With advance notice to the Permittee, District staff with proper identification shall have permission to enter, inspect, observe, collect samples, and take measurements of permitted facilities to determine compliance with the permit conditions and permitted plans and specifications. The permittee shall either accompany District staff onto the property or make provision for access onto the property.

5.1.7 Modification/Use Class/Other Changes

A. The Permittee may seek modification of any term of an unexpired permit. The Permittee is advised that Section 373.239, F.S., and Rule 40E-2.331, F.A.C., are applicable to permit modifications.

B. The Permittee shall notify the District in writing 30 days prior to any changes to the project that could potentially alter the reasonable demand reflected in the permitted allocation. Such changes include, but are not limited to, change in irrigated acreage, crop type, irrigation system, large users agreements, or water treatment method. Permittee will be required to apply for a modification of the permit for any changes in permitted allocation.

5.1.8 Violations

If any condition of the permit is violated, the permit shall be subject to review and modification, enforcement action, or revocation pursuant to Chapter 373, F.S.

5.1.9 Existing Legal Users

The Permittee shall mitigate interference with existing legal uses that was caused in whole or in part by the Permittee's withdrawals, consistent with the approved mitigation plan. As necessary to offset the interference, mitigation will include pumpage reduction, replacement of the impacted individual's equipment, relocation of wells, change in withdrawal source, or other means.

Interference to an existing legal use is defined as an impact that occurs under hydrologic conditions equal to or less severe than a 1-in-10 year drought event that results in the:

A. Inability to withdraw water consistent with provisions of the permit, such as when remedial structural or operational actions not materially authorized by existing permits must be taken to address the interference; or,

B. Change in the quality of water pursuant to primary State Drinking Water Standards to the extent that the water can no longer be used for its authorized purpose, or such change is imminent.

5.1.10 Harm to Natural Resource/ Saline Intrusion/Pollution

The Permittee shall mitigate harm to the natural resources caused by the Permittee's withdrawals, as determined through reference to the conditions for permit issuance. When harm occurs, or is imminent, the District will require the Permittee to modify withdrawal rates or mitigate the harm. Harm, as determined through reference to the conditions for permit issuance includes:

A. Reduction in ground or surface water levels that result~~s~~ in harmful lateral movement of the freshwater/salt water interface,

B. Reduction in water levels that harm the hydroperiod of wetlands,

C. Significant reduction in water levels or hydroperiod in a naturally occurring water body such as a lake or pond,

D. Harmful movement of contaminants in violation of state water quality standards, or,

E. Harm to the natural system including damage to habitat for rare or endangered species.

5.1.11 Off-site Impacts

The Permittee shall mitigate harm to existing off-site land uses caused by the Permittee's withdrawals, as determined through reference to the conditions for permit issuance.

When harm occurs, or is imminent, the District will require the Permittee to modify withdrawal rates or mitigate the harm. Harm as determined through reference to the conditions for permit issuance, includes:

A. Significant reduction in water levels on the property to the extent that the designed function of the water body and related surface water management improvements are damaged, not including aesthetic values. The designed function of a water body is identified in the original permit or other governmental authorization issued for the construction of the water body. In cases where a permit was not required, the designed function shall be determined based on the purpose for the original construction of the water body (e.g. fill for construction, mining, drainage canal, etc.)

B. Damage to agriculture, including damage resulting from reduction in soil moisture resulting from consumptive use; or,

C. Land collapse or subsidence caused by reduction in water levels associated with consumptive use.

5.2 Special Permit Conditions

A. This permit is issued to: (permittee's name)

B. This permit shall expire on (expiration date).

C. Use classification is (primary water use type and secondary water use types).

D. Source classification is: (source classification)

E. Allocation:
Total annual allocation is (recommended actual allocation) _____ MG (_____ GPD or MGD).
Total maximum monthly allocation is (recommended maximum monthly allocation) MG.

Allocation from a specific source (aquifer, facility, or facility group):
Maximum annual allocation from (a specific source) shall not exceed (the recommended maximum annual allocation by source) MG (_____ GPD or MGD)
Maximum monthly allocation from (a specific source) shall not exceed (recommended maximum monthly allocation by source) MG (_____ GPD or MGD)

These allocations represent the amount of water required to meet the water demands as a result of rainfall deficit during a drought with the probability of recurring one year in ten. The Permittee shall not exceed these allocations in hydrologic conditions less than a 1-in-10 year drought event. Compliance with the annual allocation is based on the quantity withdrawn over a 12-month time period.

Compliance with the maximum monthly allocation is based on the greatest quantity withdrawn in any single month. The annual allocation expressed in GPD or MGD is for informational purposes only.

If the rainfall deficit is more severe than that expected to recur once every ten years, the withdrawals shall not exceed that amount necessary to continue to meet the reasonable-beneficial demands under such conditions, provided no harm to the water resources occur and:

1. All other conditions of the permit are met; and

2. The withdrawal is otherwise consistent with applicable declared Water Shortage Orders in effect pursuant to Chapter 40E-21, F.A.C.

F. Withdrawal facilities:

G. The Permittee shall submit all data as required by the implementation schedule for each of the permit conditions to: SFWMD at www.sfwmd.gov/ePermtting, or Regulatory Support, P.O. Box 24680, West Palm Beach, FL 33416-4680.

H. The Permittee must submit the appropriate application form incorporated by reference in Rule 40E-2.101, F.A.C., to the District prior to the permit expiration date in order to continue the use of water.

I. The Permittee shall implement the following operating plan:

J. This permit supersedes and/or cancels the following water use permit(s):

K. This is an existing project. An Environmental Resource or surface water management permit will be required prior to any change in land use or modification of the drainage system.

5.2.1 Use Class

A. Public Water Supply

1. The Permittee shall notify the District within 30 days of any change in service area boundary that results in a change in demand that affects its permitted allocation. The allocation shall be modified to effectuate such change.

2. The Permittee shall implement the wellfield operating plan submitted in support of the permit application, as described in the District staff report.

3. The Permittee shall determine unaccounted-for distribution system losses. Losses shall be determined for the entire distribution system on a monthly basis. Permittee shall define the manner in which unaccounted-for losses

are calculated. Reports shall be submitted to the District on a yearly basis and are due by April 30th of each year.

4. The Permittee shall maintain an accurate flow meter at the intake of the water treatment plant for the purpose of measuring daily inflow of water.

5. The Permittee shall maintain an accurate flow meter at the point of discharge from the treatment plant for the purpose of measuring the daily flow of water.

6. The Standard Water Conservation Plan described in Subsection 2.3.2.F.1.a of the Applicant's Handbook for Water Use Permit Applications within the South Florida Water Management District and the Staff Report, must be implemented in accordance with the approved implementation schedule. If implementation of the Standard Water Conservation Plan fails to demonstrate progress toward increasing water use efficiency, the Permittee shall request a permit modification, if necessary, to revise the Standard Water Conservation Plan to address the deficiency. The approved implementation schedule is described in Exhibit (insert exhibit number)

7. The Goal-Based Water Conservation Plan described in Subsection 2.3.2.F.1.b of the Applicant's Handbook for Water Use Permit Applications within the South Florida Water Management District and the Staff Report must be implemented in accordance with the approved implementation schedule. If implementation of the Goal-Based Water Conservation Plan fails to demonstrate progress toward increasing water use efficiency, the Permittee shall request a permit modification, if necessary, to revise the Goal-Based Water Conservation Plan to address the deficiency. The approved implementation schedule is described in Exhibit (insert exhibit number).

8. The Permittee shall provide annual status reports to the District that summarizes the Aquifer Storage and Recovery cycle testing activities. Reports shall be submitted to the District on a yearly basis and are due by April 30th of each year.

9. The Permittee shall notify the District within 30 days of entering into an interlocal agreement, contract, or other similar instrument to deliver or receive water outside of its service area or to serve a demand not identified to determine the allocation described in this permit. A copy of such agreement shall be provided to the District. The monthly volume of water delivered and/or received via each interlocal agreement, contract, or other similar instrument shall be submitted to the District semi-annually.

B. Irrigation

The condition listed below is applicable to all irrigation use classes. Subsections 5.2.1.C through 5.2.1.E contain additional permit conditions for the specific irrigation use class.

For new or increased allocations over previously permitted allocations from sources not categorized as sources of limited availability, the Permit shall expire within five years of issuance to the extent that permitted acreage has not been planted consistent with the timelines contemplated in the Permit, or to the extent the allocation has otherwise been abandoned pursuant to Section 373.243, F.S.

C. Landscape Irrigation

1. The Permittee must comply with the water conservation plan submitted pursuant to Subsection 2.3.2.E.1 of the Applicant's Handbook for Water Use Permit Applications within the South Florida Water Management District and described in the Staff Report.

2. Landscape irrigation shall be restricted to the hours and days described in Rule 40E-24.201, F.A.C., or alternative landscape irrigation conservation measures adopted by local government ordinance in accordance with Rule 40E-24.301, F.A.C.

3. Withdrawal from the surface water source(s) for irrigation shall be equal to the amount of water used for replacement/recharge on a monthly basis (for example, the volume of water withdrawn from the lake must be the same volume of water put into the lake), except when the surface water drainage system is discharging. The replacement/recharge of groundwater into surface water is for water quality treatment or supplementation and not the artificial maintenance of lake levels.

4. The amount of water used for irrigation replacement/recharge shall not exceed the amount of water withdrawn from the surface water sources(s) on a monthly basis (for example, there cannot be more water put into the lake than is pumped out of the lake). The replacement/recharge of groundwater into surface water is for water quality treatment or supplementation and not the artificial maintenance of lake levels.

D. Golf Course irrigation

1. The Permittee must comply with the water conservation plan submitted pursuant to Subsection 2.3.2.E.1 of the Applicant's Handbook for Water Use Permit Applications within the South Florida Water Management District and described in the Staff Report.

2. Golf course irrigation is prohibited between the hours of 10:00 A.M. and 4:00 P.M., except as follows:

a. Irrigation using a micro-irrigation system is allowed anytime.

b. Users whose average annual allocation is made up of 75% or greater volume of reclaimed water for irrigation may irrigate at any time.

c. Irrigation of, or in preparation for, planting, new golf courses and recreational areas is allowed at any time of day for one 30-day period provided irrigation is limited to the amount necessary for sod or plant establishment. Irrigation of newly seeded or sprigged golf course areas is allowed any time of day for one 60-day period.

d. Watering in of chemicals, including insecticides, pesticides, fertilizers, fungicides, and herbicides, when required by law, recommended by the manufacturer or constituting best management practices, is allowed anytime within 24 hours of application.

e. Irrigation systems may be operated anytime for maintenance and repair purposes.

3. Withdrawal from the surface water source(s) for irrigation shall be equal to the amount of water used for replacement/recharge on a monthly basis (for example, the volume of water withdrawn from the lake must be the same volume of water put into the lake), except when the surface water drainage system is discharging. The replacement/recharge of groundwater into surface water is for water quality treatment or supplementation and not the artificial maintenance of lake levels.

4. The amount of water used for irrigation replacement/recharge shall not exceed the amount of water withdrawn from the surface water sources(s) on a monthly basis (for example, there cannot be more water put into the lake than is pumped out of the lake). The replacement/recharge of groundwater into surface water is for water quality treatment or supplementation and not the artificial maintenance of lake levels.

E. Agriculture

The Permittee shall complete Form No. 1376, Report of Planting and Harvest of Seasonal Crops Form, incorporated by reference in Rule 40E-2.091, F.A.C., and submit it with Form No. 1378, Water Use Pumpage Report Form, also incorporated by reference in Rule 40E-2.091, F.A.C.

F. Diversion and Impoundment

1. The independent secondary user permittee must advise the diversion and impoundment permittee prior to applying to the District for a proposed change in surface water allocation from the diversion and impoundment system.

2. The dependent secondary users listed herein must advise the District and the diversion and impoundment permittee prior to any change in demands.

3. The diversion and impoundment system permittee is responsible for all violations of diversion and impoundment permit terms, except the violations of the dependent secondary users.

4. Within 90 days of the diversion and impoundment permittee agreeing to the inclusion of a dependent secondary user consistent with the requirements in Subsection 2.3.2.C.2.a, Applicant's Handbook for Water Use Permit Applications within the South Florida Water Management District, the diversion and impoundment permittee is responsible for submitting a request for a permit modification to the District to include the dependent secondary user.

5. All dependent secondary users must comply with the terms of their agreement with the diversion and impoundment entity and applicable terms of this permit.

6. The Dependent Secondary Users listed herein must advise the District and the diversion and impoundment permittee prior to any change in demands.

7. This is an independent secondary use permit within a diversion and impoundment system; therefore, the duration may be modified or reduced such that it will not exceed the expiration date of the associated diversion and impoundment permit.

G. Dewatering

1. A copy of the permit, its permit conditions, and dewatering plan is required to be kept onsite at all times during dewatering operations by the lead contractor or site manager.

2. At least 72 hours prior to initial dewatering, the Permittee shall contact the District to allow for a site visit to verify:

    a. The location and design of the recharge trenches and onsite retention areas where dewatering water will be retained;

    b. The location of monitoring facilities; and,

    c. Other site-specific issues related to the protection of the resource or other existing legal users.

Failure of the Permittee, or the Permittee's representative, to notify the District before dewatering commences will result in enforcement action.

If necessary, the District shall conduct a site visit.

Notification of commencement of dewatering can be made by contacting:

3. Dewatering is authorized by this permit for a duration of one year from the date provided to the District by the Permittee in accordance with the commencement notification requirements as stated in the conditions of this permit. This authorization shall not exceed the expiration date of this permit.

4. All dewatering water shall be retained on the Permittee's land. Off-site discharge of dewatering effluent shall not be made.

5. Off-site discharge may be made via the facilities and conditions that follow:

6. Turbidity measurements of the dewatering water shall be made daily at the point of discharge and a background location upstream in the receiving waterbody. If turbidity levels in the dewatering water exceed 29 NTU above background conditions of the receiving water body or 0 NTU above background for discharge to Outstanding Florida Waters, the Permittee is required to correct the situation and cease dewatering operations until monitoring demonstrates turbidity standards are met. All turbidity data shall be retained onsite for inspection by District staff.

7. The Permittee shall not lower the water table below the following depths:

8. The excavation shall be constructed using sound engineering practices. If the excavation or dewatering activities endanger the properties of adjacent owners (through erosion, side wall collapse, flooding, etc.), the Permittee shall cease operations until a method to prevent such occurrences is found and instituted. The Permittee shall be responsible for finding and instituting methods to stop such occurrences.

9. The Permittee shall immediately cease dewatering when continued dewatering would create a condition hazardous to the health, safety, and general welfare of the people of the District.

10. The Permittee shall be responsible for clearing shoaling, if the Permittee's dewatering operation creates shoaling in adjacent water bodies.

11 The Permittee shall conduct dewatering activities in adherence to the following operating plan:

12. Within 30 days of completion of the dewatering operation, all dewatering facilities (such as impoundments, conveyances, and recharge trenches) shall be filled and regraded to ground elevation or to otherwise comply with the Environmental Resource Permit.

13. At least two weeks prior to commencing dewatering, the Permittee shall provide site specific dewatering plans for each proposed dewatering activity to the District for review and approval. Permittee shall not initiate dewatering prior to receiving written notification from district staff, that the proposed dewatering activity is consistent with the approved master permit.

14. Pursuant to Section 2.3.2.B.2 of the Applicant's Handbook for Water Use Permit Applications within the South Florida Water Management District, neither maximum monthly nor annual allocation volumes are specified.

H. Mining Dewatering

The Permittee is advised that this Permit does not relieve the Permittee of complying with all county, state, and federal regulations governing these operations, maintenance, and reclamation of the borrow pit.

I. Industrial/Commercial/Power Plant

The Permittee must comply with the water conservation plan submitted in compliance with Subsection 2.3.2.D.1 of the Applicant's Handbook for Water Use Permit Applications within the South Florida Water Management District and described in the Staff Report.

5.2.2 Compliance, Monitoring, and Reporting

The following subsections contain additional compliance, monitoring, and reporting permit conditions.

A. Pumpage

These conditions apply to permits with an average annual allocation greater than or equal to 100,000 gallons per day or, if in the South Miami-Dade Agricultural Area, greater than or equal to 300,000 gallons per day:

1. Prior to any withdrawals at the project, the Permittee shall provide the results of the calibration testing of the identified water accounting method(s) and equip all existing and proposed withdrawal facilities with approved water use accounting method(s) pursuant to Subsection 4.1.1 of the Applicant's Handbook for Water Use Permit Applications.

2. Every five years from the date of last calibration, the Permittee shall submit re-calibration data on each withdrawal facility.

3. Monthly withdrawals for each withdrawal facility shall be reported to the District semi-annually. The water accounting method and means of calibration shall be stated on each report.

4. Permittees, who are dependent on other sources of water supply such as reclaimed water or water sale agreements to meet a portion of their demands, shall include the monthly volumes from all other sources in the report to the District, unless the use of those sources is reported to another state agency, in which case the District will obtain the water use information from said agency. The water accounting method and means of calibration shall be stated on each report.

B. Wetlands and Other Surface Waters

Within six months of permit issuance, the Permittee shall implement the Wetland/Environmental Monitoring Program described in the District staff report prepared in support of recommendation for permit issuance.

C. Water Levels

Within six months of permit issuance, the Permittee shall implement the Water Level Monitoring Program described in the District staff report prepared in support of recommendation for permit issuance.

D. Saline Water

1. The Permittee shall develop a saline water intrusion monitoring program. Within three months of permit issuance, an updated or a preliminary proposal shall be submitted to District staff for approval. The purpose of this program shall be to ensure that harmful saline water intrusion does not occur. The program shall include the name of the facilities/sample points to be monitored and their locations, method of water quality analysis, and frequency of data collection. The monitoring program shall be implemented upon District approval.

2. The Permittee shall implement the following saline water intrusion monitoring program:

3. If the chloride ion concentration of water collected from the well(s), pump(s), or monitoring station(s) exceeds the stipulated concentration(s) or demonstrates an increasing trend, additional assurances shall be required to demonstrate that the conditions for permit issuance will continue to be met.

E. Water Quality

1. The Permittee shall develop a water quality monitoring program. Within three months of permit issuance, an updated or a preliminary proposal shall be submitted to district staff for approval. The purpose of this program shall be to ensure that harmful contamination does not occur. The program shall include the name of the facilities/sample points to be monitored and their locations, method of water quality analysis, and frequency of data collection. The monitoring program shall be implemented upon District approval.

2. The Permittee shall implement the following water quality monitoring program:

F. Other Reports

1. Pursuant to Section 373.236(4), F.S., every ten years from the date of permit issuance, the Permittee shall submit a water use compliance report for review and approval by District Staff to SFWMD at www.sfwmd.gov/ePermitting, or Regulatory Support, MSC 9611, P.O. Box 24680, West Palm Beach, FL 33416-4680.

2. Pursuant to Section 373.236(6), F.S., every five years from the date of permit issuance, the Permittee shall submit a water use compliance report for review and approval by District Staff to SFWMD at www.sfwmd.gov/ePermitting, or Regulatory Support, P.O. Box 24680, West Palm Beach, FL 33416-4680.

G. Alternative Water Supply

The Permittee shall develop alternative water supplies, including reclaimed water. The Permittee shall provide annual updates of the status of all alternative water supply projects. The status report shall include work completed to date, expenditures, and any anticipated changes in timelines. Alternative water supplies shall be developed in accordance with the schedules described in the District Staff Report and Exhibit (exhibit number identified).

H. Reclaimed Water

1. Upon notification from the District of the availability of reclaimed water pursuant to Section 373.250, F.S., the Permittee shall investigate the feasibility of obtaining reclaimed water and actively participate in discussions and negotiations with potential suppliers of reclaimed water when the supplies become available.

2. Should reclaimed water become unavailable, the Permittee shall apply to the District for an emergency water use permit prior to temporarily increasing withdrawals above the permitted allocation.

3. If reclaimed water becomes available prior to the expiration date of this permit, the Permittee shall apply for a modification of the water use permit to reflect that portion of the allocation which is to be provided for by reclaimed water. The permittee is required to request a permit modification when the reuse utility has uncommitted reclaimed water supply, reclaimed water is available at the project boundary, and the necessary onsite modifications and authorizations are obtained.

4. The Permittee shall continue to investigate the feasibility of utilizing reclaimed water as an alternative water supply for this project. To this end, the

Permittee, or its successor, shall provide the District with periodic reclaimed water feasibility reports, to be submitted at five (5) year intervals commencing 5 years from permit issuance and continuing through the duration of this water use permit. Such reclaimed water feasibility reports shall evaluate the feasibility of utilizing reclaimed water and specifically consider: 1) whether a suitable reclaimed water supply source is available and permitted; 2) whether reclaimed water supply lines are available at the property boundary in sufficient capacity to serve Permittee's needs; 3) whether the Permittee is capable of accessing the reclaimed water source through distribution lines; 4) whether use of reclaimed water is technically, environmentally, and economically feasible; and 5) whether use of reclaimed water would adversely affect requirements contained in Permittee's surface water drainage permit, if appropriate.

I. Public Water Utilities Reuse Information Updates

1. Public water utilities that control, either directly or indirectly, a wastewater treatment plant, and which have determined pursuant to Section 403.064, F.S., that use of reclaimed water is feasible, must provide the District with annual updates of the following information: 1) the status of distribution system construction, including location and capacity of lines; 2) a summary of uncommitted supplies for the next year; 3) copies of any new or amended local mandatory reclaimed water reuse zone ordinances; and 4) a list of end-users who have contracted to receive reclaimed water and the agreed upon quantity of water to be delivered.

2. Public water utilities that control, either directly or indirectly, a wastewater treatment plant, and which had determined, at the time of issuance of its consumptive use permit and pursuant to Section 403.064, F.S., that reuse of reclaimed water was not feasible must advise the District of any change in this determination that may occur during the term of the consumptive use permit. In the event the utility determines reuse has become feasible, then the District will require the utility to provide the information listed in Subsections 2.2.4.A and 5.2.1.H.1.

J. Water Wells

1. The Permittee shall secure a well construction permit prior to construction, repair, or abandonment of all wells, as described in Chapter 40E-3, F.A.C.

2. If a proposed well location is different from a location specified in the application, the Permittee shall submit to the District an evaluation of the impact of pumpage from the proposed well location on adjacent existing legal uses, pollution sources, environmental features, the saline water interface, and water bodies one month prior to all new well construction. The Permittee is advised the proposed well locations and resulting impacts must be in compliance with all permitting criteria and performance standards in effect at that time.

3. The Permittee shall submit to the District an updated "Summary of Groundwater (Well) Facilities" Table ("Section IV – Sources of Water", Water Use Permit Application Form 1379), within 90 days of completion of the proposed wells identifying the actual total and cased depths, pump manufacturer and model numbers, pump types, intake depths and type of meters.

4. The Permittee shall submit to the District an updated "Summary of Groundwater (Well) Facilities" Table ("Section IV – Sources of Water", Water Use Permit Application Form 1379), within six months of permit issuance, identifying which wells have been properly plugged and abandoned according to Subsection 40E-3.531(3), F.A.C., and which wells are to be maintained as water level monitoring wells.

5. Within six months of permit issuance, the Permittee shall plug and abandon the following wells in accordance with Chapter 40E-3, F.A.C.: (individual wells identified based on project specifications).

6. The Permittee shall submit to the District a well survey that shall include the following: well cased depth, well total depth, and chloride ion concentration of the water in wells not having this information listed in "Summary of Groundwater (Wells) Facilities" Table ("Section IV – Sources of Water", Water Use Permit Application Form 1379). This survey shall be submitted for the following wells within six months of permit issuance: (individual wells identified based on project specifications).

7. The Permittee shall submit to the District an updated "Summary of Groundwater (Pump) Facilities" Table ("Section IV – Sources of Water", Water Use Permit Application Form 1379), within 90 days of installation of the proposed pumps identifying the surface water source, local drainage district (if applicable), pump type, diameter, capacity and horsepower, referenced intake elevation, and water use accounting method.

8. If at any time there is an indication that the well casing, valves, or controls leak or have become inoperative, repairs or replacement shall be made to restore the system to an operating condition. Failure to make such repairs shall be cause for filling and abandoning the well, in accordance with procedures outlined in Chapter 40E-3, F.A.C.

9. The Permittee shall submit to the District an updated "Summary of Surface Water (Culvert) Facilities" Table ("Section IV – Sources of Water", Water Use Permit Application Form 1379), within 90 days of installation of the proposed culverts identifying the surface water source, local drainage district (if applicable), culvert type, length, cross-section, diameter, height, width, invert elevation, control device, and water use accounting method.

K. Specific Region Special Conditions

1. A "Water Rights Compact Among the Seminole Tribe of Florida, the State of Florida, and the South Florida Water Management District," which confirms tribal rights, has been approved. Exercise of tribal rights in the future may impact allocations sought by the Permittee in future permit modifications and renewals.

2. The property which is the subject of this Permit is located in the area covered by Chapter 40E-63, F.A.C, (Works of the District within the Everglades). This special condition is intended to notify the Permittee that this property may be subject to additional or new permitting or water quality requirements as specified in Chapter 40E-63, F.A.C.

3. The Permittee shall be subject to all the stipulations agreed to in any executed landowner agreement reached between the Permittee, the District and the Seminole Tribe of Florida. Such stipulations may impact allocations sought by the Permittee in future Permit modifications and renewals.

4. Upon notification from the District, water withdrawals from a source classified as "S" pursuant to Chapter 40E-22, F.A.C., shall be terminated when the minimum level specified in Chapter 40E-22, F.A.C. is reached. The following source and minimum level shall apply: [source and minimum level to be added consistent with Rule 40E-22.262, F.A.C.]

5. The Permittee and the Lake Worth Drainage District have previously entered into an interlocal agreement for mitigation of impacts. It is acknowledged and agreed by the Permittee that this modification of the permit shall be incorporated into and made part thereof the interlocal agreement.

6. The Permittee will be responsible for mitigation to domestic uses, including but not limited to those shown in the District staff report for this permit, in the event that declining water levels result in domestic uses suffering a loss of water supply and the event is confirmed by application of the following factors by District staff. Factors used in determining mitigation responsibility include, but are not limited to, water level monitoring data, local pumpages, and climatic conditions. Failure by the Permittee to mitigate any adverse impacts that occur as a result of the Permittee's withdrawals, for which mitigation responsibility has been determined, will be considered a permit violation.

7. Prior to any permanent pump installation on Floridan aquifer wells in Martin or St. Lucie counties, the Permittee shall provide measurements of flow from each well using calibrated flow equipment. The method of accounting, calibration data, corrections for well losses, proposed pump information,

and the basis for the requested flow rate shall be submitted to the District for review and approval. Staff approval will be granted if the natural flow rate of the well is greater than that of the proposed pump.

8. Temporary pumps installed on Floridan aquifer wells in Martin or St. Lucie counties to increase flow for freeze protection withdrawals must be removed within 72 hours of the conclusion of the freeze event.

Part B
Water Use Management System Design and Evaluation Aids

I. *Saline Water Monitoring Program*

II. *Aquifer Performance Testing*

III. *Step Drawdown Testing*

IV. *Groundwater Level Monitoring Program*

V. *Supplemental Crop Requirement and Withdrawal Calculation*

VI. *Bibliography*

South Florida Water Management District

Part – B

Water Use Management
System Design and Evaluation Aids

I. Saline Water Intrusion Monitoring (SWIM) Program

SALINE WATER INTRUSION MONITORING (SWIM) PROGRAM GUIDELINES

1985

Introduction

Inland movement of saline water in coastal areas as well as upcoming of brackish water in inland areas is a major concern to the South Florida Water Management District. Consequently, there is a need to monitor movement of saline or brackish water, as it may affect water availability for existing and future users, both potable and non-potable. These guidelines are intended to assist the Permittee in designing a Saline Water Intrusion Monitoring (SWIM) Program.

Because of the complexity of the saline intrusion problem, these guidelines are general in nature. Specific details and requirements for each program will be prepared on a case-by-case basis within the context of these guidelines. Prior to the beginning of the design and implementation of the Permittee's SWIM Program, the Permittee should schedule a meeting with the District Staff to reach a consensus on the scope of the Permittee's SWIM Program.

The SWIM Guidelines are organized in two sections. The first section reviews the general hydrogeologic conditions under which a Permittee may be required to develop a SWIM program. This section should not be considered exhaustive as there may be additional hydrogeologic conditions in which a SWIM Program is required. The second section outlines the general requirements of a SWIM Program, the data to be collected, the frequency of data collection, the method of reporting, monitoring well construction details, and the sampling methodology.

1.0 Conditions Under Which a Permittee will be Required to Develop a SWIM Program

1.1 The wellfield is within one mile of a brackish or saltwater body including canals and tidal creeks.

1.2 The wellfield is located seaward of the 250 mg/l chloride line mapped at the base of the aquifer and/or located seaward of a line between two adjacent salinity control structures.

1.3 The land on which the wellfield is located is between the Intracoastal Waterway and the Atlantic Ocean; between a tidal creek and the Gulf of Mexico; or between the Intracoastal Waterway and the Gulf of Mexico.

1.4 Non-potable saline water is located either above or below the producing zone by a distinct and definable confining layer.

1.5 A history of saline water intrusion or increasing chloride concentrations exists for either groundwater or surface water in the vicinity of the wellfield.

1.6 Staff evaluation indicated that, at projected withdrawal rates, saline water intrusion may occur to the extent that the existing treatment process will no longer be capable of producing potable water.

1.7 Staff evaluation indicated that, at projected withdrawal rates, saline water intrusion may occur in neighboring wellfields.

1.8 Staff evaluation indicated that the use of brackish water for irrigation purposes may contaminate a potable aquifer.

2.0 Monitoring Program

2.1 General SWIM Requirements

2.1.1 Locate the saline water interface. That is, the 250 mg/l isochlor (line of constant concentration). The method of locating the saline water interface is dependent upon the well construction technique employed. If the Cable-Tool method is used, then water samples are taken after each casing length is installed. The samples are evaluated for chlorides in the field, usually by some titration method, and subsequently verified by a commercial laboratory. If the Rotary Drilling method is used, then a resistivity log is run on the well. Because resistivity is influenced by the conductivity of the water in the aquifer, the saline water interface is shown by a significant decrease in resistivity. In locating the saline water interface the first monitoring well should be completed in the most permeable beds above but near the bottom of the aquifer unless the interface has been located at a shallower depth. If the saline water interface is located, then the process is complete. If the saline water interface is not located, then an additional well should be constructed to the depth of the producing zone. All wells should be developed to ensure good interconnection with the aquifer.

2.1.2 Monitor advance or retreat of the saline water interface. This is accomplished by measuring the chloride concentrations, usually monthly, at the predefined interface. The chloride concentration versus time data obtained are used to infer movement of the interface.

2.1.3 Monitor water levels in specified wells. This is usually done monthly. Water levels are measured because they provide estimates of the saline water interface. For every one-foot of fresh water head, the saline water interface is maintained approximately forty feet deep when ground water flow is not taken into account. Thus, for a measured fresh water head of two feet, the saline water interface would be approximately 80 feet deep.

2.2 Monitoring Data

2.2.1 Chloride Concentration: The Permittee may be required to monitor one or more of the following:

1) saline water in the proximity of the 250 mg/l isochlor at the base of the aquifer;

2) saline intrusion from shallow tidal canals or creeks;

3) saline intrusion due to upconing;

4) saline intrusion from an adjacent formation;

5) chloride concentration levels at the wellfield site; and/or

6) chloride concentration levels at the level of the production zone in the area between the wellfield and the source of saline water.

2.2.2 Water Levels: Water levels from monitoring wells should be collected to obtain information regarding the direction of groundwater flow in the area of influence of the wellfield. The vertical distribution of water levels should be monitored in cases in which upconing or intrusion from an adjacent formation is suspected. Water level records supplied to the District as part of the limiting conditions of the Permittee's water use permit shall suffice to satisfy this requirement.

2.2.3 Rainfall: Daily or weekly accumulations of rainfall data may be required. Rainfall records supplied to the District as part of the limiting conditions of the Permittee's water use permit shall suffice to satisfy this requirement.

2.2.4 Wellfield withdrawals: Pumping records supplied to the District as part of the limiting conditions of the Permittee's water use permit shall suffice to satisfy this requirement.

2.3 Frequency of Data Collection and Reporting

2.3.1 Frequency of data collection: The frequency of data collection will depend on each data item and on the risk of saline intrusion faced by the wellfield under the current annual allocation or the requested increase in annual allocation.

In general the following frequencies are recommended:

Item	Frequency
Rainfall	Daily or weekly accumulations
Water levels	Monthly or quarterly (except when recorders are required)
Pumpage records	As required by water use permit
Chloride data	Monthly or quarterly

During or in anticipation of a water shortage declaration, more frequent data collection and submission may be required.

2.3.2 Frequency of data reporting: Collected data shall be submitted to the District during the month following the month of collection.

2.3.3 Format for reporting data: Data shall be submitted in tabular and graphical form. The graphical presentation of the data will reflect the historic trends of the measured parameter.

2.4 Well Construction

Wells must be constructed and developed so that point measurements of chlorides are obtained. The following are general guidelines:

2.4.1 Location: The location of the monitoring wells should be decided on a case-by-case basis in accordance with the site hydrogeological data available to the District and/or the Permittee.

2.4.2 Depth: The depth of the monitoring wells should be decided on a case-by-case basis in accordance with the site hydrogeological data available to the District and/or the Permittee.

2.4.3 Diameter: Monitoring wells should be at least two inches in diameter, or four inches in diameter for wells with recorders.

2.4.4 Screen Length: Monitoring wells which are required to measure chlorides at a given point should be screened at that depth. For most wells a length of screen between three and six feet is recommended. The screen length must not exceed six feet.

2.4.5 Well Material: Metallic or non-metallic casings can be used for the monitoring wells.

Note: For wells constructed by the Cable-Tool method no screen is required, but the well should be developed. To insure the well has been properly developed, the District recommends the following test:

1) measure water level;

2) bail out the equivalent of one well casing, if possible, but at least 10 feet of water; and

3) measure recovery of the well (water levels versus time).

If the well does not recover within one hour, then the well must be redeveloped or further constructed. No more than one foot of sand should be within the casing above the bottom of the casing.

2.5 Monitoring Program - Sampling Method

2.5.1 The sampling method to be used should be such that the formation water is sampled.

2.5.2 If the monitoring well is being pumped, extract a volume of water equivalent to three times the casing volume. This should

present few problems and the final water sample can be taken at any desired depth.

2.5.3 If the monitoring well is deep and the bailing technique is being employed, then bailing thirty feet of water will be sufficient. The sample should then be taken at the screened depth or bottom of the casing with a "thief" type sampler. Information regarding this type of sampling device can be obtained from the District.

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South Florida Water Management District

Part – B

Water Use Management System
Design and Evaluation Aids

II. Aquifer Performance Testing

AQUIFER PERFORMANCE TEST (APT)

1985

Introduction

When the impacts resulting from a proposed groundwater withdrawal cannot be adequately predicted, the Staff may request that the Applicant proposing the groundwater withdrawal develop and implement an Aquifer Performance Test (APT) program.

As an aid to the Applicant or the Permittee, the Staff has compiled a set of guidelines for developing and implementing an APT program. The guidelines are not meant to portray an inflexible attitude about the manner in which an APT program should be conducted but are only designed to point out the general and basic aspects of an APT program. Depending on circumstances, i.e. flowing wells, alternative methodologies may be necessary. These circumstances should be discussed with the Staff prior to finalizing an APT program or any well construction.

The guidelines are subdivided into separate sections dealing with:

1) the initial site investigation,

2) the construction of on-site wells,

3) the step drawdown test,

4) the background data for the constant rate discharge test,

5) the constant rate discharge test,

6) the water quality of the aquifer,

7) the analysis of constant rate discharge test data, and

8) the contents of the Hydrogeologic Report.

<u>The Staff should be notified before any major deviations from the proposed guidelines are instituted.</u>

The successful completion of an APT program does not necessarily result in a Staff recommendation for the allocation of the quantity of water requested by the Applicant. The data collected during an APT program, however, often supports a request for the withdrawal of groundwater.

1.0 Initial Site Investigation

1.1 The initial site investigation should be performed as the first step in an APT program. During the initial site investigation, the following items should be addressed:

1) The most probable drilling depth and yield for a proposed test production well. These should be determined by reviewing existing data such as geologic well logs and hydrogeologic reports. A preliminary cross section indicating the thickness and water

quality (if appropriate) associated with the various production and confining zones should be constructed prior to selecting a drilling depth.

2) The location of possible sources of groundwater contamination.

3) The location of adjacent surface water bodies that may interact with the groundwater system.

4) The best means of routing the discharge water from the test production well site.

5) The location, total depth, cased depth, withdrawal rate, pumping schedule, pre-pumping water level, and specific capacity of adjacent pumping wells. If possible, the water levels should be referenced to the National Geodetic Vertical Datum (NGVD).

6) The location, total depth, cased depth, and static water level of existing wells that may serve as observation wells during the constant rate discharge. If possible, the water levels should be referenced to NGVD.

7) The tentative locations, total depths, and cased depths for the proposed test production well and observation wells necessary for the constant rate discharge test (see the subsection on 'Construction of On-Site Wells' for recommended number of wells, radial distances and depths). The potential adverse impacts that proposed withdrawals may have on existing uses or environmental features should be considered when locating the test production well.

1.2 After completing the initial site investigation, the Applicant or Permittee should schedule a meeting and present the proposed APT program to the Staff for discussion. The proposed APT program should specify the location, total depth, and cased depth of the proposed test production well and observation wells; the pump discharge rate; the routing of pump discharge water; the method and frequency of collecting water level data; and the method and frequency of collecting water quality data. The proposed program should follow the criteria specified in the following sections of these guidelines unless otherwise agreed to by the Staff. <u>All proposed APT programs should be discussed with the Staff prior to accepting bids on the installation of test wells, test production wells or any services associated with the APT program.</u>

2.0 Construction of On-Site Wells

2.1 In most cases, a minimum of three production zone observation wells and one shallow or adjacent aquifer observation well are necessary to conduct a constant rate discharge test. The construction of observation wells may be initiated after the proposed APT program has been agreed upon.

2.2 The radial distance of the observation wells from the test production well will vary depending on the type of aquifer, its thickness, its

average conductivity and stratification. Presented here are some general rules to follow for the observation well placement:

1) For confined and semi-confined aquifers the production zone observation wells should be located between 100 - 700 feet from the pumped well. (As a general rule the nearest observation well should be at a distance which is at least equal to the thickness of the aquifer being tested.)

2) For unconfined or water-table aquifers the production zone observation wells should be located between 30-400 feet from the pumped well.

3) The observation wells should be placed along a line perpendicular to the regional groundwater flow.

2.3 The observation well located furthest from the test production well may be designed to satisfy the limiting condition accompanying most Water Use Permits which requires a continuous recording water level observation well.

2.4 The production zone observation wells should have screened or open hole segments that correspond to those of the test production well.

2.5 The shallow or adjacent aquifer observation well(s) should be located 50 feet from the test production well and constructed such that the anisotropic characteristics of the production zone (in the water table aquifer case) or the extent of the hydraulic connection across the semi-confining layers overlying or underlying the production zones (in the leaky artesian aquifer case) can be determined.

2.6 All wells should be developed in such a manner that a good hydraulic connection exists between the wells and the zones being monitored.

2.7 During the installation of the test production well and all observation wells, cuttings should be collected every five feet or formation change, whichever comes first. When drilling Floridan Aquifer wells, cuttings should be collected every ten feet or formation change, whichever comes first.

2.8 A geophysical log for all production and observation wells is recommended. A geologic log should be made for each well and a hydrogeologic cross section for the site of investigation should be developed using the geologic and geophysical logs from each well.

3.0 Step Drawdown Test

3.1 A step drawdown test should be performed on the completed and developed test production well as the third step in the APT program. The data collected during the step drawdown test can be used to predict the drawdown that will occur within the test production well at various discharge rates.

3.2 General Guidelines

3.2.1 This test is to be performed under rainless conditions.

3.2.2 There must be a means of obtaining access to the water in the production well so that the depth to water surface (water level) within the casing can be determined by using an electric water level probe or metal measuring tape.

3.2.3 The pump used during the step drawdown test must be capable of operating at various discharge rates. A calibrated orifice weir or some other calibrated flow meter should be installed on the discharge side of the pump so that the pump discharge can be determined.

3.2.4 For a water table or unconfined aquifer, if the pumped water cannot be routed to a storage tank or off-site through an existing water distribution system, a closed conduit or plastic lined trench should be used to transport the pumped water to an area 500 feet down gradient from the production well before it is discharged onto the land surface. As an alternative, it may be possible to route the pumped water to an existing adjacent surface water body. If the well is not in the water table aquifer, then the discharge distance may be reduced to 25 feet from the production well.

3.2.5 The step drawdown test should be performed at four constant discharge rates which represent approximately 50%, 65%, 85%, and 100% of the design capacity of the production well. Start pumping at the lowest discharge rate. Each step should be pumped for a specific time interval or until the water level in the well stabilizes (whichever comes first).

3.2.5.1 The length of each step should increase as the discharge increases, with the first step lasting not less than one hour long. Each step thereafter should increase by one-half hour, i.e., the second step - 1.5 hours, the third step - 2 hours, and the fourth step - 2.5 hours.

3.2.5.2 Take drawdown measurements every 3 minutes, recording the water levels to the nearest one tenth of a foot (0.1 ft).

3.2.5.3 For each water level measurement record the time, the distance from top of the casing to the water surface, the difference between the initial water level and the depth to water surface (drawdown), and the discharge rate.

3.2.5.4 After the drawdown has been determined, the discharge valve should be adjusted to obtain the constant discharge rate for the next step. It is important to maintain the discharge rate as close to constant as possible for each step.

3.2.5.5 Repeat the procedure for each increased discharge.

3.2.6 After the final increase, stop pumping and let the water level recover to prepumping conditions (approximately within one tenth of a foot, 0.1 ft, of the prepumping level). Measure and record the recovering water levels as was done for the pumping levels. A copy of the raw data collected during the test should be provided to District Staff.

3.3 The additional head loss that occurs as groundwater flows into the test production well can be calculated using the coefficients determined by plotting the constant discharge (Q) for each step versus the specific drawdown (s/Q) for each step on arithmetic scale paper. The District Staff can supply additional forms and instructions for the step drawdown test upon request.

Drawdowns observed within the test production well should be adjusted for well efficiency losses. Corrected drawdowns can then be used in a distance versus drawdown plot to determine the transmissivity of the aquifer.

4.0 Background Data for the Constant Rate Discharge Test

4.1 The collection of background data is the fourth step in the APT. This data can be used to determine if there may be outside interferences that could alter the results of the test.

4.2 General Guidelines

4.2.1 Prior to initiating the constant rate discharge test, the prepumping static water level (referenced to NGVD) should be determined in all observation wells, the test production well and adjacent surface water bodies for five days prior to the test. These water levels should be determined to the nearest 1/100 foot (0.01 ft), if possible.

4.2.2 If the constant rate discharge test is to be performed within 2,000 feet of tidal water or an adjacent pumping well, a continuous water level recorder should be placed on the well nearest the tidal water or adjacent pumping well.

4.2.3 The magnitude of the water level fluctuations indicated by the hydrograph will indicate if the raw drawdown and recovery data collected during the constant rate discharge test should be adjusted.

4.2.4 The time distribution and volume of adjacent pumpage and rainfall occurring 24 hours prior to initiating the constant rate discharge test should be recorded.

4.2.5 If possible, adjacent pumpage should be curtailed and rainfall should not occur two hours prior to initiating the constant rate discharge test. If pumpage cannot be curtailed, it is preferred that adjacent pumpage be done at a constant rate for 12 hours prior to and for the duration of the test.

5.0 Constant Rate Discharge Test

5.1 The constant rate discharge test should be conducted as the fifth step in the APT program. In general, when a constant rate discharge test is conducted within the Biscayne Aquifer, a twelve hour discharge period is recommended and in other areas of the District, a three day or greater discharge period is recommended.

5.2 Procedure and Guidelines

5.2.1 Not less than two hours prior to initiating the constant rate discharge test, the valve located on the discharge site of the test production well pump should be adjusted so that the initial discharge of the pump will be close to the constant discharge rate selected for the test. The discharge rate should approach the design capacity of the well.

5.2.2 The actual pump discharge should be recorded throughout the test. A calibrated orifice weir or some other calibrated flow meter should be installed on the discharge side of the pump so that the pump discharge can be determined.

5.2.3 If the pumped water cannot be routed to a storage tank or off-site through an existing water distribution system, a closed conduit or plastic lined trench should be used to transport the pumped water to an area 500 feet down gradient from the test production well before it is discharged onto the land surface. As an alternative, it may be possible to route the pumped water to an existing adjacent surface water body.

5.2.4 Drawdown and recovery water level measurements should be made to the nearest 1/100 foot (0.01 ft). Measurements should be made with a steel tape, graduated surveyor's chain, electric probe, continuous analog water level recorder or analog/digital recorder, or pressure-transducer recorder.

5.2.5 A predetermined schedule for measuring drawdowns should be initiated as soon as the test production well pump starts to discharge. It is suggested that drawdown measurements be made according to the following schedule:

Frequency of Measurement	Time after Pumping Stopped
Approx. every 15 seconds	0 to 2 minutes
Approx. every 30 seconds	2 to 5 minutes
Approx. every 1 minute	5 to 15 minutes
Approx. every 5 minutes	15 to 60 minutes
Approx. every 10 minutes	60 to 120 minutes
Approx. every 0.5 hour	2 to 5 hours
Approx. every 1 hour	5 to 72 hours (5 to 12 hrs. for Biscayne Aquifer Test)

5.2.6 After pumping the well at a constant rate for the agreed upon discharge period, the pump is stopped and recovery water level

measurements are made. Recovery data should be collected for a four hour period after the pump is stopped or until water levels have recovered within 0.05 feet of the initial static water level. It is suggested that recovery measurements be made according to the following schedule:

Frequency of Measurement	Time after Pumping Stopped
Approx. every 15 seconds	0 to 2 minutes
Approx. every 30 seconds	2 to 5 minutes
Approx. every 1 minute	5 to 15 minutes
Approx. every 5 minutes	15 to 60 minutes
Approx. every 10 minutes	60 to 120 minutes
Approx. every 0.5 hour	2 to 4 hours

5.2.7 Rainfall that occurred during the constant rate discharge test should be recorded. The constant rate discharge test should be terminated if water levels in observation wells start to rise due to the effects of recharge from rainfall. Some fluctuations may be due to tidal or barometric effects.

5.2.8 A copy of all raw data collected during the constant rate discharge test should be provided to District Staff.

6.0 Water Quality of the Aquifer

6.1 As part of the APT, it is important to determine how the water quality of an aquifer responds to imposed stress.

6.2 This is done by sampling the water for chloride concentrations and conductivity at the following times:

1) during the step drawdown test (at the beginning of each step and at the end of the test),

2) before the APT begins, and

3) at the end of the APT.

6.3 This data shall be submitted along with the other test data.

7.0 Analysis of Constant Rate Discharge Test Data

7.1 As the sixth step of the program, the constant rate discharge test raw data should be analyzed by means of analytical or graphical techniques which are based on theory which reasonably depicts on-site conditions. The analysis should determine the transmissivity (gpd/ft) and storage coefficient of the production zone as well as the leakance (gpd/ft3) of any overlying confining zones. Recharge from surface water sources should be considered in the analysis. An attempt should be made to explain inconsistencies in the observed data. When necessary, the raw drawdown and recovery data should be adjusted to account for the effects of tidal fluctuations, adjacent pumpage, recharge from surface water, and partial penetration.

7.2 As an aid in analyzing data collected from a water table aquifer system, the Applicant or the Permittee may want to refer to the works of Neuman (1975) on fully penetrating water table wells with no storage capacity, Papadopulos (1967) on fully penetrating non-leaky artesian wells with storage capacity, Streltsova (1974) on partially penetrating water table wells with no storage capacity and Boulton and Streltsova (1976) on partially penetrating water table wells with storage capacity.

7.3 As an aid in analyzing data collected from a leaky artesian aquifer system, the Applicant or Permittee may want to refer to the works of Hantush and Jacob (1955) and Hantush (1959) on fully penetrating leaky artesian aquifer wells with no storage capacity and no aquitard storage changes, Hantush (1964) on partially penetrating leaky artesian aquifer wells with no storage capacity and aquitard storage changes, Papadopulos (1967) on fully penetrating non-leaky artesian aquifer wells with storage capacity and Hantush (1961) and Weeks (1969) on the effects of partial penetration of aquifer wells with no storage capacity.

7.4 Additional useful references dealing with the analysis of data collected during a constant rate discharge test are Kruseman and De Ridder (1970), Lohman (1972) and Walton (1970). The above references are fully cited in the attached bibliography.

8.0 Hydrogeologic Study

8.1 As the final step in an APT program, the Applicant or Permittee should assemble a hydrogeologic study report.

8.2 Items to be Included in the Report

8.2.1 A section describing the geologic and hydrogeologic conditions that exist at the site of investigation. The description should incorporate a hydrogeologic cross section developed from the geologic and geophysical well logs compiled for the test production well and the three production zone observation wells. The cross section should indicate the thickness and relative location of each production zone and confining zone as well as the water quality and the relative head for each zone.

8.2.2 A section describing the construction of the test production well, the four observation wells required for the constant rate discharge test and any other adjacent wells. The cased and uncased depth of each well should be indicated on a hydrogeologic cross section. The locations of pertinent wells and surface water bodies should be indicated on a 7 1/2 minute USGS quadrangle map. The report should indicate the distance from each well or surface water body to the test production well.

8.2.3 A section describing the procedure used for running the step drawdown test and the constant rate discharge test as well as the technique used in determining the discharge of the test

production well, in routing the pumped water away from the test production well, and in determining the changes in water levels.

8.2.4 A section describing how the data collected during the step drawdown test and the constant rate discharge test was analyzed to determine the hydraulic characteristics of the hydrogeologic system. Use the terms s, Q, t, and r, where s = drawdown, Q = discharge, t = time, and r = radius from pumped well, to describe the data.

8.2.4.1 The analysis of the data collected during the step drawdown test should include a plot of Q vs. s/Q.

8.2.4.2 The analysis of the data collected during the constant rate discharge test should include individual plot figures indicating the drawdown data collected from each well. These should be plots of:

1) log t/r2 vs. log s on log-log paper (K and E Log paper, No. 46-7522, should be used when plotting constant rate discharge test data so that published type curves can be used to check indicated match points), and

2) log t/r2 vs. s on semi-log paper.

8.2.4.3 In addition, one plot of log r vs. s for each well on semi-log paper.

8.2.4.4 Any of the above figures not discussed in the text of the Hydrogeologic Report should be included in the Report's Appendix. If a graphical solution involving type curves is used in the determination of the aquifer characteristics, the pertinent curves and match points should be provided. The report should indicate the basis for selecting the value of transmissivity, storage coefficient and leakance most representative of the hydrogeologic system.

8.2.5 A section describing the impacts that proposed withdrawals will have on water levels and water quality within the selected production zone and adjacent confining zones or production zones.

8.2.5.1 If the proposed withdrawals are from a water table aquifer system, the Applicant or Permittee should calculate the theoretical time variant cone of depression that would develop in the absence of rainfall after 30, 60, 90 and 180 days of pumpage at the proposed withdrawal rate. The calculations for a water table aquifer system should utilize the most representative transmissivity value derived from the APT program and an appropriate storage coefficient.

8.2.5.2 If the proposed withdrawals are from a leaky artesian aquifer system, the Applicant or Permittee should calculate the theoretical steady state cone of depression that would develop at the proposed withdrawal rate. The calculations for a leaky artesian system should utilize the most representative transmissivity and leakance values derived from the APT program.

8.2.5.3 In all cases, the Applicant or Permittee should calculate the cumulative cone of depression when withdrawals from multiple wells are proposed.

8.2.5.4 The resultant cones of depression should be indicated on a 7 1/2 minute USGS quadrangle map.

8.2.5.5 The Applicant should also address the impacts that lowered water levels will have on the surrounding environmental features (including wetlands), adjacent existing legal uses, water bodies, etc.

8.2.6 A section tabulating all water level, rainfall, pump discharge and adjacent pumping data collected throughout the APT program. Copies of hydrographs should also be included in this section. All water levels should be referenced to the National Geodetic Vertical Datum (NGVD).

South Florida Water Management District

Part – B

Water Use Management System
Design and Evaluation Aids

III. Step Drawdown Testing

STEP DRAWDOWN TEST
1985

Introduction

District Staff has compiled a set of guidelines for performing a Step Drawdown Test (SDT). These guidelines are presented here as an evaluation aid for the Applicant or Permittee. The SDT is used by the SFWMD to evaluate the water yielding capacity of the aquifer. In addition, the test is used to determine the efficiency of the wells used by the Permittee.

1.0 General Guidelines

1.1 This test is to be performed under rainless conditions.

1.2 There must be a means of obtaining access to the water in the production well so that the depth to water surface (water level) within the casing can be determined by using an electric water level probe or metal measuring tape.

1.3 The pump used during the SDT must be capable of operating at various discharge rates. A calibrated orifice weir or some other calibrated flow meter should be installed on the discharge side of the pump so that the pump discharge can be determined.

1.4 Routing of Discharge Water

1.4.1 For a water table or unconfined aquifer, if the pumped water cannot be routed to a storage tank or off-site through an existing water distribution system, a closed conduit or plastic lined trench should be used to transport the pumped water to an area 600 feet down gradient from the production well before it is discharged onto the land surface. As an alternative, it may be possible to route the pumped water to an existing adjacent surface water body.

1.4.2 If the well is not in the water table aquifer, then the discharge distance may be reduced to 25 feet from the production well.

1.5 The SDT should be performed at four constant discharge rates which represent approximately 50%, 65%, 85%, and 100% of the design capacity of the production well.

1.5.1 Start pumping at the lowest discharge rate.

1.5.2 Each step should be pumped for a specific time interval or until the water level in the well stabilizes (whichever comes first).

1.5.3 The length of each step should increase as the discharge increases, with the first step lasting not less than one hour long. Each step thereafter should increase by one-half hour, i.e., the second step - 1.5 hours, the third step - 2 hours, and the fourth step - 2.5 hours.

1.5.4 Take drawdown measurements every 3 minutes, recording the water levels to the nearest one tenth of a foot (0.1 ft).

1.5.5 For each water level measurement record the time, the distance from top of the casing to the water surface, the difference between the initial water level and the depth to water surface (drawdown), and the discharge rate.

1.5.6 After the drawdown has been determined, the discharge valve should be adjusted to obtain the constant discharge rate for the next step. It is important to maintain the discharge rate as close to constant as possible for each step.

1.5.7 Repeat the procedure for each increased discharge.

1.6 After the final increase, stop pumping and let the water level recover to prepumping conditions (approximately within one tenth of a foot, 0.1 ft, of the prepumping level). Measure and record the recovering water levels as was done for the pumping levels.

2.0 Water quality aspects of the aquifer should be determined by sampling the water for chloride concentrations and conductivity at the beginning of each step and at the end of the test.

3.0 A copy of the raw data collected during the test should be provided to District Staff. Sample forms for data collection are attached.

Step Drawdown Form

Permit number:_____ Application number:_____

Applicant's Name:_____

Project Name:_____

Project Location: Section:___ Township:___ Range:___

Weather Conditions:_____

Test Operator:_____ Test Date:_____

Pump Characteristics: Power:___HP; Discharge Diameter:___IN

Flow Meter Type:_____

Static water Level:____FT from the Top of Casing

Discharge Rate (GPM)	Time (MIN)	Depth from Top of Casing to water Surface (FT)	Drawdown* (FT)	Chloride Conc. (MG/L)	Conductivity (MICROMHOS/CM)

* Drawdown is the static water level minus pumping level.

NOTE: Attach copy of well log and completion report.

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South Florida Water Management District

Part – B

Water Use Management Rules
System Design and Evaluation Aids

IV. Groundwater Level Monitoring Program

GROUNDWATER LEVEL MONITORING PROGRAM

1985

Introduction

A groundwater level monitoring program may be required to adequately indicate the impact of the proposed use on existing legal uses, water bodies, land uses, environmental features such as wetlands, saline water interface, or the aquifer. These guidelines are intended to help the Permittee in developing a groundwater level monitoring program.

Staff determines the scope of a Permittee's monitoring program by the size of the withdrawal, the hydrologic properties of the aquifer, the amount and type of other water use in the aquifer, and the land use surrounding the wellfield. The number of wells required for monitoring will normally be specified in the special conditions of the permit. For example, a water use of less than one million gallons per day in a relatively undeveloped inland area may require only one monitoring well, while a use of several million gallons per day from a highly-stressed coastal aquifer subject to salt water intrusion may require a number of monitoring wells at several depths located at various directions and distances from the wellfield.

The hydrologic aspects of each wellfield will differ; therefore, these guidelines are general in nature. A monitoring program for flowing wells will require a different methodology. Specific details and requirements for each program will be prepared on a case-by-case basis within the context of these guidelines. The Permittee must schedule a meeting with District Staff prior to observation well construction in order to review the design and scope of the monitoring program.

1.0 Definitions

1.1 General Terms

1.1.1 Annual Allocation: The permitted quantity of water approved by the Governing Board of the District for use on a yearly basis.

1.1.2 Area of Influence: The area of land surrounding a well or wellfield which may be impacted by the wellfield or, as a consequence of regional groundwater gradients, a land area which may impact the wellfield because groundwater flow under the land area is towards the wellfield. The area of influence of a wellfield may be determined on a case-by-case basis by defining either the drawdown or gradient of the drawdown induced by proposed withdrawals at the boundaries of the area of influence.

1.1.3 Cone of Depression: The conical shape taken by the potentiometric surface showing the variation of drawdown with distance due to pumping from a well (or wellfield) within its area of influence.

1.1.4 Interference: A condition occurring when the areas of influence of two or more wells overlap.

1.1.5 Potentiometric Surface: An imaginary surface representing the static head of groundwater and defined by the level to which water will rise in a well.

1.2 Terms Related to Groundwater Level Monitoring

1.2.1 Continuous Water Level Recorder: A device containing a movable pen which responds to water level changes in an observation well to produce a record of groundwater levels with respect to time.

1.2.2 Groundwater Level: For purposes of this report, the level to which water rises in an observation well, defining the potentiometric surface; throughout this report, the term "Groundwater Level" will mean the potentiometric level in an observation well, expressed in reference to NGVD, regardless of the type of aquifer in which the well is completed.

1.2.3 Hydrograph: A graph which shows changes in groundwater levels with respect to time; for purposes of this report, a graph of daily, weekly, or monthly groundwater levels, as compared to a graph produced by a water level recorder.

1.2.4 National Geodetic Vertical Datum (NGVD): Datum reference used by the District for reporting purposes; the elevation of groundwater levels or potentiometric surfaces above or below mean sea level.

1.2.5 Monitoring Well: A special well drilled in a selected location for the purpose of observing parameters such as groundwater levels and groundwater quality.

1.2.6 Potentiometric Surface Map: A map showing the elevation of the potentiometric surface of an aquifer, referenced to NGVD, by means of contour lines.

1.3 Terms Relating To Special Aquifer Types

1.3.1 Artesian Aquifer: An aquifer which is bounded on the top and bottom by confining layers of relatively impermeable material.

1.3.2 Multi-Depth Potentiometric Head Monitoring Program: A program to monitor potentiometric levels in a production zone and adjacent zones or aquifers with one or more clusters of observation wells completed in the various aquifers; the monitoring program is intended to determine the effects of withdrawals from the production zone in zones or aquifers.

1.3.3 Water Table Aquifer: An aquifer which does not have a confining upper boundary of impermeable material; in this type of aquifer, the potentiometric surface is generally referred to as the water table.

1.3.4 Water Table Monitoring Program: A program to monitor groundwater levels in a water table aquifer with one or more monitoring wells.

2.0 Monitoring Wells

2.1 Well Network Design

2.1.1 The specific number, depth, location and design specifications of monitoring wells are determined on a case-by-case basis.

2.1.2 Individual well locations are determined after the consideration of factors such as saline water bodies, potential pollution sources, nearby wells, surface water bodies and wetlands, and the boundary of the cone of depression.

2.1.3 Design and construction specifications for each well, to include drilling method, total depth, casing depth and type, and well finish, will consider factors such as local geology, drilling conditions, nearby wells completed either in the production zone or adjacent zones or aquifers, and the parameters to be monitored from the well.

2.2 Well Construction Guidelines

2.2.1 All monitoring wells shall be installed by a registered well driller working under the direction of a licensed contractor.

2.2.2 All materials and equipment shall be clean and free from oil, grease, solvents, or other contaminants.

2.2.3 Upon completion, the monitoring well shall be capable of producing water substantially free of sand and completely free of drilling fluids, and responsive to water level changes in the aquifer.

2.2.4 Sampling: Formation samples shall be collected during drilling every five (5) feet or change of formation, whichever occurs first. Samples shall be representative of the formation materials encountered at the depths at which they naturally occur in the borehole. Samples shall be clearly and indelibly labeled with the well identification and depth interval represented by the sample. A detailed driller's report shall be maintained and shall include, but not be limited to, a description of all formations encountered, depths at which the formations are encountered, and the number of feet drilled.

2.2.5 Casing: Well casing shall be new, schedule 40 pvc pipe or its equivalent, with a minimum 2 inch nominal diameter. The casing shall be assembled with threaded couplings, slip couplings, or flush joint threaded ends. If couplings are used, they may be secured to the casing with stainless steel screws that do not penetrate the PVC casing. Solvents and/or glue shall not be used to join casing. The well casing may extend above or below the protective steel casing. The top of the casing shall be fitted with a removeable, vented cap.

2.2.6 Screen: Well screen shall be new, schedule 40 PVC slotted pipe or its equivalent, 3 to 5 feet long with a minimum 2 inch nominal diameter. Slot size shall be compatible with formation materials and artificial gravel pack. It shall be fitted with a tail pipe of new, schedule 40 PVC pipe or its equivalent, 2 feet long with a minimum 2 inch nominal diameter. The bottom of the tail pipe shall be sealed with a blank cap. The screen, tail pipe, and cap shall be assembled and attached to the casing in a manner similar to the assembly of the casing. The casing and screen shall be plumb and centralized within the borehole.

2.2.7 Gravel Pack: An artificial gravel pack of washed, well rounded, well sorted, silica gravel of a size compatible with formation materials and screen slot size shall be used. The gravel shall have a minimum thickness of 2 inches and shall be placed in the borehole in such a manner as to completely fill the annular space. The gravel pack shall extend from the bottom of the tail pipe to 2 feet above the top of the screen.

2.2.8 Sand Cap: A sand cap consisting of clean washed quartz (silica) filter sand having a diameter of approximately 0.04 inches (1 mm) shall be used. The sand cap shall extend from the top of the gravel pack to 2 to 3 feet above the top of the gravel pack. The sand cap shall be placed in the borehole in such a manner as to completely fill the annular space. The sand cap shall have a minimum thickness of 2 inches. Bentonite or similar clay materials shall not be used as a substitute for the sand cap.

2.2.9 Grout: Neat cement grout shall be placed in the borehole from the top of the sand cap to ground surface. No more than 6 gallons of water per cubic foot of cement shall be used. The grout shall have a minimum thickness of 1 inch and shall be placed in the borehole in such a manner as to completely fill the annular space.

2.2.10 Well Casing Protection: A protective steel casing or equivalent shall be placed around the well casing a minimum of 2 feet below land surface to a minimum of 2 feet above land surface. The protective steel casing shall be of a diameter that allows access to the well casing for water level measurements and water sampling. A cement or concrete pad with minimum dimensions of 2 feet on each side, 4 inches thick, shall be placed around the protective steel casing. The pad shall be sloped in such a manner as to convey water away from the protective steel casing. The protective steel casing shall be fitted with a cap or locking cap. A hole must be drilled in the protective steel casing near the top of the pad to prevent the accumulation of water in the protective steel casing. The monitoring well identification must be clearly and indelibly marked on the protective steel casing.

2.3 Well Construction and Documentation

2.3.1 The District may require the collection of drill cuttings or cores, and the submittal of lithologic or geophysical logs, obtained during the drilling of observation wells.

2.3.2 A completion report should be submitted pursuant to Chapter 40.E-3, Florida Administrative Code (F.A.C.)

2.3.3 An accurate site map of the location of each monitoring well is required giving specific directions from landmarks to the well.

2.4 Water Level Recorders

2.4.1 Water level recorders which produce a page-type chart or a roll-type chart are recommended.

2.4.2 Recorders which produce circular charts or digital-coded punched paper tapes are not acceptable. A digital-coded type recorder would be considered only if the data has been decoded with the levels referenced to NGVD and then the data submitted.

3.0 Data Collection and Submittal

3.1 Establishment of Datum Reference for Monitoring Wells

3.1.1 A measuring point (MP) is established for each well and used as a reference point for all groundwater levels measurements. Normally, the measuring point is the top of the well casing.

3.1.2 The datum reference is established by surveying the elevation of the measuring point above mean sea level. (0.0' NGVD)

3.2 Groundwater Level Measurements

3.2.1 Wetted Tape Measurement: This method uses a steel measuring tape or surveyor's chain, preferably graduated into hundredths of a foot. The bottom portion of the tape is coated with carpenter's chalk or fluid-level paste and the tape is lowered into the well a sufficient depth to allow part of the chalked portion of the tape to be below the water level. At this point, find a footage marker on the tape, hold it against the measuring point, and record that footage (HOLD). Withdraw the tape from the well, determine the footage at which the water level CUT the tape as indicated by the line between wet and dry chalk or paste, and subtract the CUT footage from the HOLD footage to obtain the groundwater level (GWL) below the measuring point. To express the water level in terms of NGVD reference, subtract the GWL measurements from the elevation of the measuring point.

3.2.2 Electric Probe Measurement: An electric probe is a device in which contact with the top of the water column in a well completes a circuit and sends a signal, usually through an ammeter on the device. The point at which the probe first

touches water is determined, the probe cable is held against the measuring point, and the length of cable below the hold point is measured to determine the groundwater level. Subtract that level from the elevation of the measuring point to express the water level in NGVD reference.

3.2.3 Other Observations: Along with the groundwater level, the date and time of the measurement are recorded. It may also be useful to note items such as weather and precipitation, number of wells operating, etc.

3.3 Water Level Recorder Operation

3.3.1 Starting a Continuous Recorder Measurement: Measure the potentiometric level with steel tape or electric probe. Note the groundwater level (referenced to NGVD), date, time, and the initials of the person starting the record on the chart. Adjust the chart for the proper time of day and the recorder pen for the proper water level. Check the movement of the recorder float to be sure as upward movement in the well is shown as upward movement on the recorder.

3.3.2 Ending a Continuous Recorder Measurement: Measure the groundwater level (referenced to NGVD). If there is a large difference between the measured level and the level showing on the recorder, perform the measurement again. Note the level, date, time and inspector's initials on the chart. Also note any level discrepancy of 0.1 foot or more, and any time discrepancy of I hour or more per seven-day period.

3.4 Monthly Data Submittal Requirements

3.4.1 Groundwater Levels: Field measurements of groundwater levels are submitted to the District during the month following the month in which the measurements were made. If any monitoring wells are equipped with water level recorders, the recorder charts are submitted with the field measurements.

3.4.2 Documentation: The project name and permit number must accompany all data submittals to the District.

3.5 Annual Reporting Requirements

3.5.1 Hydrographs: The District may require that a hydrograph for each observation well be prepared at the end of each calendar year. The graph shall be prepared from the field groundwater level measurements taken in wells without water level recorders, or from the lowest water level occurring on the 5th, 10th, 15th, 20th, 25th and last day of the month in wells equipped with recorders. The water level scale on the hydrographs shall be held constant throughout the year.

3.5.2 Potentiometric Surface Map: For larger groundwater level monitoring networks, the District may require the submittal of wet season and dry season potentiometric surface maps. The maps shall be based on the May and November water level

measurements. A separate map should be prepared for each monitored aquifer.

3.5.3 Documentation: The project name and permit number must accompany all data submittals to the District.

South Florida Water Management District

Part – B

Water Use Management System
Design and Evaluation Aids

V. Supplemental Crop Requirement and Withdrawal Calculation

PART B

WATER USE MANAGEMENT SYSTEM

DESIGN AND EVALUATION AIDS

V. SUPPLEMENTAL CROP REQUIREMENT

AND

WITHDRAWAL CALCULATION

SUPPLEMENTAL CROP REQUIREMENT AND WITHDRAWAL CALCULATION

Introduction

The Water Use Division of the South Florida Water Management District uses a modified Blaney-Criddle equation to determine evapotranspiration and the Soil Conservation Service method described below to determine supplemental irrigation needs.

1.0 The Modified Blaney-Criddle Equation

1.1 The Blaney-Criddle equation in its basic form is

$$(1) \qquad U = k \sum_{1}^{m} p \; t / 100$$

where

U = crop evapotranspiration for a given period

k = an annual, seasonal, or monthly empirical consumptive use coefficient which varies according to the crop (see description below)

p = percent of daytime hours of the year which occur during the period

t = mean temperature for the period, in degrees Farenheit

m = month

1.2 The following modification has been made to the above equation:

$$(2) \qquad k = kt \times kc$$

where

kt = a climatic coefficient which is related to the mean air temperature; kt = 0.0173t - 0.314

kc = a coefficient reflecting the growth stage of the crop; values are shown in Table~~s~~ SCR-1

RT(M) = average monthly rainfall (Table SCR-2)

F(M) = monthly evapotranspiration factor

T(M) = average monthly temperature (Table SCR-2)

P(M) = monthly percentage of annual daylight hours (Table SCR-2)

RE(M) = monthly effective rainfall

RE2(M) = monthly effective rainfall normalized to level of certainty

AKT(M)= kt

AKC(M) = monthly crop growth coefficient (Table SCR-1)

RT1(M) = average monthly effective rainfall factor considering average monthly rainfall

Ul(M) = average monthly effective rainfall factor considering average monthly evapotranspiration

D = net depth of application (see Figures SCR-1 through SCR-15)

Fl = soil factor

F2 = ratio of design drought growing-season effective rainfall to average annual rainfall (Table SCR-2)

The locations of the geographical areas represented by the rainfall stations (Table SCR-2) used to determine the average monthly rainfall RT(M), average monthly temperature T(M), and monthly percentage of annual daylight hours P(M) are shown in Figures SCR-1 through SCR-15.

2.2.2 Equation (3) is solved for each month of the year for perennial crops, or for each month of the growing season for annual crops. The largest monthly difference between evapotranspiration and design drought effective rainfall is the basis of the maximum month allocation and the total of the monthly differences between evapotranspiration and design drought effective rainfall is the basis of the annual allocation. The maximum month and annual differences are multiplied by the Allocation Coefficient Multiplier (BOR Table 2-1) to determine the overall crop requirement then multiplied by the irrigated acreage to give an allocation, equation (4).

3.0 Additional information

Additional detail on this method may be found in " Irrigation Water Requirements," Technical Release No. 21, USDA, Soil Conservation Service, Engineering Division, 1970.

2.0 The irrigation water use allocation is calculated as follows:

(3) $SUP = U - RE(d, s)$

(4) $Q = SUP \times ACM \times A$

where

SUP = supplemental irrigation requirement for the growing period in inches

RE = effective rainfall, which is normalized to the design drought (d), and the soil type (s)

Q = allocation (acre inches)

ACM = Allocation Coefficient Multiplier (BOR Table 2-1)

A = irrigated acreage (acres)

2.1 Growth Coefficients

2.1.1 The crop growth coefficient used in the equations are determined as follows:

1) For perennial crops, twelve monthly coefficients are given in Table SCR-1.

2) For annual crops, monthly coefficients for growing seasons of three and four months are given in Table SCR-1.

2.2 Calculation of Monthly Supplemental Irrigation Requirement and Allocation

2.2.1 The Water Use Division uses a computer program to calculate the supplemental irrigation water requirement used in determining an irrigation water use allocation. The program approximates equations (1) and (2) as follows:

(5) $F(M) = (T(M) \times P(M)) / 100$

(6) $AKT(M) = (0.0173 \times T(M)) - 0.314$

(7) $AKTF(M) = F(M) \times AKT(M)$

(8) $U(M) = AKTF(M) \times AKC(M)$

(9) $RT1(M) = (0.70917 \times (RT(M)^{0.82416}) - 0.11556)$

(10) $Ul(M) = 10^{(0.02426 \text{ X } U(M))}$

(11) $Fl = 0.531747 + 0.295154 \text{ X } D - 0.057697 \text{ X } D^2 + 0.003804 \text{ X } D^3$

(12) $RE(M) = RTI(M) \times UI(M) \text{ X } Fl$

(13) $RE2 = RE(M) \times F2$

where

M = month of year

U(M) = average monthly evapotranspiration

TABLE SCR-1: Growth Coefficients for Crops

Monthly Coefficiencts for Perennial Crops

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
AVOCADO	0.27	0.42	0.58	0.70	0.78	0.81	0.77	0.71	0.63	0.54	0.43	0.30
CITRUS	0.63	0.66	0.68	0.70	0.71	0.71	0.71	0.71	0.70	0.68	0.67	0.64
SUGARCANE	0.39	0.30	0.53	0.61	0.70	0.79	0.79	0.84	0.73	0.88	0.72	0.69
GRAPES	0.20	0.24	0.38	0.60	0.71	0.80	0.80	0.76	0.61	0.50	0.35	0.23
TURF GRASS	0.49	0.57	0.73	0.85	0.90	0.92	0.92	0.91	0.87	0.79	0.67	0.55
PASTURE	0.46	0.60	0.63	0.68	0.70	0.53	0.56	0.58	0.52	0.53	0.49	0.44

Monthly Coefficients for Annual Crops

	Three-Month Growing Season			**Four-Month Growing Season**			
	Month of Growing Season			Month of Growing Season			
	1	**2**	**3**	**1**	**2**	**3**	**4**
DRY BEANS	0.73	1.08	0.81	0.66	1.02	1.06	0.75
WINTER WHEAT	0.40	0.81	1.18	0.35	0.65	0.97	1.22
SURGHUM	0.54	1.01	0.70	0.43	0.99	0.93	0.65
GREEN BEAN	0.61	0.91	1.10	0.58	0.79	1.01	1.11
GRAIN CORN	0.59	1.02	0.96	0.54	0.90	1.06	0.93
SILAGE CORN	0.55	0.97	1.03	0.51	0.81	1.06	1.02
SWEET CORN	0.60	1.02	1.04	0.55	0.90	1.07	1.03
MELONS	0.56	0.79	0.72	0.52	0.75	0.79	0.71
PEAS	0.72	1.09	1.03	0.66	1.01	1.11	1.01
POTATO	0.54	1.18	1.32	0.46	0.96	1.33	1.30
SOYBEANS	0.33	0.77	0.84	0.30	0.56	0.96	0.79
TOMATO	0.50	0.93	0.84	0.47	0.76	1.00	0.80
SMALL VEGETABLES	0.54	0.81	0.62	0.48	0.77	0.81	0.57

TABLE SCR-2: Rainfall Stations

STATION: ARCHBOLD

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mean Rainfall	1.91	2.20	3.11	2.33	4.27	7.80	6.94	7.15	6.80	3.24	1.63	1.64
Mean Temperature (F)	60.61	61.97	66.39	70.40	75.65	79.37	80.42	80.94	79.60	74.37	68.40	62.65
Annual Daylight (%)	7.43	7.09	8.38	8.66	9.42	9.35	9.54	9.15	8.32	8.04	7.31	7.31

Temperature based on 29 years of data, rainfall based on 68 years of data

Factor for conversion of average rainfall to drought rainfall = 0.83

STATION: AVON PARK

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mean Rainfall	2.24	2.51	2.82	2.52	4.12	8.27	8.03	7.50	7.15	3.59	1.71	1.76
Mean Temperature (F)	61.74	63.41	67.61	72.20	77.06	80.63	81.90	82.00	80.47	74.97	68.17	63.29
Annual Daylight (%)	7.42	7.08	8.37	8.67	9.44	9.37	9.56	9.16	8.32	8.03	7.3	7.29

Temperature based on 67 years of data, rainfall based on 93 years of data

Factor for conversion of average rainfall to drought rainfall = 0.84

STATION: BELLE GLADE

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mean Rainfall	2.20	1.89	3.02	2.85	4.85	8.65	7.81	7.95	7.98	4.34	2.22	1.72
Mean Temperature (F)	63.00	63.83	67.55	70.60	75.29	78.93	80.32	80.68	79.43	74.94	68.87	64.32
Annual Daylight (%)	7.46	7.11	8.38	8.65	9.4	9.32	9.52	9.13	8.32	8.05	7.33	7.34

Temperature based on 68 years of data, rainfall based on 72 years of data

Factor for conversion of average rainfall to drought rainfall = 0.84

STATION: CLEWISTON

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mean Rainfall	2.08	1.98	2.37	2.39	4.27	7.20	6.28	6.38	5.92	3.46	1.93	1.67
Mean Temperature (F)	63.52	65.00	69.10	73.20	77.29	80.43	81.84	82.00	81.17	76.58	70.57	65.26
Annual Daylight (%)	7.45	7.1	8.38	8.66	9.4	9.33	9.52	9.13	8.32	8.04	7.33	7.33

Temperature based on 50 years of data, rainfall based on 46 years of data

Factor for conversion of average rainfall to drought rainfall = 0.83

TABLE SCR-2: Rainfall Stations

STATION: EVERGLADES

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mean Rainfall	1.69	1.63	0.95	2.26	4.41	9.75	8.21	7.79	9.07	4.12	1.46	1.45
Mean Temperature (F)	65.10	66.03	69.39	73.17	76.94	80.30	81.77	82.00	81.50	77.29	71.23	66.74
Annual Daylight (%)	7.49	7.12	8.38	8.64	9.37	9.29	9.49	9.11	8.32	8.06	7.36	7.37

Temperature based on 67 years of data, rainfall based on 57 years of data

Factor for conversion of average rainfall to drought rainfall = 0.83

STATION: FORT DRUM

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mean Rainfall	2.05	2.72	3.39	2.16	4.67	7.52	7.46	6.80	6.48	3.92	1.79	1.78
Mean Temperature (F)	61.77	62.90	66.84	70.77	75.48	79.23	81.00	81.00	79.63	74.61	68.57	63.00
Annual Daylight (%)	7.41	7.08	8.37	8.67	9.44	9.37	9.56	9.16	8.32	8.03	7.29	7.29

Temperature based on 50 years of data, rainfall based on 50 years of data

Factor for conversion of average rainfall to drought rainfall = 0.85

STATION: FT. LAUDERDALE

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mean Rainfall	2.86	2.52	2.90	4.12	6.28	9.02	6.39	6.90	8.21	8.40	3.96	2.52
Mean Temperature (F)	66.81	67.62	70.71	74.27	77.94	80.90	82.00	82.26	81.37	77.77	72.63	68.42
Annual Daylight (%)	7.49	7.12	8.38	8.64	9.37	9.29	9.49	9.11	8.32	8.06	7.36	7.37

Temperature based on 50 years of data, rainfall based on 83 years of data

Factor for conversion of average rainfall to drought rainfall = 0.82

STATION: FT. MYERS

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mean Rainfall	1.90	2.00	1.50	1.90	4.10	9.40	8.70	8.60	8.40	3.50	1.50	1.50
Mean Temperature (F)	64.03	65.10	68.87	73.13	77.97	81.23	82.53	82.90	81.60	76.58	69.83	65.29
Annual Daylight (%)	7.46	7.11	8.38	8.65	9.4	9.32	9.52	9.13	8.32	8.05	7.33	7.34

Temperature based on 50 years of data, rainfall based on 57 years of data

Factor for conversion of average rainfall to drought rainfall = 0.84

TABLE SCR-2: Rainfall Stations

STATION: FT. PIERCE

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mean Rainfall	2.48	2.77	3.23	3.08	4.29	5.98	5.66	5.82	8.03	6.72	2.95	2.07
Mean Temperature (F)	63.29	64.31	67.94	72.00	76.42	79.77	81.00	81.35	80.30	75.97	69.80	64.94
Annual Daylight (%)	7.42	7.09	8.38	8.66	9.43	9.36	9.55	9.15	8.32	8.03	7.3	7.3

Temperature based on 67 years of data, rainfall based on 96 years of data

Factor for conversion of average rainfall to drought rainfall = 0.83

STATION: HIALEAH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mean Rainfall	2.28	2.11	2.70	3.70	6.37	9.31	7.07	8.25	8.98	7.39	3.52	1.85
Mean Temperature (F)	66.42	67.55	71.03	74.30	77.97	80.80	82.00	82.16	81.30	77.39	72.20	67.77
Annual Daylight (%)	7.49	7.12	8.38	8.64	9.37	9.29	9.49	9.11	8.32	8.06	7.36	7.37

Temperature based on 50 years of data, rainfall based on 56 years of data

Factor for conversion of average rainfall to drought rainfall = 0.81

STATION: HOMESTEAD

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mean Rainfall	1.72	1.86	2.29	3.18	6.73	9.39	7.95	8.27	10.27	7.18	2.15	1.35
Mean Temperature (F)	65.77	67.45	69.81	72.50	76.52	80.03	81.45	82.00	81.07	77.45	71.93	67.29
Annual Daylight (%)	7.52	7.13	8.39	8.63	9.35	9.26	9.47	9.09	8.31	8.07	7.38	7.4

Temperature based on 72 years of data, rainfall based on 72 years of data

Factor for conversion of average rainfall to drought rainfall = 0.84

STATION: HYPOLUXO

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mean Rainfall	3.10	2.73	3.46	3.45	5.26	8.29	5.75	6.57	7.78	7.73	3.81	2.61
Mean Temperature (F)	65.84	66.69	70.10	73.63	77.81	80.77	82.29	82.55	81.30	77.45	71.87	67.35
Annual Daylight (%)	7.46	7.11	8.38	8.65	9.4	9.32	9.52	9.13	8.32	8.05	7.33	7.34

Temperature and rainfall based on 97 years of data

Factor for conversion of average rainfall to drought rainfall = 0.81

TABLE SCR-2: Rainfall Stations

STATION: IMMOKALEE

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mean Rainfall	2.14	2.26	3.09	2.23	4.23	8.61	7.48	7.35	6.71	2.90	1.95	1.51
Mean Temperature (F)	64.03	65.24	68.77	71.87	76.74	80.10	81.26	81.74	80.67	76.00	67.20	65.45
Annual Daylight (%)	7.48	7.12	8.38	8.64	9.38	9.30	9.50	9.12	9.32	8.06	7.35	7.36

Temperature based on 28 years of data, rainfall based on 37 years of data

Factor for conversion of average rainfall to drought rainfall = 0.82

STATION: JUPITER

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mean Rainfall	3.41	2.94	4.27	3.07	5.55	7.59	5.41	6.78	8.44	8.42	3.61	2.47
Mean Temperature (F)	64.84	65.69	69.26	72.97	76.97	80.17	81.68	82.06	81.20	76.90	71.10	66.61
Annual Daylight (%)	7.44	7.1	8.38	8.66	9.41	9.34	9.53	9.14	8.32	8.04	7.32	7.32

Temperature based on 50 years of data, rainfall based on 97 years of data

Factor for conversion of average rainfall to drought rainfall = 0.81

STATION: KISSIMMEE

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mean Rainfall	2.12	2.67	3.31	2.49	3.90	6.97	7.46	6.76	6.49	3.27	1.96	2.08
Mean Temperature (F)	60.94	62.38	66.65	71.20	76.19	80.30	81.65	81.84	80.07	74.77	67.93	62.48
Annual Daylight (%)	7.39	7.06	8.37	8.68	9.47	9.4	9.59	9.18	8.32	8.01	7.27	7.26

Temperature based on 50 years of data, rainfall based on 94 years of data

Factor for conversion of average rainfall to drought rainfall = 0.83

STATION: LA BELLE

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mean Rainfall	1.95	2.11	2.02	2.54	4.57	9.38	8.19	7.85	6.82	3.80	1.73	1.72
Mean Temperature (F)	62.94	64.62	68.23	72.27	77.10	80.33	81.16	81.77	80.43	75.42	68.97	64.65
Annual Daylight (%)	7.45	7.1	8.38	8.66	9.4	9.33	9.52	9.13	8.32	8.04	7.33	7.33

Temperature and rainfall based on 57 years of data

Factor for conversion of average rainfall to drought rainfall = 0.86

TABLE SCR-2: Rainfall Stations

STATION: LOXAHATCHEE

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mean Rainfall	2.59	2.38	3.33	2.99	5.52	8.95	7.94	7.32	9.71	6.44	3.18	2.21
Mean Temperature (F)	63.00	63.83	67.55	70.60	75.29	78.93	80.32	80.68	79.43	74.94	68.87	64.32
Annual Daylight (%)	7.46	7.11	8.38	8.65	9.4	9.32	9.52	9.13	8.32	8.05	7.33	7.34

Temperature based on 68 years of data, rainfall based on 47 years of data

Factor for conversion of average rainfall to drought rainfall = 0.83

STATION: MIAMI

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mean Rainfall	2.02	2.06	2.08	3.13	6.35	7.84	5.44	6.29	8.30	8.38	2.80	2.05
Mean Temperature (F)	67.35	68.48	71.65	75.13	78.74	81.23	82.68	82.84	81.67	78.10	73.13	68.87
Annual Daylight (%)	7.5	7.13	8.38	8.63	9.36	9.28	9.48	9.13	8.32	8.07	7.37	7.38

Temperature based on 50 years of data, rainfall based on 79 years of data

Factor for conversion of average rainfall to drought rainfall = 0.78

STATION: MOORE HAVEN

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mean Rainfall	1.82	2.04	1.90	2.38	4.33	7.57	7.04	6.73	6.97	3.47	1.73	1.62
Mean Temperature (F)	62.71	63.86	67.81	71.87	76.48	80.00	81.32	81.71	80.50	75.61	69.00	64.26
Annual Daylight (%)	7.44	7.1	8.38	8.66	9.41	9.34	9.53	9.14	8.32	8.04	7.32	7.32

Temperature based on 67 years of data, rainfall based on 58 years of data

Factor for conversion of average rainfall to drought rainfall = 0.83

STATION: NAPLES

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mean Rainfall	1.88	1.93	0.96	2.05	4.42	8.17	8.36	8.18	8.69	4.09	1.56	1.32
Mean Temperature (F)	64.97	65.93	69.39	73.00	77.26	80.57	81.87	82.00	81.53	77.03	71.20	66.55
Annual Daylight (%)	7.49	7.12	8.38	8.64	9.37	9.29	9.49	9.11	8.32	8.06	7.36	7.37

Temperature based on 50 years of data, rainfall based on 55 years of data

Factor for conversion of average rainfall to drought rainfall = 0.83

TABLE SCR-2: Rainfall Stations

STATION: OKEECHOBEE

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mean Rainfall	1.76	2.19	2.89	2.78	4.29	7.35	6.55	6.65	6.37	4.10	1.91	1.58
Mean Temperature (F)	62.03	63.93	67.84	72.13	76.81	80.17	81.61	81.71	80.47	75.35	69.13	63.65
Annual Daylight (%)	7.43	7.09	8.38	8.66	9.42	9.35	9.54	9.15	8.32	8.04	7.31	7.31

Temperature based on 50 years of data, rainfall based on 73 years of data

Factor for conversion of average rainfall to drought rainfall = 0.82

STATION: POMPANO BEACH

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mean Rainfall	2.94	3.60	5.98	7.75	6.41	6.73	7.99	7.71	3.60	2.30	2.71	2.14
Mean Temperature (F)	66.90	67.55	70.77	74.30	77.68	80.53	82.03	82.42	81.10	77.39	72.40	68.03
Annual Daylight (%)	7.48	7.12	8.38	8.64	9.38	9.3	9.5	9.12	8.32	8.06	7.35	7.36

Temperature based on 50 years of data, rainfall based on 55 years of data

Factor for conversion of average rainfall to drought rainfall = 0.82

STATION: STUART

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mean Rainfall	2.40	2.72	3.57	2.76	4.95	6.58	6.53	5.71	8.05	6.69	2.83	2.56
Mean Temperature (F)	64.84	65.69	69.26	72.97	76.97	80.17	81.68	82.06	81.20	76.90	71.10	66.61
Annual Daylight (%)	7.44	7.1	8.38	8.66	9.42	9.35	9.54	9.14	8.32	8.04	7.32	7.31

Temperature based on 50 years of data, rainfall based on 60 years of data

Factor for conversion of average rainfall to drought rainfall = 0.81

STATION: S-65

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mean Rainfall	2.18	2.91	3.05	2.20	4.39	7.90	7.70	6.58	6.30	3.30	2.14	1.84
Mean Temperature (F)	61.03	62.72	67.00	71.60	76.77	80.23	81.16	81.48	79.97	74.10	67.17	62.16
Annual Daylight (%)	7.41	7.08	8.37	8.67	9.44	9.37	9.56	9.16	8.32	8.03	7.29	7.29

Temperature based on 50 years of data, rainfall based on 30 years of data

Factor for conversion of average rainfall to drought rainfall = 0.85

TABLE SCR-2: Rainfall Stations

STATION: **S 140 W**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mean Rainfall	2.03	1.67	2.36	2.33	4.27	8.38	5.72	6.71	5.48	2.47	1.93	1.38
Mean Temperature (F)	66.71	68.34	70.45	73.73	78.16	82.07	83.90	84.00	83.37	79.23	74.00	68.65
Annual Daylight (%)	7.50	7.12	8.38	8.64	9.36	9.28	9.48	9.13	8.32	8.06	7.37	7.38

Temperature based on 20 years of data, rainfall based on 23 years of data

Factor for conversion of average rainfall to drought rainfall = 0.83

STATION: **TAMIAMI 4**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mean Rainfall	1.67	1.56	1.99	2.73	5.44	9.35	8.06	7.26	8.20	4.72	2.02	1.19
Mean Temperature (F)	66.94	67.72	70.65	73.53	77.48	80.93	82.77	83.06	82.23	78.55	73.00	68.23
Annual Daylight (%)	7.5	7.12	8.38	8.64	9.36	9.28	9.48	9.13	8.32	8.06	7.37	7.38

Temperature based on 50 years of data, rainfall based on 56 years of data

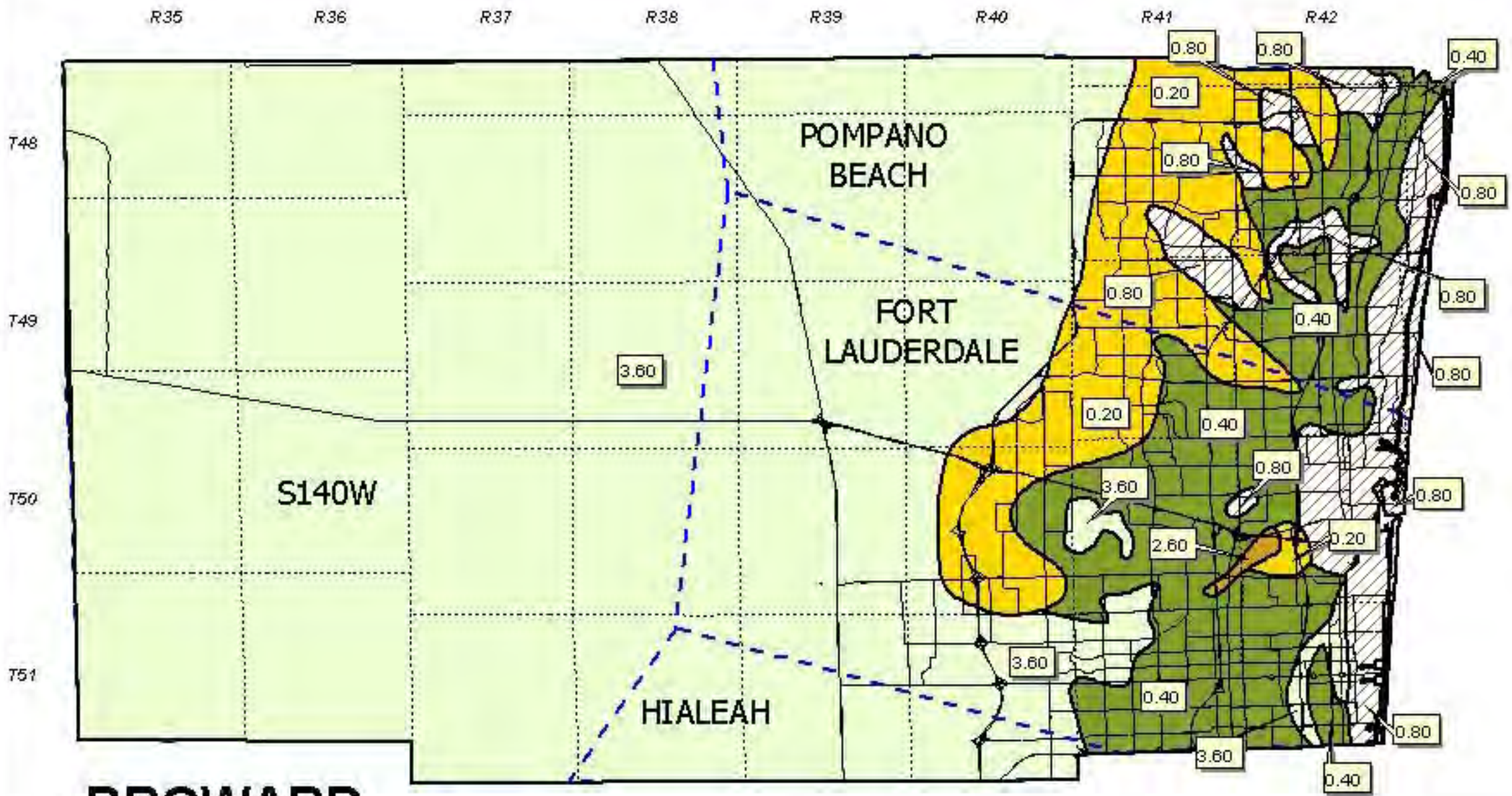
Factor for conversion of average rainfall to drought rainfall = 0.83

STATION: **WEST PALM BEACH**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mean Rainfall	2.77	2.54	3.38	3.52	5.65	7.97	6.32	6.73	8.81	6.86	3.90	2.52
Mean Temperature (F)	65.84	66.69	70.10	73.63	77.81	80.77	82.29	82.55	81.30	77.45	71.87	67.35
Annual Daylight (%)	7.47	7.11	8.38	8.65	9.39	9.32	9.51	9.12	8.32	8.05	7.34	7.34

Temperature based on 50 years of data, rainfall based on 58 years of data

Factor for conversion of average rainfall to drought rainfall = 0.80



BROWARD COUNTY

Pompano Beach, S140W, Ft. Lauderdale, and Hialeah Rain Stations

Rainfall Polygon Boundary

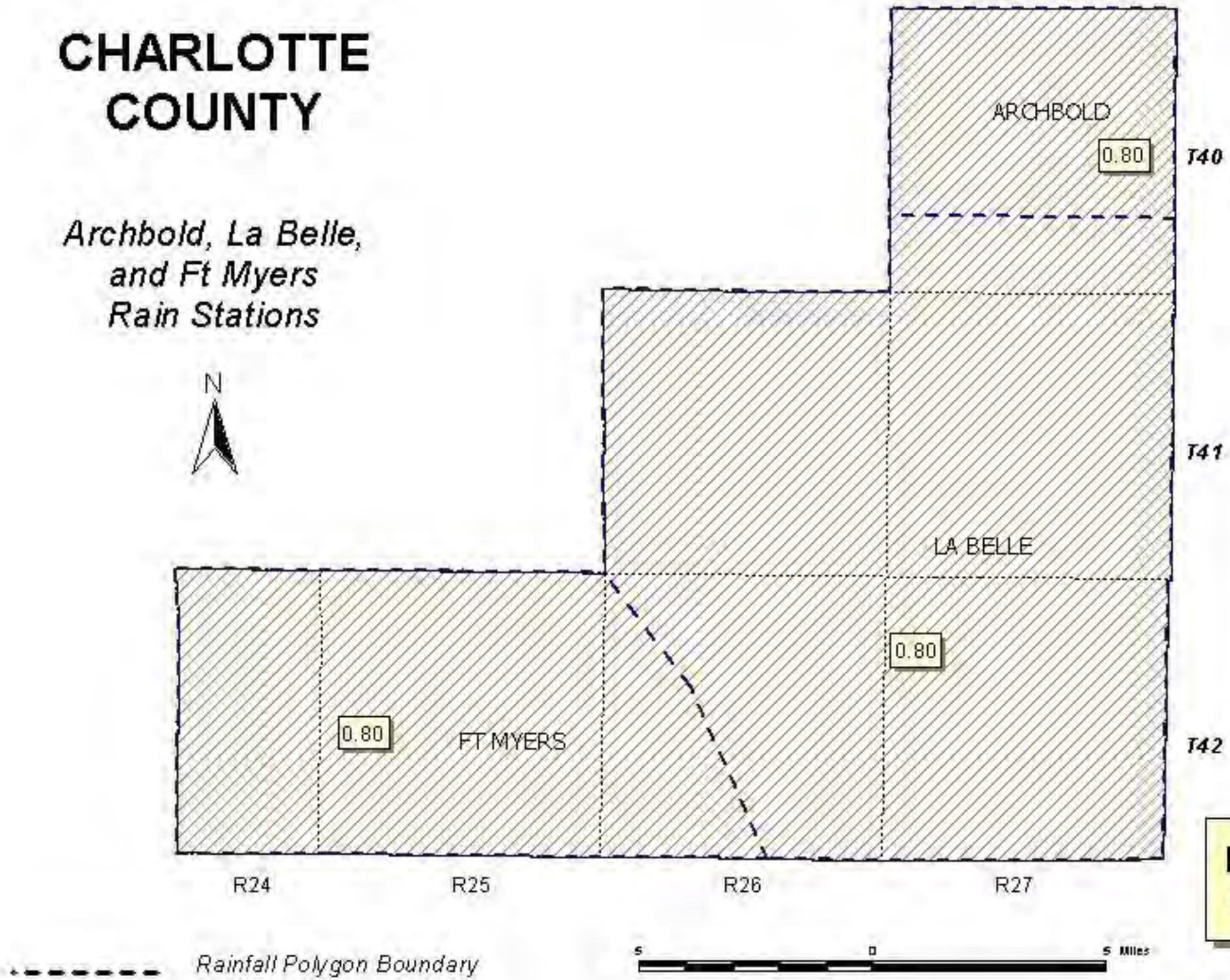
N

Net Depth of Application

Figure SCR-1

CHARLOTTE COUNTY

Archbold, La Belle, and Ft Myers Rain Stations



Net Depth of Application

Figure SCR-2

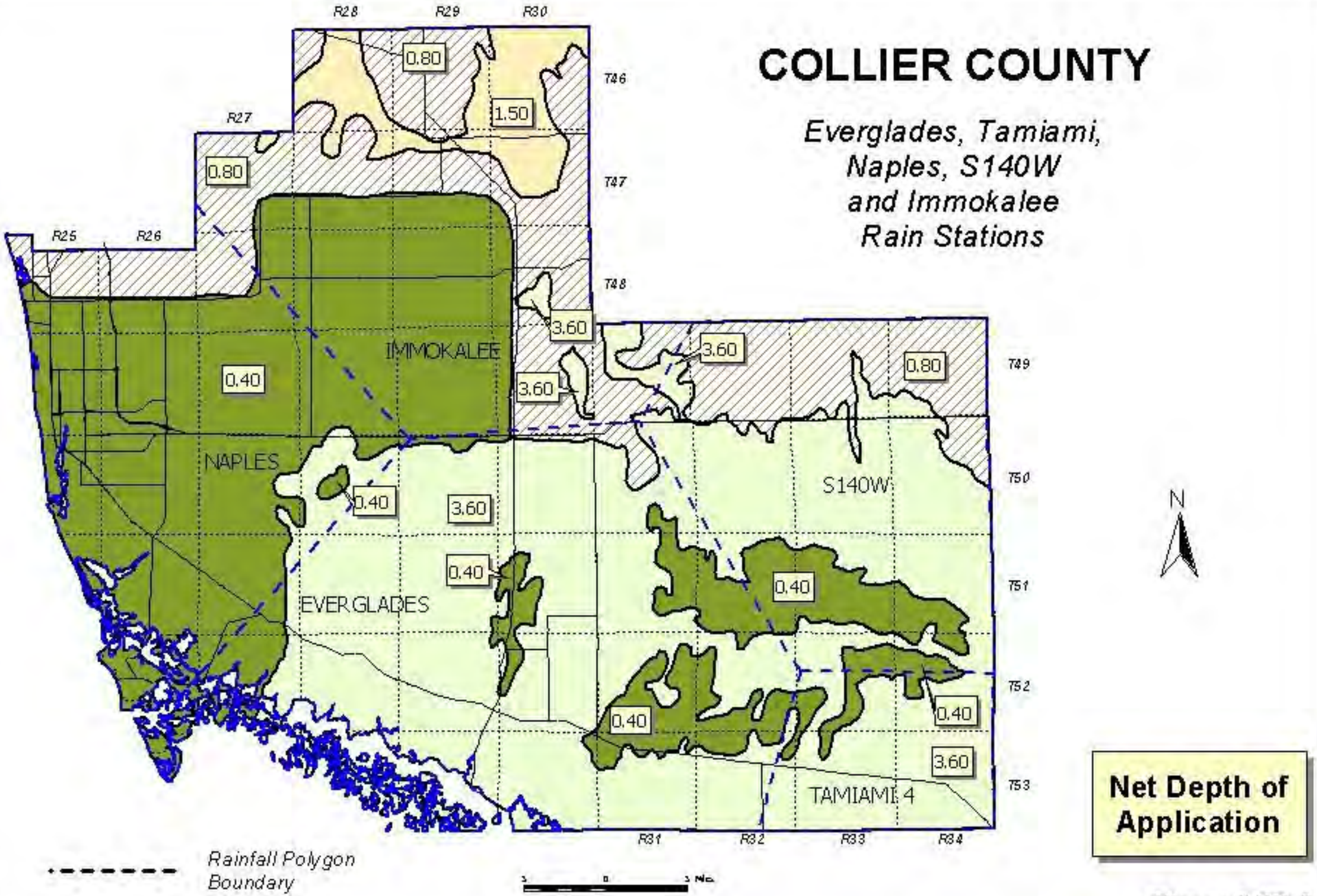

COLLIER COUNTY
Everglades, Tamiami, Naples, S140W and Immokalee Rain Stations
R25
R26
R27
R28
R29
R30
R31
R32
R33
R34
T46
T47
T48
T49
T50
T51
T52
T53
0.80
1.50
0.80
0.40
3.60
3.60
3.60
0.80
0.40
3.60
0.40
0.40
0.40
0.40
3.60
IMMOKALEE
NAPLES
EVERGLADES
S140W
TAMIAMI 4
N
Net Depth of Application
Rainfall Polygon Boundary

Figure SCR-3

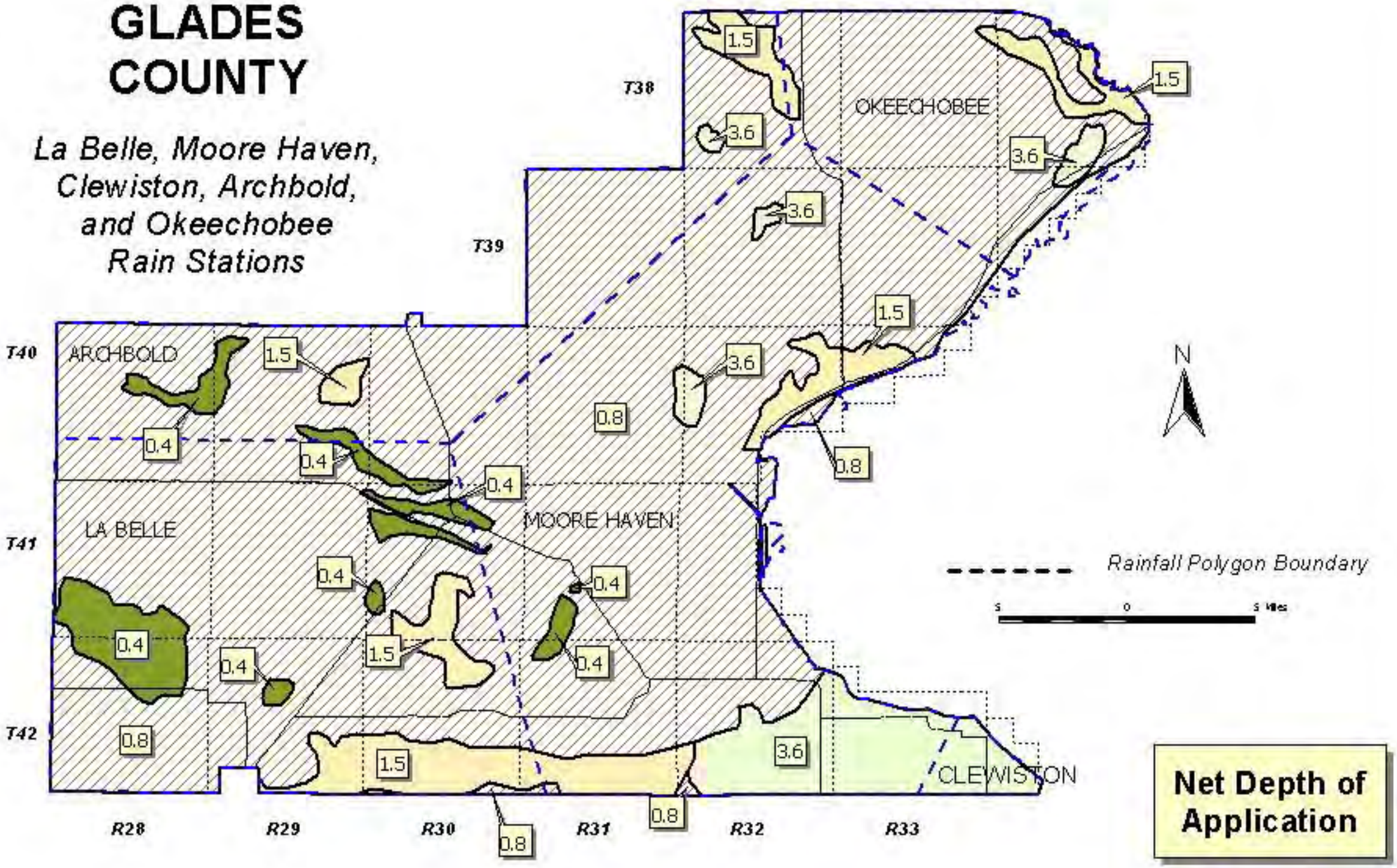

GLADES COUNTY
La Belle, Moore Haven, Clewiston, Archbold, and Okeechobee Rain Stations
T38
T39
T40
T41
T42
R28
R29
R30
R31
R32
R33
OKEECHOBEE
ARCHBOLD
LA BELLE
MOORE HAVEN
CLEWISTON
N
Rainfall Polygon Boundary
Net Depth of Application
1.5
3.6
0.8
0.4

Figure SCR-4

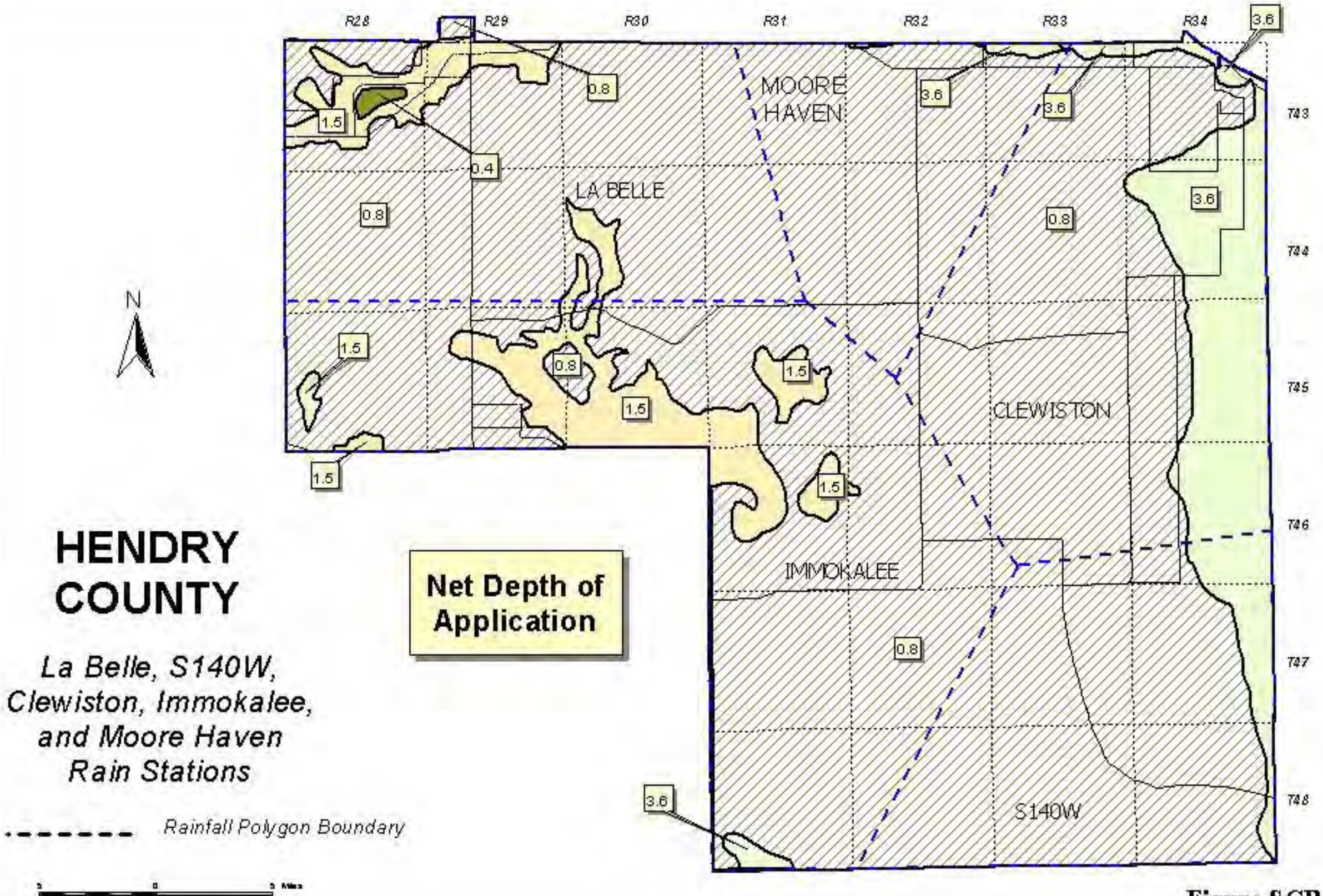

R28
R29
R30
R31
R32
R33
R34
T43
T44
T45
T46
T47
T48
MOORE HAVEN
LA BELLE
CLEWISTON
IMMOKALEE
S140W
3.6
0.8
1.5
0.4
N
HENDRY COUNTY
La Belle, S140W, Clewiston, Immokalee, and Moore Haven Rain Stations
Net Depth of Application
Rainfall Polygon Boundary

Figure SCR-5

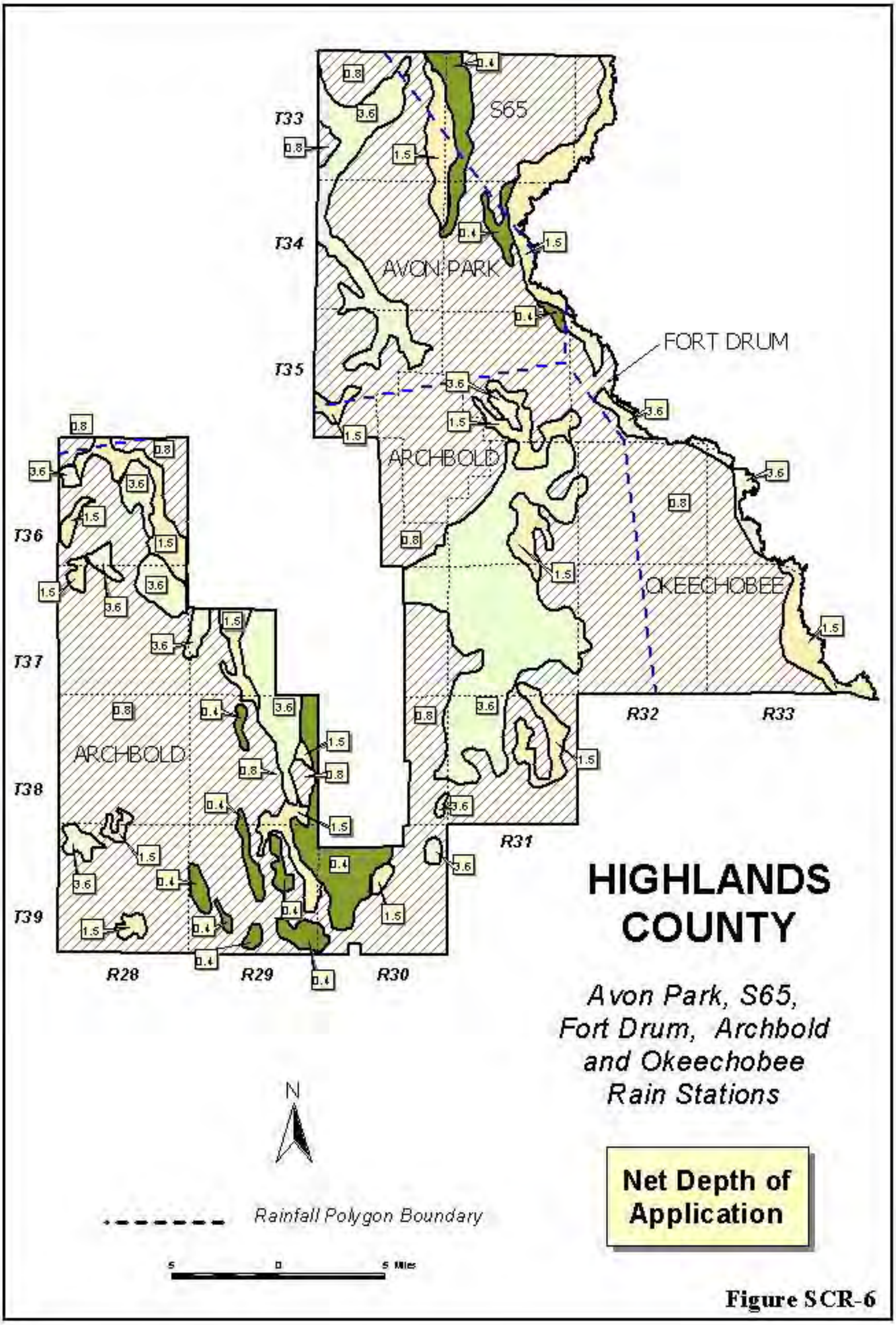

T33
T34
T35
T36
T37
T38
T39
R28
R29
R30
R31
R32
R33
S65
AVON PARK
FORT DRUM
ARCHBOLD
OKEECHOBEE
ARCHBOLD
HIGHLANDS COUNTY
Avon Park, S65, Fort Drum, Archbold and Okeechobee Rain Stations
N
Rainfall Polygon Boundary
Net Depth of Application
5 0 5 Miles

Figure SCR-6

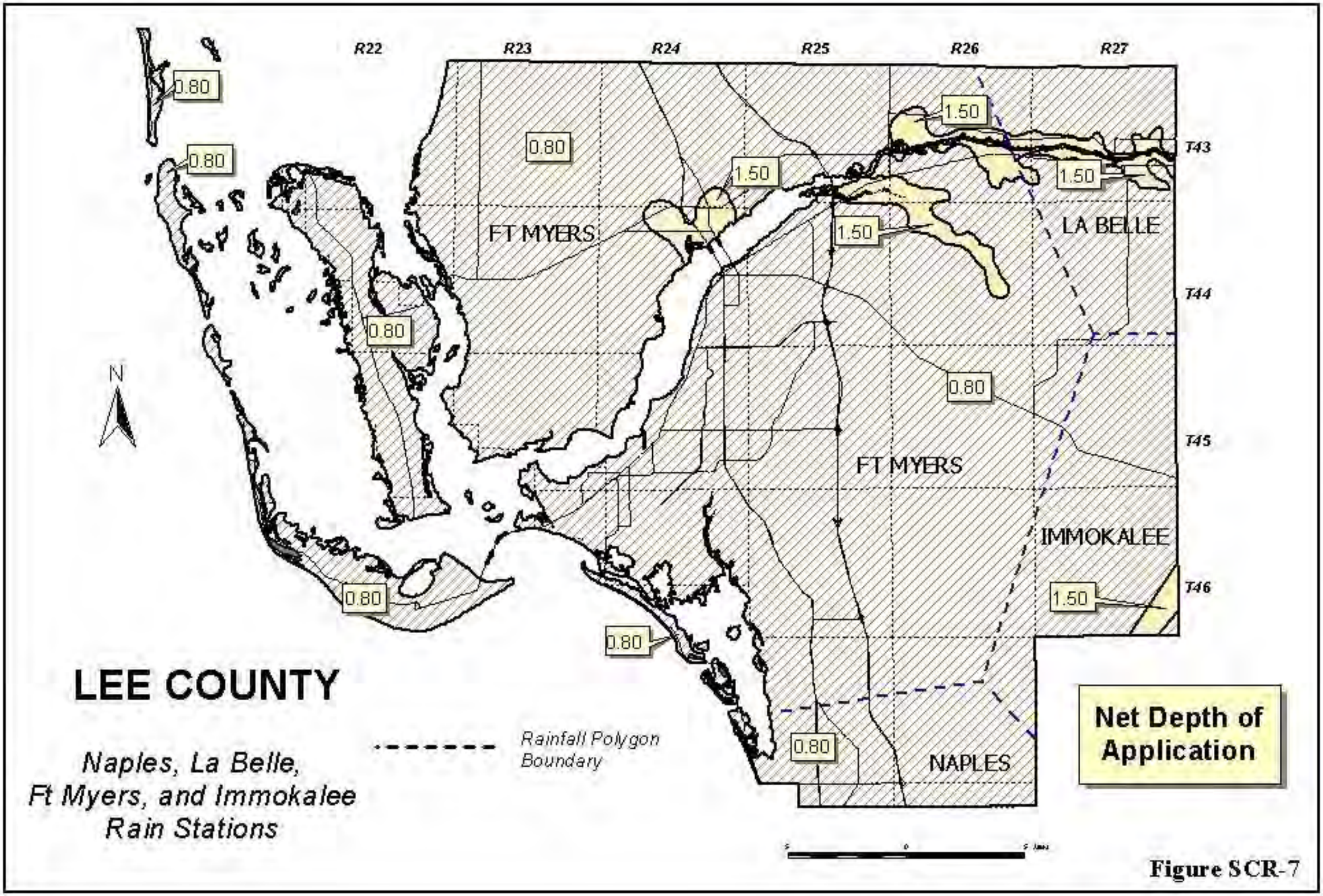

R22
R23
R24
R25
R26
R27
T43
T44
T45
T46
0.80
1.50
FT MYERS
LA BELLE
IMMOKALEE
NAPLES
N
LEE COUNTY
Naples, La Belle,
Ft Myers, and Immokalee
Rain Stations
Rainfall Polygon
Boundary
Net Depth of
Application

Figure SCR-7

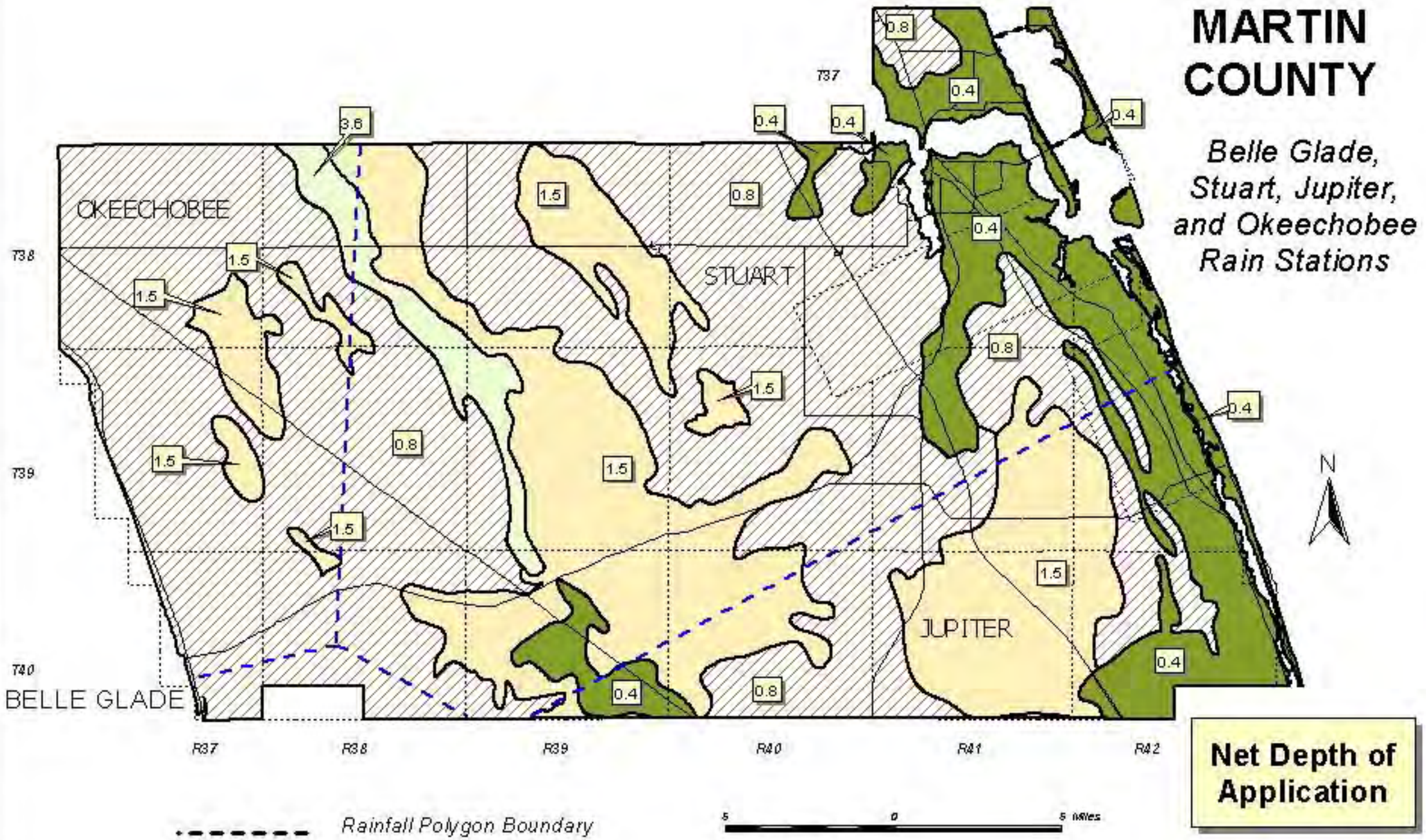
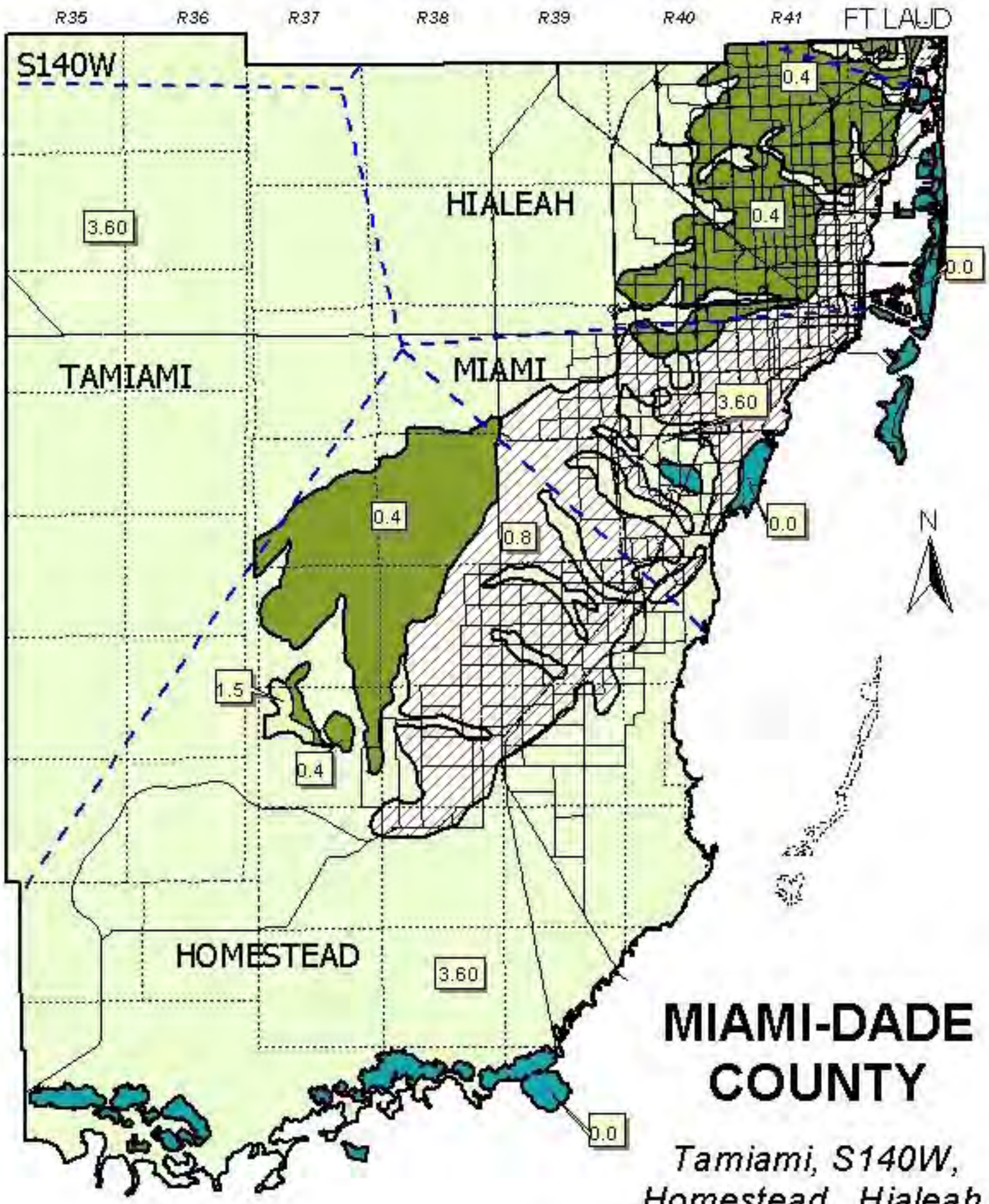

MARTIN COUNTY
Belle Glade, Stuart, Jupiter, and Okeechobee Rain Stations
OKEECHOBEE
STUART
JUPITER
BELLE GLADE
T37
T38
T39
T40
R37
R38
R39
R40
R41
R42
3.6
1.5
0.8
0.4
N
Net Depth of Application
Rainfall Polygon Boundary
5
0
5 Miles

Figure SCR-8



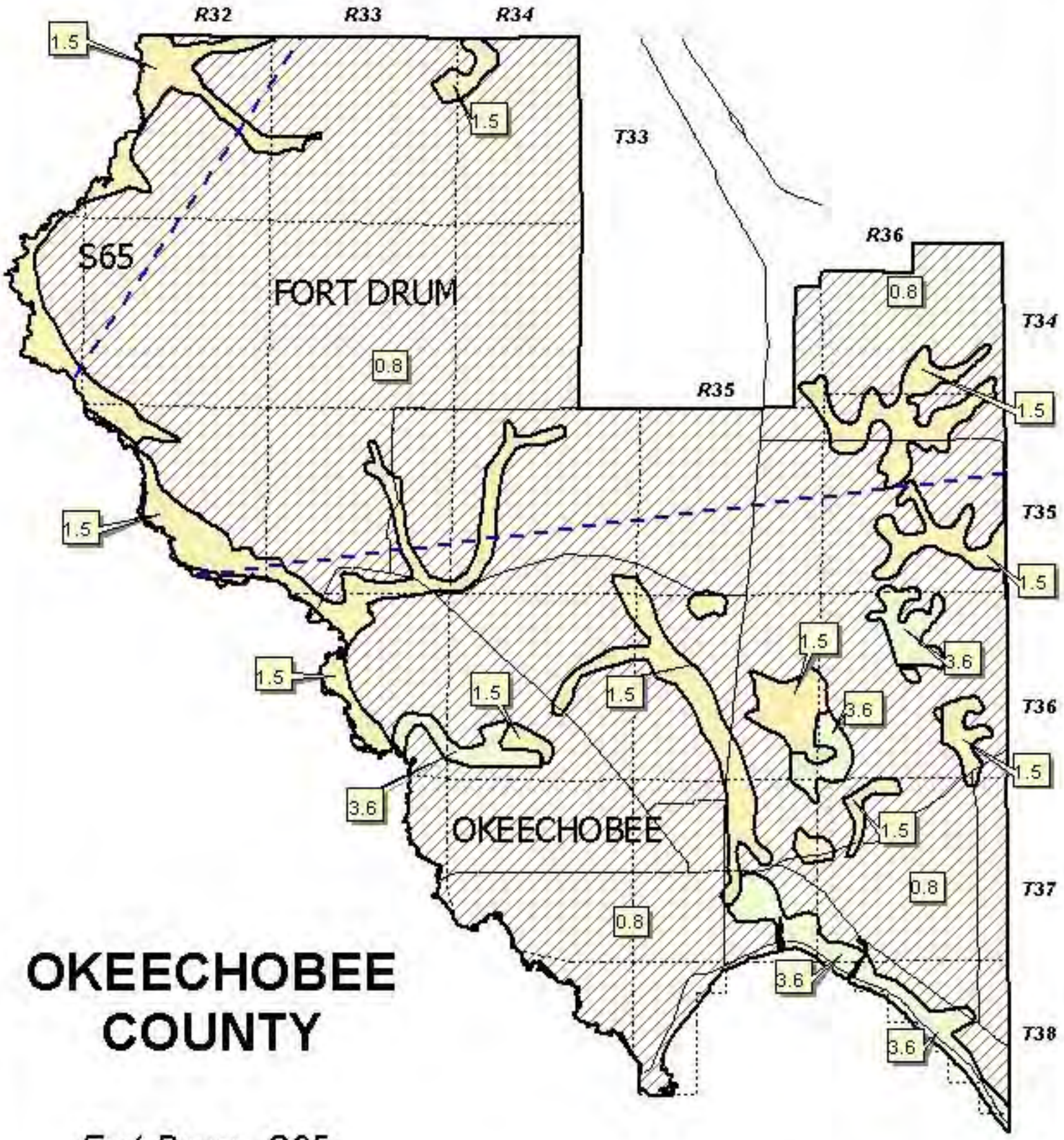
MIAMI-DADE COUNTY

Tamiami, S140W, Homestead, Hialeah, Ft Lauderdale and Miami Rain Stations

Rainfall Polygon Boundary

Net Depth of Application

Figure SCR-9



OKEECHOBEE COUNTY

Fort Drum, S65, and Okeechobee Rain Stations

Rainfall Polygon Boundary

5 0 5 Miles

N

Net Depth of Application

Figure SCR-10

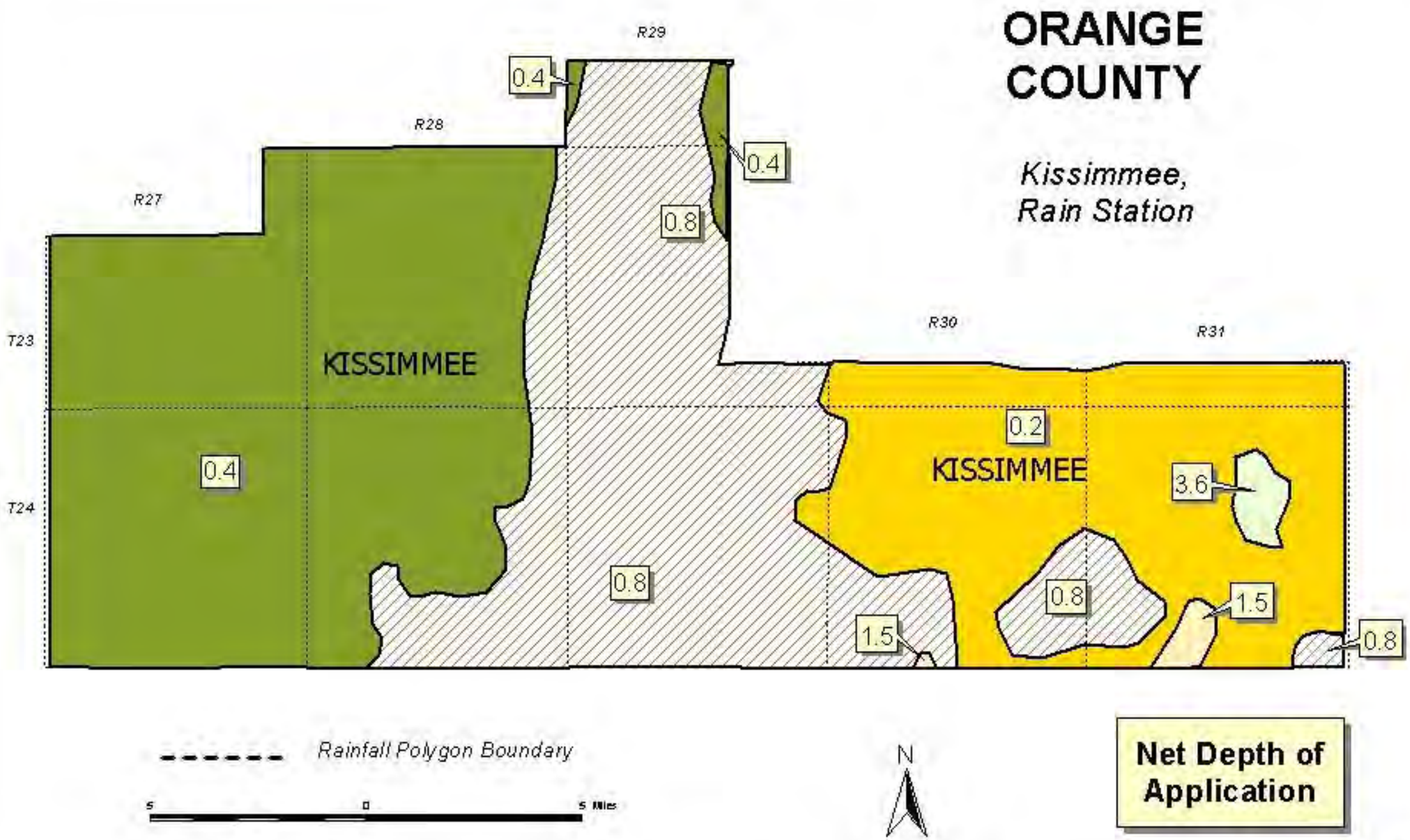


Figure SCR-11

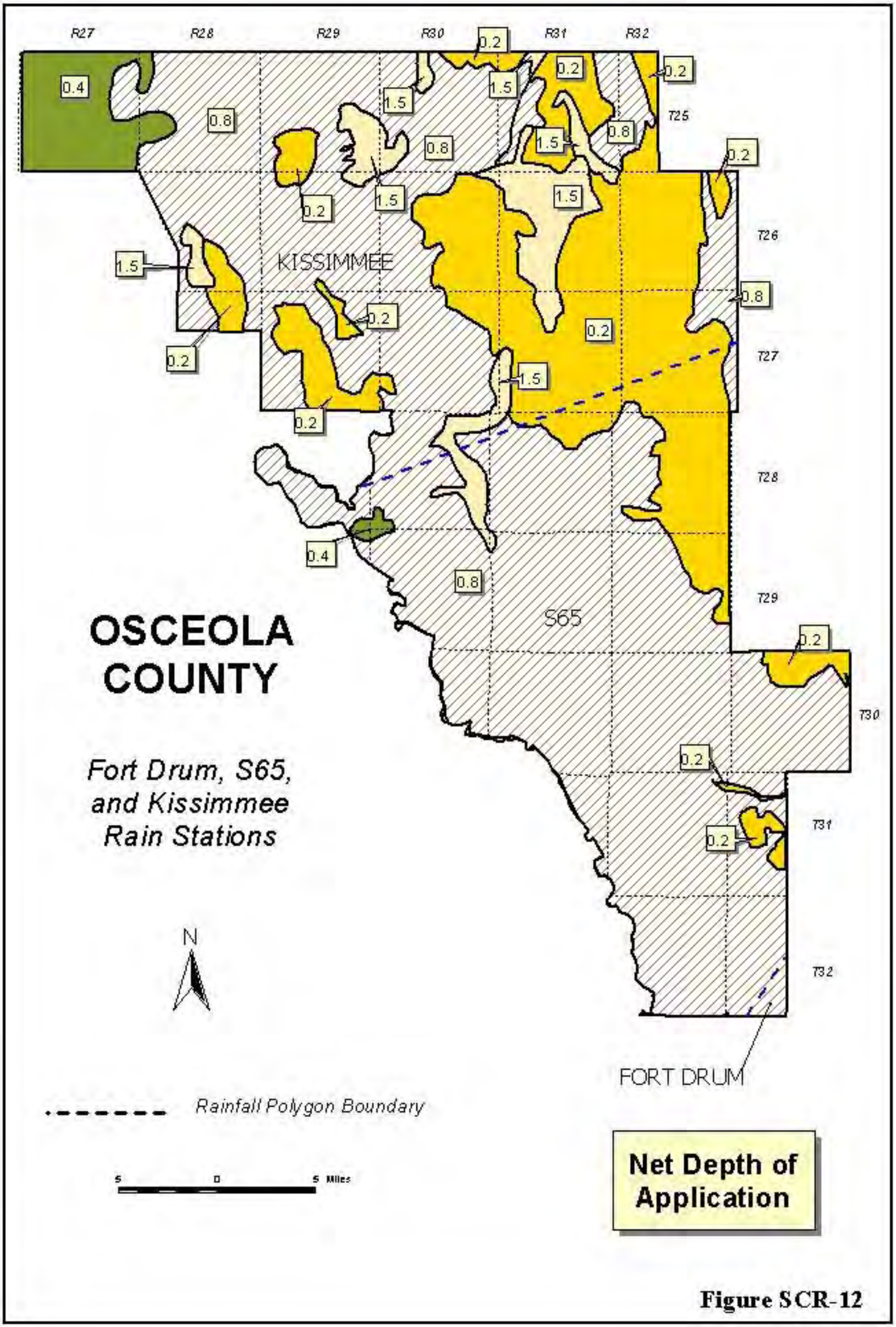


Figure SCR-12

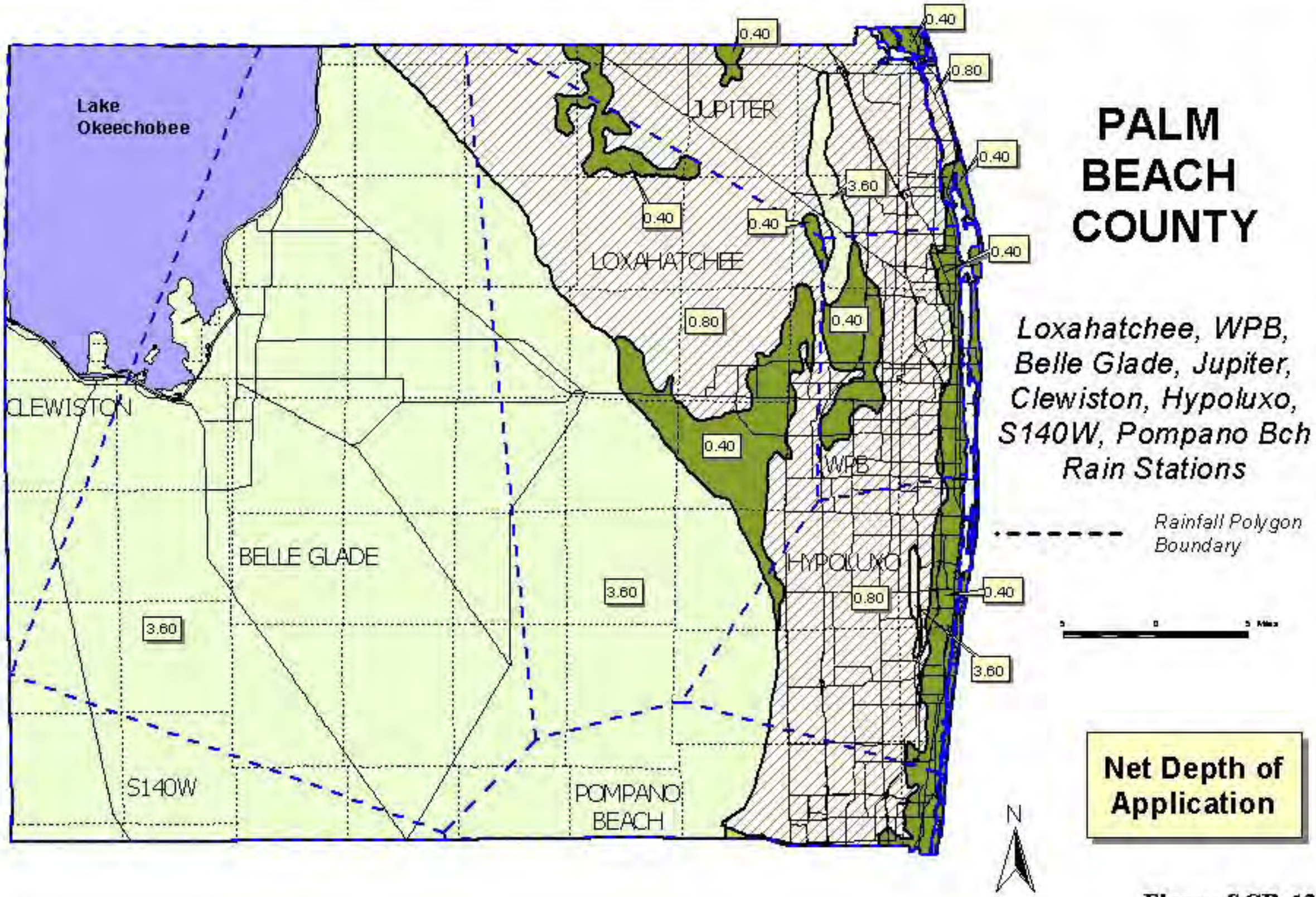


Figure SCR-13

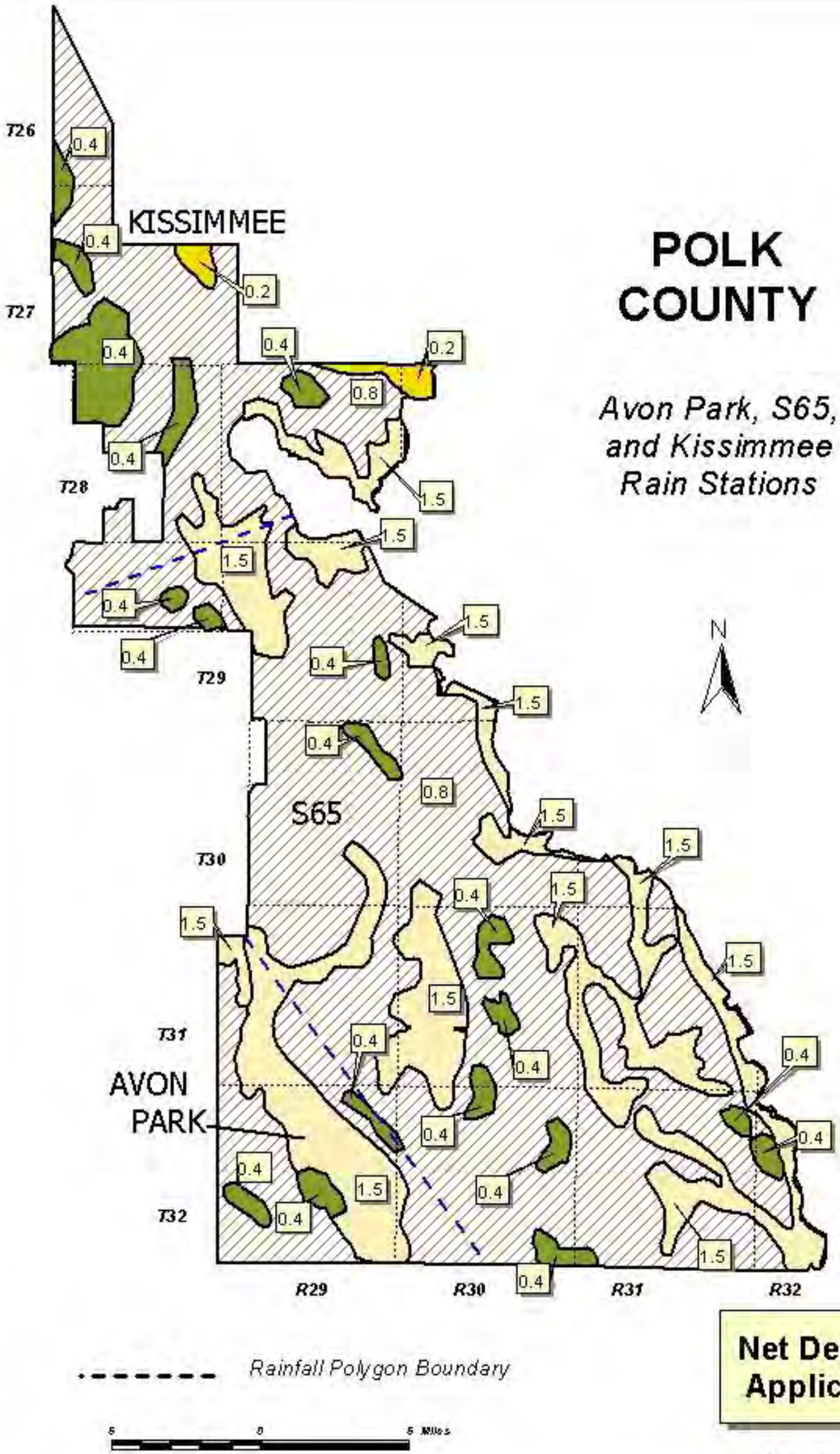


Figure SCR-14

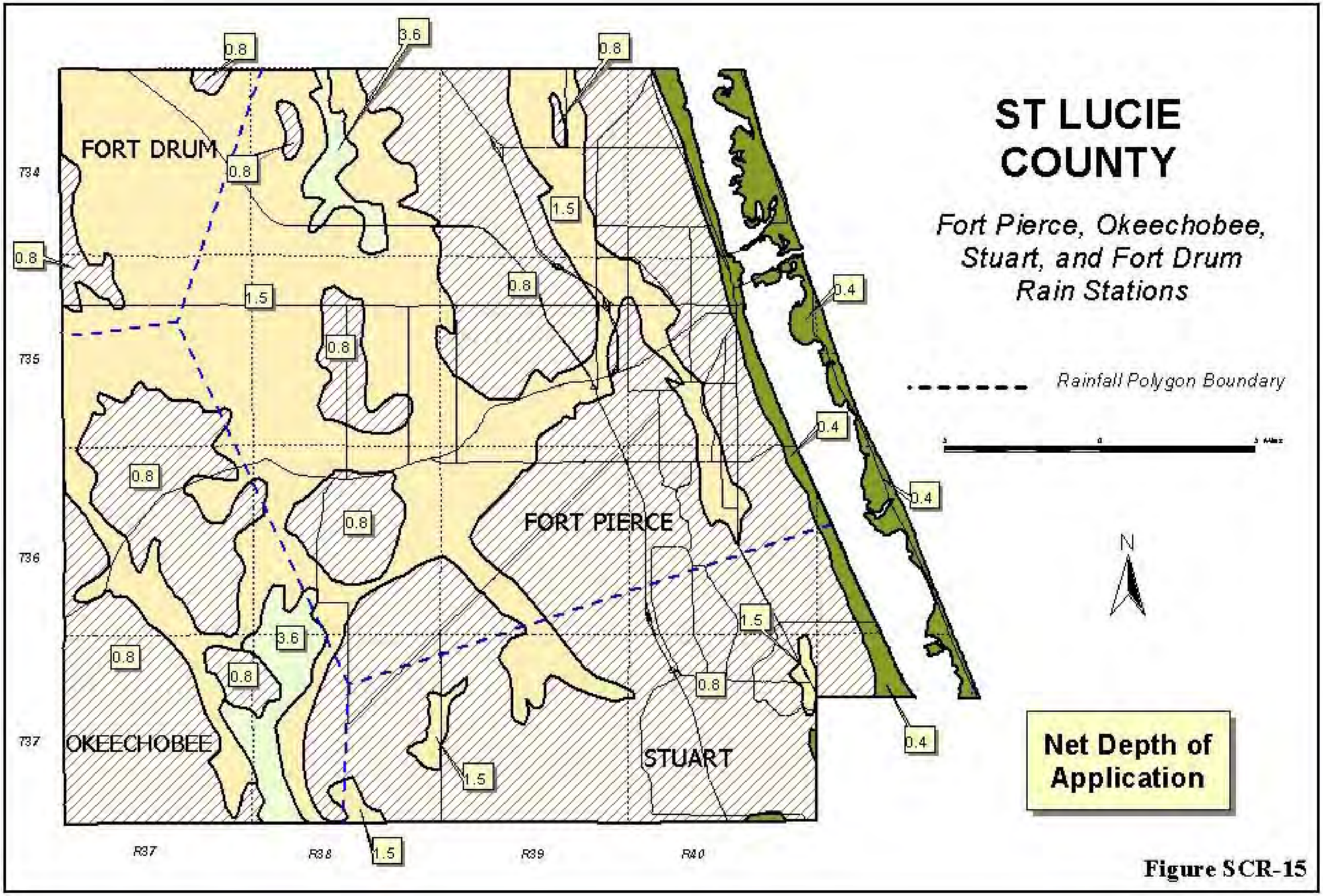


Figure SCR-15

South Florida Water Management District

Part – B

Water Use Management System
Design and Evaluation Aids

VI. Bibliography

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South Florida Water Management District

Part – C

Water Use Management Rules

PART C
WATER USE MANAGEMENT RULES

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II. Florida Statutes

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PART C

WATER USE MANAGEMENT RULES

I. GENERAL

PART C WATER USE MANAGEMENT RULES

I. General

A. South Florida Water Management District Authority

The Central and Southern Florida Flood Control District was created by Chapter 25270 Laws of Florida (1949) as a multi-county district for purposes of flood control and water conservation. In 1972 the Florida Legislature enacted Chapter 373, Florida Statutes, the Florida Water Resources Act of 1972 (Act), which greatly expanded the District's responsibilities from flood control to the full range of water management activities in addition to changing the name of the District.

The Act is intended to govern the regulation of all waters of the State, unless exempted by law, where waters of the state are defined to include all water on or beneath the surface of ground or in the atmosphere.

Generally, the purposes for which the Act was adopted are to provide for management of water and related land resources, to promote the conservation, development and proper utilization of surface and groundwater, to provide water storage for beneficial purposes, to prevent damage from floods, soil erosion and excessive drainage, to preserve natural resources, fish and wildlife, and to promote recreational development.

The District is governed by a nine-member board which is responsible for the overall administration of District programs, the regulatory program implementing the Act and the development of a water use plan. The District is also divided into two basins (the Big Cypress Basin and Okeechobee Basin), which are governing by basin boards. The primary functions of the basin boards are to plan and approve construction of primary water resource development projects and to plan secondary water control facilities for guidance of local government and private local owners.

The Act provides for the establishment of permit programs for the regulation of consumptive use of water, well construction, surface water management systems, artificial recharge and utilization of works or land of the District. Except for artificial recharge, primary regulatory authority resides in the Department of Environmental Regulation with direction to delegate the authority to the water management districts to the maximum extent practicable.

Pursuant to the Administrative Procedures Act, the District has implemented all the permitting programs authorized by the Act by adopting rules which are published as Chapter 40E of the Florida Administrative Code.

B. Permitting Procedures

The District is governed by the Administrative Procedures Act, and Rule Chapter 40E. Together they provide an administrative framework for the resolution of conflicts between applicants, objectors and the District. Within this framework, if no objections are received and the applicant agrees with the staff's recommendation, the application can usually be disposed of formally before the Governing Board. If however, the applicant disagrees with the staff's recommendation, or someone whose substantial interest may be affected objects, a formal hearing may be held either before the Governing Board or before a hearing officer from the Department of Administrative Hearings. In either case, adequate safeguards are provided so that disputes can be resolved judiciously and expeditiously.

Upon receipt of an application for a permit, the District will request any necessary additional information from the applicant within 30 days. Upon receipt of a complete application the District will issue or deny the permit application within 90 days unless the matter has been scheduled for a public hearing.

C. Permitting of Water Use

1. Statutory Provisions (Part II, Chapter 373 F.S.)

Part II of the Act deals with water use. Permits are required for all water use including but not limited to public water supply, irrigation, mining (dewatering), and industrial. No permits are required for domestic consumption of water by individual users or fire-fighting purposes.

An applicant for a water use permit must show that the proposed project is consistent with the public interest, a reasonable-beneficial use and one that will not interfere with any presently existing legal use of water.

2. Rules of the Florida Water Management District (Chapter 40E, F.A.C.)

Chapters 40E-2 and 40E-20 describe the permit requirements for the withdrawal or use of water for all purposes. To satisfy the permit

requirements an applicant must either receive an individual permit or qualify for a general permit. Individual permits are issued by the Governing Board upon application and compliance with Part II Chapter 373, F.S. and Chapter 40E-2, F.A.C. Criteria for evaluating these projects are found in the Basis of Review for Water Use which is included in Part B, Section I of this document.

General permits have been issued by Rule for those users described in Chapter 40E-20. To qualify for a general permit, an applicant needs to file a notice specified in the rules. Upon receipt of this information, the District determines whether the project qualifies for a general permit, and/or if any additional information is needed. Once the District has indicated in writing that a general permit is in effect for the project, no further application is required, unless the water use increases above the designated threshold. Both the individual and general permits are subject to revocation, suspension or modification in accordance with the provisions of Chapter 40E, F.A.C. and Chapter 373, F.S.

South Florida Water Management District

Part – C

Water Use Management Rules

II. Chapter 373 (Part II), F.S., Water Resources

http://www.leg.state.fl.us/statutes/index.cfm?App_mode=Display_Statute&URL=0300-0399/0373/0373.html

PERMITTING OF CONSUMPTIVE USES OF WATER

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373.203 Definitions.—

(1) "Abandoned artesian well" is defined as an artesian well:

(a) That does not have a properly functioning valve;

(b) The use of which has been permanently discontinued;

(c) That does not meet current well construction standards;

(d) That is discharging water containing greater than 500 milligrams per liter of chlorides into a drinking water aquifer;

(e) That is in such a state of disrepair that it cannot be used for its intended purpose without having an adverse impact upon an aquifer which serves as a source of drinking water or which is likely to be such a source in the future; or

(f) That does not have proper flow control on or below the land surface.

(2) An "artesian well" is defined as an artificial hole in the ground from which water supplies may be obtained and which penetrates any water-bearing rock, the water in which is raised to the surface by natural flow, or which rises to an elevation above the top of the water-bearing bed. "Artesian wells" are defined further to include all holes, drilled as a source of water, that penetrate any water-bearing beds that are a part of the artesian

water system of Florida, as determined by representatives of the Florida Geological Survey or the Department of Environmental Protection.

(3) "Plugging" is defined as plugging, capping, or otherwise controlling a well as deemed appropriate by the department or by the appropriate water management district.

(4) "Waste" is defined to be the causing, suffering, or permitting any water flowing from, or being pumped from, an artesian well to run into any river, creek, or other natural watercourse or channel, or into any bay or pond (unless used thereafter for the beneficial purposes of irrigation of land, mining, or other industrial purposes of domestic use), or into any street, road or highway, or upon the land of any person, or upon the public lands of the United States or of the state, unless it is used thereon for the beneficial purposes of the irrigation thereof, industrial purposes, domestic use, or the propagation of fish. The use of any water flowing from an artesian well for the irrigation of land shall be restricted to a minimum by the use of proper structural devices in the irrigation system.

History.—ss. 3, 4, ch. 28253, 1953; s. 1, ch. 59-248; ss. 25, 35, ch. 69-106; s. 25, ch. 73-190; s. 44, ch. 79-65; s. 6, ch. 83-310; s. 261, ch. 94-356.

Note.—Former ss. 370.051, 373.021.

373.206 Artesian wells; flow regulated.—Every person, stock company, association, corporation, county, or municipality owning or controlling the real estate upon which is located a flowing artesian well in this state shall, within 90 days after June 15, 1953, provide each such well with a valve capable of controlling the discharge from the well and shall keep the valve so adjusted that only a supply of water is available which is necessary for ordinary use by the owner, tenant, occupant, or person in control of the land for personal use and for conducting his or her business. Upon the determination by the Department of Environmental Protection or the appropriate water management district that the water in an artesian well is of such poor quality as to have an adverse impact upon an aquifer or other water body which serves as a source of public drinking water or which is likely to be such a source in the future, such well shall be plugged in accordance with department or appropriate water management district specifications for well plugging.

History.—s. 1, ch. 28253, 1953; s. 1, ch. 65-460; ss. 25, 35, ch. 69-106; s. 25, ch. 73-190; s. 45, ch. 79-65; s. 7, ch. 83-310; s. 262, ch. 94-356; s. 1009, ch. 95-148.

Note.—Former ss. 370.052, 373.031.

373.207 Abandoned artesian wells.—Each water management district shall develop a work plan which identifies the location of all known abandoned artesian wells within its jurisdictional boundaries and defines the actions which the district must take in order to

ensure that each such well is plugged on or before January 1, 1992. The work plan shall include the following:

(1) An initial inventory which accounts for all known abandoned artesian wells in the district.

(2) The location and owner of each known abandoned well.

(3) The methodology proposed by the district to accomplish the plugging of all known abandoned wells within the district on or before January 1, 1992.

(4) Data relating to costs to be incurred for the plugging of all wells, including the per-well cost and personnel costs.

(5) A schedule of priority for the plugging of wells, which schedule is established to mitigate damage to the groundwater resource due to water quality degradation.

History.—s. 8, ch. 83-310; s. 263, ch. 94-356; s. 10, ch. 2005-36.

373.209 Artesian wells; penalties for violation.—

(1) No owner, tenant, occupant, or person in control of an artesian well shall knowingly and intentionally:

(a) Allow the well to flow continuously without a valve or mechanical device for checking or controlling the flow.

(b) Permit the water to flow unnecessarily.

(c) Pump a well unnecessarily.

(d) Permit the water from the well to go to waste.

(2) A well is exempt from the provisions of this section unless the Department of Environmental Protection can show that the uncontrolled flow of water from the well does not have a reasonable-beneficial use, as defined in s. 373.019.

(3) Any person who violates any provision of this section shall be subject to either:

(a) The remedial measures provided for in s. 373.436; or

(b) A civil penalty of $100 a day for each and every day of such violation and for each and every act of violation. The civil penalty may be recovered by the water management board of the water management district in which the well is located or by the department in a suit in a court of competent jurisdiction in the county where the defendant resides, in the county of residence of any defendant if there is more than one defendant, or in the county where the violation took place. The place of suit shall be selected by the board or department, and the suit, by direction of the board or department, shall be instituted and conducted in the name of the board or department by appropriate counsel. The payment of any such damages does not impair or abridge any cause of action which any person may have against the person violating any provision of this section.

(4) The penalties provided by this section shall apply notwithstanding any provisions of law to the contrary.

History.—s. 2, ch. 28253, 1953; s. 323, ch. 71-136; s. 25, ch. 73-190; s. 1, ch. 74-279; s. 46, ch. 79-65; s. 146, ch. 79-400; s. 264, ch. 94-356; s. 93, ch. 95-143; s. 8, ch. 98-88.

Note.—Former ss. 370.053, 373.041.

373.213 Certain artesian wells exempt.—Nothing in ss. 373.203, 373.206, 373.209, or this section shall be construed to apply to an artesian well feeding a lake already in existence prior to June 15, 1953, which lake is used or intended to be used for public bathing and/or the propagation of fish, where the continuous flow of water is necessary to maintain its purity for bathing and the water level of said lake for fish.

History.—s. 6, ch. 28253, 1953; s. 25, ch. 73-190; s. 167, ch. 99-13.

Note.—Former ss. 370.055, 373.061.

373.216 Implementation of program for regulating the consumptive use of water.—The governing board of each water management district shall, no later than October 31, 1983, implement a program for the issuance of permits authorizing the consumptive use of particular quantities of water covering those areas deemed appropriate by the governing board. Appropriate monitoring efforts shall be a part of any such program implemented. Notice of any required hearing on the proposed implementation of these regulations shall be published at least once a week for 2 weeks in a newspaper of general circulation in the area to be affected by such regulations, the last notice appearing no less than 10 days prior to the date of the public hearing, in addition to any notice required by chapter 120.

History.—s. 1, part II, ch. 72-299; s. 8, ch. 73-190; s. 14, ch. 78-95; s. 8, ch. 82-101.

373.217 Superseded laws and regulations.—

(1) It is the intent of the Legislature to provide a means whereby reasonable programs for the issuance of permits authorizing the consumptive use of particular quantities of water may be authorized by the Department of Environmental Protection, subject to judicial review and also subject to review by the Governor and Cabinet, sitting as the Land and Water Adjudicatory Commission as provided in s. 373.114.

(2) It is the further intent of the Legislature that Part II of the Florida Water Resources Act of 1972, as amended, as set forth in ss. 373.203-373.249, shall provide the exclusive authority for requiring permits for the consumptive use of water and for authorizing transportation thereof pursuant to s. 373.223(2).

(3) If any provision of Part II of the Florida Water Resources Act of 1972, as amended, as set forth in ss. 373.203-373.249, is in conflict with any other provision, limitation, or restriction which is now in effect under any law or ordinance of this state or any political subdivision or municipality, or any rule or regulation promulgated thereunder, Part II shall govern and control, and such other law or ordinance or rule or regulation promulgated thereunder shall be deemed superseded for the purpose of regulating the consumptive use of water. However, this section shall not be construed to supersede the provisions of the Florida Electrical Power Plant Siting Act.

(4) Other than as provided in subsection (3) of this section, Part II of the Florida Water Resources Act of 1972, as amended, preempts the regulation of the consumptive use of water as defined in this act.

History.—s. 9, ch. 76-243; s. 1, ch. 77-174; s. 265, ch. 94-356.

373.219 Permits required.—

(1) The governing board or the department may require such permits for consumptive use of water and may impose such reasonable conditions as are necessary to assure that such use is consistent with the overall objectives of the district or department and is not harmful to the water resources of the area. However, no permit shall be required for domestic consumption of water by individual users.

(2) In the event that any person shall file a complaint with the governing board or the department that any other person is making a diversion, withdrawal, impoundment, or consumptive use of water not expressly exempted under the provisions of this chapter and without a permit to do so, the governing board or the department shall cause an investigation to be made, and if the facts stated in the complaint are verified the governing board or the department shall order the discontinuance of the use.

(3) For Outstanding Florida Springs, the department shall adopt uniform rules for issuing permits which prevent groundwater withdrawals that are harmful to the water resources and adopt by rule a uniform definition of the term “harmful to the water resources” to provide water management districts with minimum standards necessary to be consistent with the overall water policy of the state. This subsection does not prohibit a water management district from adopting a definition that is more protective of the water resources consistent with local or regional conditions and objectives.

History.—s. 2, part II, ch. 72-299; s. 9, ch. 73-190; s. 9, ch. 2016-1.

373.223 Conditions for a permit.—

(1) To obtain a permit pursuant to the provisions of this chapter, the applicant must establish that the proposed use of water:

(a) Is a reasonable-beneficial use as defined in s. 373.019;

(b) Will not interfere with any presently existing legal use of water; and

(c) Is consistent with the public interest.

(2) The governing board or the department may authorize the holder of a use permit to transport and use ground or surface water beyond overlying land, across county boundaries, or outside the watershed from which it is taken if the governing board or department determines that such transport and use is consistent with the public interest, and no local government shall adopt or enforce any law, ordinance, rule, regulation, or order to the contrary.

(3) Except for the transport and use of water supplied by the Central and Southern Florida Flood Control Project, and anywhere in the state when the transport and use of water is supplied exclusively for bottled water as defined in s. 500.03(1)(d), any water use permit applications pending as of April 1, 1998, with the Northwest Florida Water Management District and self-suppliers of water for which the proposed water source and area of use or application are located on contiguous private properties, when evaluating whether a potential transport and use of ground or surface water across county boundaries is consistent with the public interest, pursuant to paragraph (1)(c), the governing board or department shall consider:

(a) The proximity of the proposed water source to the area of use or application.

(b) All impoundments, streams, groundwater sources, or watercourses that are geographically closer to the area of use or application than the proposed source, and that are technically and economically feasible for the proposed transport and use.

(c) All economically and technically feasible alternatives to the proposed source, including, but not limited to, desalination, conservation, reuse of nonpotable reclaimed water and stormwater, and aquifer storage and recovery.

(d) The potential environmental impacts that may result from the transport and use of water from the proposed source, and the potential environmental impacts that may result from use of the other water sources identified in paragraphs (b) and (c).

(e) Whether existing and reasonably anticipated sources of water and conservation efforts are adequate to supply water for existing legal uses and reasonably anticipated future needs of the water supply planning region in which the proposed water source is located.

(f) Consultations with local governments affected by the proposed transport and use.

(g) The value of the existing capital investment in water-related infrastructure made by the applicant.

Where districtwide water supply assessments and regional water supply plans have been prepared pursuant to ss. 373.036 and 373.709, the governing board or the department shall use the applicable plans and assessments as the basis for its consideration of the applicable factors in this subsection.

(4) The governing board or the department, by regulation, may reserve from use by permit applicants, water in such locations and quantities, and for such seasons of the year, as in its judgment may be required for the protection of fish and wildlife or the public health and safety. Such reservations shall be subject to periodic review and revision in the light of changed conditions. However, all presently existing legal uses of water shall be protected so long as such use is not contrary to the public interest.

(5) In evaluating an application for consumptive use of water which proposes the use of an alternative water supply project as described in the regional water supply plan and provides reasonable assurances of the applicant’s capability to design, construct, operate, and maintain the project, the governing board or department shall presume that the alternative water supply use is consistent with the public interest under paragraph

(1)(c). However, where the governing board identifies the need for a multijurisdictional water supply entity or regional water supply authority to develop the alternative water supply project pursuant to s. 373.709(2)(a)2., the presumption shall be accorded only to that use proposed by such entity or authority. This subsection does not affect evaluation of the use pursuant to the provisions of paragraphs (1)(a) and (b), subsections (2) and (3), and ss. 373.2295 and 373.233.

(6) A new consumptive use permit, or the renewal or modification of a consumptive use permit, that authorizes groundwater withdrawals of 100,000 gallons or more per day from a well with an inside diameter of 8 inches or more shall be monitored for water usage at intervals using methods determined by the applicable water management district, and the results of such monitoring shall be reported to the applicable water management district at least annually. The water management districts may adopt rules to implement this subsection. In lieu of the requirements of this subsection, a water management district may enforce rules that govern water usage monitoring in effect on July 1, 2016, or may adopt rules that are more stringent than this subsection.

History.—s. 3, part II, ch. 72-299; s. 10, ch. 73-190; s. 10, ch. 76-243; s. 35, ch. 85-81; s. 4, ch. 98-88; s. 6, ch. 2005-291; s. 15, ch. 2010-205; s. 31, ch. 2015-2; s. 10, ch. 2016-1.

373.2234 Preferred water supply sources.—

(1) The governing board of a water management district is authorized to adopt rules that identify preferred water supply sources for consumptive uses for which there is sufficient data to establish that a preferred source will provide a substantial new water supply to meet the existing and projected reasonable-beneficial uses of a water supply planning region identified pursuant to s. 373.709(1), while sustaining existing water resources and natural systems. At a minimum, such rules must contain a description of the preferred water supply source and an assessment of the water the preferred source is projected to produce.

(2)(a) If an applicant proposes to use a preferred water supply source, that applicant's proposed water use is subject to s. 373.223(1), except that the proposed use of a preferred water supply source must be considered by a water management district when determining whether a permit applicant's proposed use of water is consistent with the public interest pursuant to s. 373.223(1)(c).

(b) The governing board of a water management district shall consider the identification of preferred water supply sources for water users for whom access to or development of new water supplies is not technically or financially feasible. Identification of preferred water supply sources for such water users must be consistent with s. 373.016.

(c) A consumptive use permit issued for the use of a preferred water supply source must be granted, when requested by the applicant, for at least a 20-year period and may be subject to the compliance reporting provisions of s. 373.236(4).

(3)(a) This section does not:

1. Exempt the use of preferred water supply sources from ss. 373.016(4) and 373.223(2) and (3);

2. Provide that permits issued for the use of a nonpreferred water supply source must be issued for a duration of less than 20 years or that the use of a nonpreferred water supply source is not consistent with the public interest; or

3. Require the use of a preferred water supply source or to restrict or prohibit the use of a nonpreferred water supply source.

(b) Rules adopted by the governing board of a water management district to implement this section shall specify that the use of a preferred water supply source is not required and that the use of a nonpreferred water supply source is not restricted or prohibited.

History.—s. 4, ch. 2004-381; s. 6, ch. 2006-255; s. 16, ch. 2010-205; s. 11, ch. 2016-1.

373.2235 Effect of prior land acquisition on consumptive use permitting.—The fact that any applicant has acquired, by the exercise of eminent domain or otherwise, any land for the specific purpose of serving as a site for a wellfield or right-of-way prior to obtaining a consumptive use permit from a water management district does not create any presumption of entitlement to a consumptive use permit. Evidence relating to such prior acquisition of land or right-of-way by any applicant is not admissible in any proceeding related to consumptive use permitting and has no bearing upon any water management district's determination of reasonable beneficial use in the permitting process. In the event that any applicant elects to acquire land prior to obtaining a consumptive use permit from a water management district, such action shall be considered a voluntary risk assumed by the applicant, and the fact of such prior acquisition shall not be admissible in any administrative or judicial proceeding relating to consumptive use permitting under this chapter, including any appeal taken from a water management district decision.

History.—s. 85, ch. 83-310.

373.224 Existing permits.—Any permits or permit agreements for consumptive use of water executed or issued by an existing flood control, water management, or water regulatory district pursuant to this chapter or chapter 378 prior to December 31, 1976,

shall remain in full force and effect in accordance with their terms until otherwise modified or revoked as authorized herein.

History.—s. 11, ch. 73-190; s. 3, ch. 75-125.

373.226 Existing uses.—

(1) All existing uses of water, unless otherwise exempted from regulation by the provisions of this chapter, may be continued after adoption of this permit system only with a permit issued as provided herein.

(2) The governing board or the department shall issue an initial permit for the continuation of all uses in existence before the effective date of implementation of this part if the existing use is a reasonable-beneficial use as defined in s. 373.019 and is allowable under the common law of this state.

(3) Application for permit under the provisions of subsection (2) must be made within a period of 2 years from the effective date of implementation of these regulations in an area. Failure to apply within this period shall create a conclusive presumption of abandonment of the use, and the user, if he or she desires to revive the use, must apply for a permit under the provisions of s. 373.229.

History.—s. 4, part II, ch. 72-299; s. 12, ch. 73-190; s. 598, ch. 95-148; s. 9, ch. 98-88.

373.227 Water conservation; legislative findings and intent; objectives; comprehensive statewide water conservation program requirements.—

(1) The Legislature recognizes that the proper conservation of water is an important means of achieving the economical and efficient utilization of water necessary, in part, to constitute a reasonable-beneficial use. The overall water conservation goal of the state is to prevent and reduce wasteful, uneconomical, impractical, or unreasonable use of water resources. The Legislature finds that the social, economic, and cultural conditions of the state relating to the use of public water supply vary by service area and that public water supply utilities must have the flexibility to tailor water conservation measures to best suit their individual circumstances. The Legislature encourages the use of efficient, effective, and affordable water conservation measures. Where water is provided by a public water supply utility, the Legislature intends that a variety of conservation measures be made available and used to encourage efficient water use. To achieve these conservation objectives, the state should emphasize goal-based, accountable, tailored, and measurable water conservation programs for public water supply. For purposes of this section, the term “public water supply utility” includes both publicly owned and

privately owned public water supply utilities that sell potable water on a retail basis to end users.

(2) To implement the findings in subsection (1), the department, in cooperation with the water management districts and other stakeholders, shall develop a comprehensive statewide water conservation program for public water supply. The program should:

(a) Encourage utilities to implement water conservation programs that are economically efficient, effective, affordable, and appropriate;

(b) Allow no reduction in, and increase where possible, utility-specific water conservation effectiveness over current programs;

(c) Be goal-based, accountable, measurable, and implemented collaboratively with water suppliers, water users, and water management agencies;

(d) Include cost and benefit data on individual water conservation practices to assist in tailoring practices to be effective for the unique characteristics of particular utility service areas, focusing upon cost-effective measures;

(e) Use standardized public water supply conservation definitions and standardized quantitative and qualitative performance measures for an overall system of assessing and benchmarking the effectiveness of water conservation programs and practices;

(f) Create a clearinghouse or inventory for water conservation programs and practices available to public water supply utilities which will provide an integrated statewide database for the collection, evaluation, and dissemination of quantitative and qualitative information on public water supply conservation programs and practices and their effectiveness. The clearinghouse or inventory should have technical assistance capabilities to aid in the design, refinement, and implementation of water conservation programs and practices. The clearinghouse or inventory shall also provide for continual assessment of the effectiveness of water conservation programs and practices;

(g) Develop a standardized water conservation planning process for utilities; and

(h) Develop and maintain a Florida-specific water conservation guidance document containing a menu of affordable and effective water conservation practices to assist public water supply utilities in the design and implementation of goal-based, utility-specific water conservation plans tailored for their individual service areas as provided in subsection (4).

(3) Regarding the use of water conservation or drought rate structures as a conservation practice, a water management district shall afford a public water supply utility wide latitude

in selecting a rate structure and shall limit its review to whether the utility has provided reasonable assurance that the rate structure contains a schedule of rates designed to promote efficient use of water by providing economic incentives. A water management district shall not fix or revise rates.

(4) As part of an application for a consumptive use permit, a public water supply utility may propose a goal-based water conservation plan that is tailored to its individual circumstances. Progress towards goals must be measurable. If the utility provides reasonable assurance that the plan will achieve effective water conservation at least as well as the water conservation requirements adopted by the appropriate water management district and is otherwise consistent with s. 373.223, the district must approve the plan which shall satisfy water conservation requirements imposed as a condition of obtaining a consumptive use permit. The conservation measures included in an approved goal-based water conservation plan may be reviewed periodically and updated as needed to ensure efficient water use for the duration of the permit. If the plan fails to meet the water conservation goal or goals by the timeframes specified in the permit, the public water supply utility shall revise the plan to address the deficiency or employ the water conservation requirements that would otherwise apply in the absence of an approved goal-based plan.

(5) To incentivize water conservation, if actual water use is less than permitted water use due to documented implementation of water conservation measures beyond those required in a consumptive use permit, including, but not limited to, those measures identified in best management practices pursuant to s. 570.93, the permitted allocation may not be modified solely due to such water conservation during the term of the permit. To promote water conservation and the implementation of measures that produce significant water savings beyond those required in a consumptive use permit, each water management district shall adopt rules providing water conservation incentives, which may include limited permit extensions.

(6) For consumptive use permits for agricultural irrigation, if actual water use is less than permitted water use due to weather events, crop diseases, nursery stock availability, market conditions, or changes in crop type, a district may not, as a result, reduce permitted allocation amounts during the term of the permit.

(7) The department or a water management district may adopt rules pursuant to ss. 120.536(1) and 120.54 to carry out the purposes of this section.

History.—s. 8, ch. 2004-381; s. 58, ch. 2013-15; s. 12, ch. 2016-1.

373.228 Landscape irrigation design.—

(1) The Legislature finds that multiple areas throughout the state have been identified by water management districts as water resource caution areas, which indicates that in the near future water demand in those areas will exceed the current available water supply and that conservation is one of the mechanisms by which future water demand will be met.

(2) The Legislature finds that landscape irrigation comprises a significant portion of water use and that current typical landscape irrigation systems and Florida-friendly landscaping designs offer significant potential water conservation benefits.

(3) It is the intent of the Legislature to improve landscape irrigation water use efficiency by ensuring that landscape irrigation systems meet or exceed minimum design criteria.

(4) The water management districts shall work with the Florida Nursery, Growers and Landscape Association, the Florida Native Plant Society, the Florida Chapter of the American Society of Landscape Architects, the Florida Irrigation Society, the Department of Agriculture and Consumer Services, the Institute of Food and Agricultural Sciences, the Department of Environmental Protection, the Department of Transportation, the Florida League of Cities, the Florida Association of Counties, and the Florida Association of Community Developers to develop landscape irrigation and Florida-friendly landscaping design standards for new construction which incorporate a landscape irrigation system and develop scientifically based model guidelines for urban, commercial, and residential landscape irrigation, including drip irrigation, for plants, trees, sod, and other landscaping. The standards shall be based on the irrigation code defined in the Florida Building Code, Plumbing Volume, Appendix F. Local governments shall use the standards and guidelines when developing landscape irrigation and Florida-friendly landscaping ordinances. By January 1, 2011, the agencies and entities specified in this subsection shall review the standards and guidelines to determine whether new research findings require a change or modification of the standards and guidelines.

(5) In evaluating water use applications from public water suppliers, water management districts shall consider whether the applicable local government has adopted ordinances for landscaping and irrigation systems consistent with the Florida-friendly landscaping provisions of s. 373.185.

History.—s. 6, ch. 2004-381; s. 13, ch. 2008-150; s. 19, ch. 2009-243.

373.229 Application for permit.—

(1) All permit applications filed with the governing board or the department under this part and notice thereof required under s. 373.116 shall contain:

(a) The name of the applicant and his or her address or, in the case of a corporation, the address of its principal business office;

(b) The date of filing;

(c) The date set for a hearing, if any;

(d) The source of the water supply;

(e) The quantity of water applied for;

(f) The use to be made of the water and any limitation thereon;

(g) The place of use;

(h) The location of the well or point of diversion; and

(i) Such other information as the governing board or the department may deem necessary.

(2) The notice shall state that written objections to the proposed permit may be filed with the governing board or the department by a specified date. The governing board or the department, at its discretion, may request further information from either applicant or objectors, and a reasonable time shall be allowed for such responses.

(3) In addition to the information required in subsection (1), all permit applications filed with the governing board or the department which propose the transport and use of water across county boundaries shall include information pertaining to factors to be considered, pursuant to s. 373.223(3), unless exempt under s. 373.713(9).

(4) If the proposed application is for less than 100,000 gallons per day, the governing board or the department may consider the application and any objections thereto without a hearing. If the proposed application is for 100,000 gallons per day or more and no objection is received, the governing board or the department, after proper investigation by its staff, may, at its discretion, approve the application without a hearing.

History.—s. 5, part II, ch. 72-299; s. 13, ch. 73-190; s. 11, ch. 76-243; s. 1, ch. 77-174; s. 599, ch. 95-148; s. 5, ch. 98-88; s. 17, ch. 2010-205.

373.2295 Interdistrict transfers of groundwater.—

(1) As used in this section, the term “interdistrict transfer and use” means a consumptive water use that involves the withdrawal of groundwater from a point within one water management district for use outside the boundaries of that district, but does not include a withdrawal and use within the same county. In case of withdrawal of groundwater from a point within one water management district for use outside the boundaries of that district but within the same county, the provisions of subsections (4), (11), and (13) shall apply, and the district considering a permit application for such a consumptive use shall apply the applicable provisions of this chapter, and its rules, to the withdrawal and use.

(2) To obtain a permit for an interdistrict transfer and use of groundwater, an applicant must file an application in accordance with s. 373.229 with the water management district having jurisdiction over the area from which the applicant proposes to withdraw groundwater and submit a copy of the application to the water management district having jurisdiction over the area where the water is to be used.

(3) The governing board of the water management district where the groundwater is proposed to be withdrawn shall review the application in accordance with this part, the rules of the district which relate to consumptive water use permitting, and other applicable provisions of this chapter.

(4) In determining if an application is consistent with the public interest as required by s. 373.223, the projected populations, as contained in the future land use elements of the comprehensive plans adopted pursuant to chapter 163 by the local governments within which the withdrawal areas and the proposed use areas are located, will be considered together with other evidence presented on future needs of those areas. If the proposed interdistrict transfer of groundwater meets the requirements of this chapter, and if the needs of the area where the use will occur and the specific area from which the groundwater will be withdrawn can be satisfied, the permit for the interdistrict transfer and use shall be issued.

(5) In addition to other requirements contained in this part, the water management district where the groundwater is proposed to be withdrawn shall:

(a) Furnish copies of any application, information, correspondence, or other related material to the water management district having jurisdiction over the area where the water is to be used; and

(b) Request comments on the application and the future water needs of the proposed use area from the water management district having jurisdiction over the area where the water is to be used. If comments are received, they must be attached to the preliminary notice of intended agency action and may not create a point of entry for review whether issued by the governing board or district staff.

(6) Upon completion of review of the application, the water management district where the groundwater is proposed to be withdrawn shall prepare a notice of preliminary intended agency action which shall include an evaluation of the application and a recommendation of approval, denial, or approval with conditions. The notice shall be furnished to the district where the water is to be used, the applicant, the Department of Environmental Protection, the local governments having jurisdiction over the area from which the groundwater is to be withdrawn and where the water is to be used, and any person requesting a copy of the notice.

(a) Any interested person may, within the time specified in the notice, notify in writing the district from where the groundwater is to be withdrawn of such person's position and comments or objections, if any, to the preliminary intended action.

(b) The filing of the notice of intended agency action shall toll the time periods contained in s. 120.60 for the granting or denial of a permit for an interdistrict transfer and use of groundwater.

(c) The preliminary intended agency action and any comments or objections of interested persons made pursuant to paragraph (a) shall be considered by the governing board of the water management district where the groundwater is proposed to be withdrawn. Following such consideration, the governing board shall issue a notice of intended agency action.

(d) Any substantially affected person who submitted a notification pursuant to paragraph (a) may request review by the department within 14 days after the filing of the notice of intended agency action. If no request for review is filed, the notice of intended agency action shall become the final order of the governing board.

(7) Notwithstanding the provisions of chapter 120, the department shall, within 30 days after its receipt of a request for review of the water management district's action, approve, deny, or modify the water management district's action on the proposed interdistrict transfer and use of groundwater. The department shall issue a notice of its intended action. Any substantially affected person who requested review pursuant to paragraph (6)(a) may request an administrative hearing pursuant to chapter 120 within 14 days after notice of the department's intended action. The parties to such proceeding shall include, at a minimum, the affected water management districts and the applicant. The proceedings initiated by a petition under ss. 120.569 and 120.57, following the department's issuance of a notice of intended agency action, is the exclusive proceeding authorized for the review of agency action on the interdistrict transfer and use of groundwater. This procedure is to give effect to the legislative intent that this section

provide a single, efficient, simplified, coordinated permitting process for the interdistrict transfer and use of groundwater.

(8) The department shall issue a final order which is subject to review pursuant to s. 120.68 or s. 373.114.

(9) In administering this part, the department or the water management districts may enter into interagency agreements. However, such agreements are not subject to the provisions of s. 373.046 and chapter 120.

(10) The state hereby preempts any regulation of the interdistrict transfer and use of groundwater. If any provision of this section is in conflict with any other provision or restriction under any law, administrative rule, or ordinance, this section shall govern and such law, rule, or ordinance shall be deemed superseded for the purposes of this section. A water management district or the department may not adopt special rules which prohibit or restrict interdistrict transfer and use of groundwater in a manner inconsistent with this section.

(11) If, after the final order of the department or final agency action under this section, the proposed use of the site designated in the application for groundwater production, treatment, or transmission facilities does not conform with the existing zoning ordinances, a rezoning application may be submitted. If local authorities deny the application for rezoning, the applicant may appeal this decision to the Land and Water Adjudicatory Commission, which shall authorize a variance or nonconforming use to the existing comprehensive plan and zoning ordinances, unless the commission determines after notice and hearing that such variance or nonconforming use is contrary to the public interest.

(12) The permit required under this section and other sections of this chapter and chapter 403 are the sole permits required for interdistrict transfer and use of groundwater, and such permits are in lieu of any license, permit, or similar document required by any state agency or political subdivision pursuant to chapter 163, chapter 380, or chapter 381, and the Florida Transportation Code.

(13) When a consumptive use permit under this section is granted for water use beyond the boundaries of a local government from which or through which the groundwater is withdrawn or transferred and a local government denies a permit required under chapter 125 or chapter 153 for a facility or any infrastructure which produces, treats, transmits, or distributes such groundwater, the person or unit of government applying for the permit under chapter 125 or chapter 153 may appeal the denial to the Land and Water Adjudicatory Commission. The commission shall review the local government action for

consistency with this chapter and the interdistrict groundwater transfer permit and may reverse, modify, or approve the local government's action.

History.—s. 1, ch. 87-347; s. 266, ch. 94-356; s. 99, ch. 96-410; s. 11, ch. 2000-212; s. 1, ch. 2003-64; s. 2, ch. 2003-265.

373.22951 Validation of prior agreements between water management districts.—Any agreements between water management districts entered into before the effective date of this act pursuant to s. 373.046 authorizing the issuance of permits for the interdistrict withdrawal and use of water within a county are validated and shall continue in effect until otherwise rescinded.

History.—s. 2, ch. 2003-64; s. 3, ch. 2003-265.

373.232 Citation of rule.—In addition to any other provisions within this part or any rules promulgated hereunder, the permitting agency shall, when requesting information for a permit application pursuant to this part or such rules promulgated hereunder, cite a specific rule. If a request for information cannot be accompanied by a rule citation, failure to provide such information cannot be grounds to deny a permit.

History.—s. 4, ch. 79-161.

373.233 Competing applications.—

(1) If two or more applications that otherwise comply with the provisions of this part are pending for a quantity of water that is inadequate for both or all, or that for any other reason are in conflict, and the water management district or department has deemed the applications complete, the water management district or the department has the right to approve or modify the application that best serves the public interest.

(2)(a) If two or more competing applications qualify equally under subsection (1), the governing board or the department shall give preference to a renewal application over an initial application.

(b) If two or more competing applications qualify equally under subsection (1) and none of the competing applications is a renewal application, the governing board or the department shall give preference to the application for the use where the source is nearest to the area of use or application consistent with s. 373.016(4)(a).

History.—s. 6, part II, ch. 72-299; s. 9, ch. 2013-92; s. 13, ch. 2016-1.

373.236 Duration of permits; compliance reports.—

(1) Permits shall be granted for a period of 20 years, if requested for that period of time, if there is sufficient data to provide reasonable assurance that the conditions for permit issuance will be met for the duration of the permit; otherwise, permits may be issued for shorter durations which reflect the period for which such reasonable assurances can be provided. The governing board or the department may base the duration of permits on a reasonable system of classification according to source of supply or type of use, or both.

(2) The Legislature finds that some agricultural landowners remain unaware of their ability to request a 20-year consumptive use permit under subsection (1) for initial permits or for renewals. Therefore, the water management districts shall inform agricultural applicants of this option in the application form.

(3) The governing board or the department may authorize a permit of duration of up to 50 years in the case of a municipality or other governmental body or of a public works or public service corporation where such a period is required to provide for the retirement of bonds for the construction of waterworks and waste disposal facilities.

(4) Where necessary to maintain reasonable assurance that the conditions for issuance of a 20-year permit can continue to be met, the governing board or department, in addition to any conditions required pursuant to s. 373.219, may require a compliance report by the permittee every 10 years during the term of a permit. The Suwannee River Water Management District may require a compliance report by the permittee every 5 years through July 1, 2015, and thereafter every 10 years during the term of the permit. This report shall contain sufficient data to maintain reasonable assurance that the initial conditions for permit issuance are met. Following review of this report, the governing board or the department may modify the permit to ensure that the use meets the conditions for issuance. Permit modifications pursuant to this subsection shall not be subject to competing applications, provided there is no increase in the permitted allocation or permit duration, and no change in source, except for changes in source requested by the district. In order to promote the sustainability of natural systems through the diversification of water supplies through the development of seawater desalination plants, a water management district may not reduce an existing permitted allocation of water during the permit term as a result of planned future construction of, or additional water becoming available from, a new seawater desalination plant that does not receive funding from a water management district. Except as expressly provided in this subsection, this subsection does not alter the existing authority of a water management district to modify a consumptive use permit pursuant to this chapter.

(5)(a) A permit approved for the development of alternative water supplies shall be granted for a term of at least 20 years if there is sufficient data to provide reasonable assurance that the conditions for permit issuance will be met for the duration of the permit.

However, if the permittee issues bonds for the construction of the project, upon request of the permittee before the expiration of the permit, the permit shall be extended for such additional time as is required for the retirement of bonds, not including any refunding or refinancing of such bonds, if the governing board determines that the use will continue to meet the conditions for the issuance of the permit. The permit is subject to compliance reports under subsection (4).

(b)1. A permit approved on or after July 1, 2013, for the development of alternative water supplies shall be granted for a term of at least 30 years if there is sufficient data to provide reasonable assurance that the conditions for permit issuance will be met for the duration of the permit. If, within 7 years after a permit is granted, the permittee issues bonds to finance the project, completes construction of the project, and requests an extension of the permit duration, the permit shall be extended to expire upon the retirement of such bonds or 30 years after the date that construction of the project is complete, whichever occurs later. However, a permit's duration may not be extended by more than 7 years beyond the permit's original expiration date.

2. A permit issued under this paragraph is subject to compliance reports under subsection (4). If the permittee demonstrates that bonds issued to finance the project are outstanding, the quantity of alternative water allocated in the permit may not be reduced during a compliance report review unless a reduction is needed to address harm to water resources or to existing legal uses present when the permit was issued. A reduction required by an applicable water shortage order applies to a permit issued under this paragraph.

3. A permit issued under this paragraph may not authorize the use of nonbrackish groundwater supplies or nonalternative water supplies.

(c) An entity that wishes to develop alternative water supplies may apply for a permit under paragraph (a) or paragraph (b).

(6)(a) The Legislature finds that the need for alternative water supply development projects to meet anticipated public water supply demands of the state is so important that it is essential to encourage participation in and contribution to these projects by private-rural-land owners who characteristically have relatively modest near-term water demands but substantially increasing demands after the 20-year planning period in s. 373.709. Therefore, where such landowners make extraordinary contributions of lands or construction funding to enable the expeditious implementation of such projects, water management districts and the department may grant permits for such projects for a period of up to 50 years to municipalities, counties, special districts, regional water supply authorities, multijurisdictional water supply entities, and publicly or privately owned utilities, with the exception of any publicly or privately owned utilities created for or by a

private landowner after April 1, 2008, which have entered into an agreement with the private landowner for the purpose of more efficiently pursuing alternative public water supply development projects identified in a district's regional water supply plan and meeting water demands of both the applicant and the landowner.

(b) A permit under paragraph (a) may be granted only for that period for which there is sufficient data to provide reasonable assurance that the conditions for permit issuance will be met. Such a permit shall require a compliance report by the permittee every 5 years during the term of the permit. The report shall contain sufficient data to maintain reasonable assurance that the conditions for permit issuance applicable at the time of district review of the compliance report are met. After review of this report, the governing board or the department may modify the permit to ensure that the use meets the conditions for issuance. This subsection does not limit the existing authority of the department or the governing board to modify or revoke a consumptive use permit.

(7) A permit approved for a renewable energy generating facility or the cultivation of agricultural products on lands consisting of 1,000 acres or more for use in the production of renewable energy, as defined in s. 366.91(2)(d), shall be granted for a term of at least 25 years at the applicant's request based on the anticipated life of the facility if there is sufficient data to provide reasonable assurance that the conditions for permit issuance will be met for the duration of the permit; otherwise, a permit may be issued for a shorter duration that reflects the longest period for which such reasonable assurances are provided. Such a permit is subject to compliance reports under subsection (4).

(8) A water management district may issue a permit to an applicant, as set forth in s. 163.3245(13), for the same period of time as the applicant's approved master development order if the master development order was issued under s. 380.06(21) by a county which, at the time the order was issued, was designated as a rural area of opportunity under s. 288.0656, was not located in an area encompassed by a regional water supply plan as set forth in s. 373.709(1), and was not located within the basin management action plan of a first magnitude spring. In reviewing the permit application and determining the permit duration, the water management district shall apply s. 163.3245(4)(b).

History.—s. 7, part II, ch. 72-299; s. 13, ch. 97-160; s. 7, ch. 2005-291; s. 7, ch. 2006-255; s. 10, ch. 2009-243; s. 70, ch. 2010-5; ss. 18, 55, ch. 2010-205; s. 10, ch. 2013-92; s. 1, ch. 2013-169; s. 17, ch. 2015-30; s. 37, ch. 2016-10.

373.239 Modification and renewal of permit terms.—

(1) A permittee may seek modification of any terms of an unexpired permit.

(2) If the proposed modification involves water use of 100,000 gallons or more per day, the application shall be treated under the provisions of s. 373.229 in the same manner as the initial permit application. Otherwise, the governing board or the department may at its discretion approve the proposed modification without a hearing, provided the permittee establishes that:

(a) A change in conditions has resulted in the water allowed under the permit becoming inadequate for the permittee's need, or

(b) The proposed modification would result in a more efficient utilization of water than is possible under the existing permit.

(3) All permit renewal applications shall be treated under this part in the same manner as the initial permit application.

History.—s. 8, part II, ch. 72-299; s. 14, ch. 73-190.

373.243 Revocation of permits.—The governing board or the department may revoke a permit as follows:

(1) For any material false statement in an application to continue, initiate, or modify a use, or for any material false statement in any report or statement of fact required of the user pursuant to the provisions of this chapter, the governing board or the department may revoke the user's permit, in whole or in part, permanently.

(2) For willful violation of the conditions of the permit, the governing board or the department may permanently or temporarily revoke the permit, in whole or in part.

(3) For violation of any provision of this chapter, the governing board or the department may revoke the permit, in whole or in part, for a period not to exceed 1 year.

(4) For nonuse of the water supply allowed by the permit for a period of 2 years or more, the governing board or the department may revoke the permit permanently and in whole unless the user can prove that his or her nonuse was due to extreme hardship caused by factors beyond the user's control. For a permit issued pursuant to s. 373.236(7), the governing board or the department may revoke the permit only if the nonuse of the water supply allowed by the permit is for a period of 4 years or more.

(5) The governing board or the department may revoke a permit, permanently and in whole, with the written consent of the permittee.

History.—s. 9, part II, ch. 72-299; s. 14, ch. 78-95; s. 600, ch. 95-148; s. 11, ch. 2009-243.

373.244 Temporary permits.—

(1) The governing board of a water management district may issue, or may authorize its executive director to issue, temporary permits for the consumptive use of water while an application is pending for a permit pursuant to ss. 373.219 and 373.229.

(2) Such a temporary permit shall be issued for a period of time to expire on the day following the next regular meeting of the governing board. At such meeting, the governing board shall consider whether it appears that the proposed use meets the criteria set forth in s. 373.223(1) and that such temporary permit is necessary for consumptive use of water prior to final action on an application for a permit pursuant to ss. 373.219 and 373.229.

(3) The governing board may summarily extend the term of a temporary permit for subsequent periods of time to expire on or before the day following the next regular meeting of the governing board.

(4) The board shall review temporary permits at each regular meeting and may terminate a temporary permit or refuse to extend it further upon a finding that the water use does not meet the criteria set forth in s. 373.223(1) or that adverse effects are occurring as a result of water use under the temporary permit or that the water authorized to be used under such permit is no longer required by the permitholder.

(5) The notice and hearing that might otherwise be required pursuant to s. 373.116(2) and chapter 120 shall not be required prior to issuance or extension of a temporary permit pursuant to the provisions of this section.

(6) Issuance of a temporary permit pursuant to the provisions of this section shall not in any way be construed as a commitment to issue a permit pursuant to ss. 373.219 and 373.229. No action taken by the governing board, or by the executive director if so authorized, shall be construed to estop the governing board from subsequently denying an application for a permit pursuant to ss. 373.219 and 373.229.

History.—s. 1, ch. 79-160.

373.246 Declaration of water shortage or emergency.—

(1) The governing board or the department by regulation shall formulate a plan for implementation during periods of water shortage. As a part of this plan the governing

board or the department shall adopt a reasonable system of water-use classification according to source of water supply; method of extraction, withdrawal, or diversion; or use of water or a combination thereof. The plan may include provisions for variances and alternative measures to prevent undue hardship and ensure equitable distribution of water resources.

(2) The governing board or the department by order may declare that a water shortage exists for a source or sources within all or part of the district when insufficient water is or will be available to meet the present and anticipated requirements of the users or when conditions are such as to require temporary reduction in total use within the area to protect water resources from serious harm. Such orders will be final agency action.

(3) In accordance with the plan adopted under subsection (1), the governing board or the department may impose such restrictions on one or more classes of water uses as may be necessary to protect the water resources of the area from serious harm and to restore them to their previous condition.

(4) A declaration of water shortage and any measures adopted pursuant thereto may be rescinded by the governing board or the department.

(5) When a water shortage is declared, the governing board or the department shall cause notice thereof to be published in a prominent place within a newspaper of general circulation throughout the area. Publication of such notice will serve as notice to all users in the area of the condition of water shortage.

(6) The governing board or the department shall notify each permittee in the district by electronic mail or regular mail of any change in the condition of his or her permit or any suspension of his or her permit or of any other restriction on the permittee's use of water for the duration of the water shortage.

(7) If an emergency condition exists due to a water shortage within any area of the district, and if the department, or the executive director of the district with the concurrence of the governing board, finds that the exercise of powers under subsection (1) is not sufficient to protect the public health, safety, or welfare; the health of animals, fish, or aquatic life; a public water supply; or recreational, commercial, industrial, agricultural, or other reasonable uses, it or he or she may, pursuant to the provisions of s. 373.119, issue emergency orders reciting the existence of such an emergency and requiring that such action, including, but not limited to, apportioning, rotating, limiting, or prohibiting the use of the water resources of the district, be taken as the department or the executive director deems necessary to meet the emergency.

(8) An affected party to whom an emergency order is directed under subsection (7) shall comply immediately, but may challenge such an order in the manner set forth in s. 373.119.

History.—s. 10, part II, ch. 72-299; s. 14, ch. 78-95; s. 11, ch. 82-101; s. 10, ch. 84-341; s. 601, ch. 95-148; s. 168, ch. 99-13; s. 11, ch. 2013-92.

373.249 Existing regulatory districts preserved.—The enactment of this chapter shall not affect any existing water regulatory districts pursuant to chapter 373, or orders issued by said regulatory districts, unless specifically revoked, modified, or amended by such regulatory district or by the department.

History.—s. 11, part II, ch. 72-299.

373.250 Reuse of reclaimed water.—

(1)(a) The encouragement and promotion of water conservation and reuse of reclaimed water, as defined by the department and used in this chapter, are state objectives and considered to be in the public interest. The Legislature finds that the use of reclaimed water provided by domestic wastewater treatment plants permitted and operated under a reuse program approved by the department is environmentally acceptable and not a threat to public health and safety.

(b) The Legislature recognizes that the interest of the state to sustain water resources for the future through the use of reclaimed water must be balanced with the need of reuse utilities to operate and manage reclaimed water systems in accordance with a variety and range of circumstances, including regulatory and financial considerations, which influence the development and operation of reclaimed water systems across the state.

(2) Reclaimed water is an alternative water supply as defined in s. 373.019(1) and is eligible for alternative water supply funding. A contract for state or district funding assistance for the development of reclaimed water as an alternative water supply may include provisions listed under s. 373.707(9). The use of reclaimed water may not be excluded from regional water supply planning under s. 373.709.

(3)(a) Reclaimed water may be presumed available to a consumptive use permit applicant when a utility exists which provides reclaimed water, which has determined that it has uncommitted reclaimed water capacity, and which has distribution facilities, which are initially provided by the utility at its cost, to the site of the affected applicant's proposed use.

(b) A water management district may not require a permit for the use of reclaimed water. However, when a use includes surface water or groundwater, the permit for such sources may include conditions that govern the use of the permitted sources in relation to the feasibility or use of reclaimed water.

(c) A water management district may require the use of reclaimed water in lieu of all or a portion of a proposed use of surface water or groundwater by an applicant when the use of reclaimed water is available; is environmentally, economically, and technically feasible; and is of such quality and reliability as is necessary to the user. However, a water management district may neither specify any user to whom the reuse utility must provide reclaimed water nor restrict the use of reclaimed water provided by a reuse utility to a customer in a permit or, unless requested by the reuse utility, in a water shortage order or water shortage emergency order.

(d) The South Florida Water Management District shall require the use of reclaimed water made available by the elimination of wastewater ocean outfall discharges as provided for in s. 403.086(9) in lieu of surface water or groundwater when the use of reclaimed water is available; is environmentally, economically, and technically feasible; and is of such quality and reliability as is necessary to the user. Such reclaimed water may also be required in lieu of other alternative sources. In determining whether to require such reclaimed water in lieu of other alternative sources, the water management district shall consider existing infrastructure investments in place or obligated to be constructed by an executed contract or similar binding agreement as of July 1, 2011, for the development of other alternative sources.

(4) The water management district shall, in consultation with the department, adopt rules to implement this section. Such rules shall include, but not be limited to:

(a) Provisions to permit use of water from other sources in emergency situations or if reclaimed water becomes unavailable, for the duration of the emergency or the unavailability of reclaimed water. These provisions shall also specify the method for establishing the quantity of water to be set aside for use in emergencies or when reclaimed water becomes unavailable. The amount set aside is subject to periodic review and revision. The methodology shall take into account the risk that reclaimed water may not be available in the future, the risk that other sources may be fully allocated to other uses in the future, the nature of the uses served with reclaimed water, the extent to which the applicant intends to rely upon reclaimed water, and the extent of economic harm which may result if other sources are not available to replace the reclaimed water. It is the intent of this paragraph to ensure that users of reclaimed water have the same access to ground or surface water and will otherwise be treated in the same manner as other users of the same class not relying on reclaimed water.

[1](b) Provisions to require permit applicants that are not reuse utilities to provide, as part of their reclaimed water feasibility evaluation for a nonpotable use, written documentation from a reuse utility addressing the availability of reclaimed water. This requirement shall apply when the applicant's proposed use is within an area that is or may be served with reclaimed water by a reuse utility within a 5-year horizon, as established by the reuse utility and provided to the district. If the applicable reuse utility fails to respond or does not provide the information required under paragraph (c) within 30 days after receipt of the request, the applicant shall provide to the district a copy of the written request and a statement that the utility failed to provide the requested information. The district is not required to adopt, by rule, the area where written documentation from a reuse utility is required, but the district shall publish the area, and any updates thereto, on the district's website. This paragraph may not be construed to limit the ability of a district to require the use of reclaimed water or to limit a utility's ability to plan reclaimed water infrastructure.

[1](c) Provisions specifying the content of the documentation required in paragraph (b), including sufficient information regarding the availability and costs associated with the connection to and the use of reclaimed water, to facilitate the permit applicant's reclaimed water feasibility evaluation.

A water management district may not adopt any rule that gives preference to users within any class of use established under s. 373.246 who do not use reclaimed water over users within the same class who use reclaimed water.

(5)(a) No later than October 1, 2012, the department shall initiate rulemaking to adopt revisions to the water resource implementation rule, as defined in s. 373.019(25), which shall include:

1. Criteria for the use of a proposed impact offset derived from the use of reclaimed water when a water management district evaluates an application for a consumptive use permit. As used in this subparagraph, the term "impact offset" means the use of reclaimed water to reduce or eliminate a harmful impact that has occurred or would otherwise occur as a result of other surface water or groundwater withdrawals.

2. Criteria for the use of substitution credits where a water management district has adopted rules establishing withdrawal limits from a specified water resource within a defined geographic area. As used in this subparagraph, the term "substitution credit" means the use of reclaimed water to replace all or a portion of an existing permitted use of resource-limited surface water or groundwater, allowing a different user or use to initiate a withdrawal or increase its withdrawal from the same resource-limited surface

water or groundwater source provided that the withdrawal creates no net adverse impact on the limited water resource or creates a net positive impact if required by water management district rule as part of a strategy to protect or recover a water resource.

(b) Within 60 days after the final adoption by the department of the revisions to the water resource implementation rule required under paragraph (a), each water management district shall initiate rulemaking to incorporate those revisions by reference into the rules of the district.

(6) Reuse utilities and the applicable water management district or districts are encouraged to periodically coordinate and share information concerning the status of reclaimed water distribution system construction, the availability of reclaimed water supplies, and existing consumptive use permits in areas served by the reuse utility.

(7) This section does not impair or limit the authority of a water management district to plan for and regulate consumptive uses of water under this chapter or regulate the use of surface water or groundwater to supplement a reclaimed water system.

(8) This section applies to applications for new consumptive use permits and renewals and modifications of existing consumptive use permits.

History.—s. 2, ch. 94-243; s. 35, ch. 97-160; s. 18, ch. 97-164; s. 37, ch. 99-247; s. 5, ch. 2004-381; s. 4, ch. 2008-232; s. 56, ch. 2010-205; s. 2, ch. 2012-150; s. 59, ch. 2013-15.

[1]Note.—Section 57, ch. 2010-205, provides that “[t]he water management districts shall initiate rulemaking no later than July 1, 2011, to implement the requirements of s. 373.250(3)(c) and (d), Florida Statutes, as created by this act.”

III. Florida Department of Environmental Protection (FDEP) Rules

Florida Department of State website:
https://www.flrules.org/

a. Chapter 62-40, F.A.C. Water Resource Implementation Rule
Florida Department of Environmental Protection Water Policy Resources

Florida Department of State website link to Chapter 62-40:
https://www.flrules.org/gateway/ChapterHome.asp?Chapter=62-40

CHAPTER 62-40
WATER RESOURCE IMPLEMENTATION RULE

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62-40.110 Declaration and Intent.

(1) The waters of the state are among its basic resources. Such waters should be managed to conserve and protect natural resources and scenic beauty and to realize the full beneficial use of the resource. Recognizing the importance of water to the state, the Legislature passed the Water Resources Act, Chapter 373, F.S., and the Air and Water Pollution Control Act, Chapter 403, F.S. Additionally, numerous goals and policies within the State Comprehensive Plan, Chapter 187, F.S., address water resources and natural systems protection.

(2) This chapter is intended to provide water resource implementation goals, objectives, and guidance for the development and review of programs, rules, and plans relating to water resources, based on statutory policies and directives in Chapters 187, 373, and 403, F.S.

(3) These policies shall be construed as a whole and no individual policy shall be construed or applied in isolation from other policies. All constructions of this chapter shall give meaning to all parts of the rule when possible.

(4) This chapter, in and of itself, shall not constitute standards or criteria for decisions on individual permits. This chapter also does not constitute legislative authority to the Districts for the adoption of rules if such rules are not otherwise authorized by statute.

(5) A goal of this chapter is to coordinate the management of water and related land resources. Local governments shall consider the water resource implementation rule in the development of their comprehensive plans as required by Chapter 163, F.S., and as required by Section 403.0891(3)(a), F.S. Special districts which manage water shall consider the water resource implementation rule in the development of their plans and programs. The Legislature has also expressed its intent, in Section 373.0395, F.S., that future growth and development planning reflect the limitations of available ground water and other water supplies.

(6) It is an objective of the State to protect the functions of entire ecological systems, as developed and defined in the programs, rules, and plans of the Department and water management districts.

(7) It is a goal of this chapter that sufficient water be available for all existing and future reasonable-beneficial uses and the natural systems, and that the adverse effects of competition for water supplies be avoided.

(8) The Department and the Districts shall take into account cumulative impacts on water resources and manage those resources

in a manner to ensure their sustainability.

(9) Government services should be provided efficiently. Inefficiency resulting from duplication of permitting shall be eliminated where appropriate, including water supply, water quality and water quantity permitting functions.

(10) Public education, awareness, and participation shall be encouraged. The Department and Districts should assist educational institutions in the development of educational curricula and research programs which meet Florida's present and future water management needs.

(11) This chapter does not repeal, amend or otherwise alter any rule now existing or later adopted by the Department or Districts. However, procedures are included in this chapter which provide for the review of Department and District plans, programs, and rules to assure consistency with the provisions of this chapter. The procedure for modification of District rules as requested by the Department shall be as prescribed in Section 373.114, F.S., and applicable provisions of this chapter.

(12) It is the intent of the Department, in cooperation with the Water Management Districts, to seek adequate sources of funding to supplement District ad valorem taxes to implement the provisions of this chapter.

Rulemaking Authority 373.026(7), 373.036(1)(d), 373.043, 373.171 FS. Law Implemented 373.023, 373.026, 373.033, 373.036(1)(d), 373.0391, 373.0395, 373.042, 373.046, 373.0831, 373.086, 373.103, 373.106, 373.171, 373.175, 373.185, 373.1961, 373.223, 373.246, 373.250, 373.418, 373.451, 373.453, 403.0615(3), 403.064, 403.0891 FS., Ch. 2002-296, s. 38, Laws of Florida. History–New 5-5-81, Formerly 17-40.01, Amended 12-5-88, Formerly 17-40.001, Amended 8-14-90, 12-17-91, Formerly 17-40.110, Amended 7-20-95, 5-7-05.

62-40.120 Department Rules.

The water resource implementation rule shall also include the following Department rules:

(1) Surface Water Quality Standards, Chapter 62-302 and Rule 62-4.242, F.A.C.

(2) Ground Water Classes, Standards, and Exemptions, Chapter 62-520, F.A.C.

(3) Drinking Water Standards, Monitoring, and Reporting, Chapter 62-550, F.A.C.

Rulemaking Authority 373.026(7), 373.036(1)(d), 373.043, 373.171 FS. Law Implemented 373.023, 373.026, 373.036(1)(d), 373.0391, 373.0395, 373.042, 373.046, 373.103, 373.106, 373.171, 373.175, 373.1961, 373.223, 373.246, 373.250, 373.418, 373.451, 373.453, 403.0615(3), 403.064, 403.0891 FS. History–New 8-14-90, Formerly 17-40.120, Amended 7-20-95, 5-7-05.

62-40.210 Definitions.

When used in this chapter and in the review of rules of the Districts pursuant to Section 373.114(2), F.S., unless the context or content of such District rule requires a narrower, more specific meaning, the following words shall mean:

(1) "Aquifer" shall mean a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield useful quantities of ground water to wells, springs or surface water.

(2) "Basin Management Action Plan" means the document that sets forth the activities, schedule, and funding sources by which point and nonpoint dischargers will reduce pollutants discharged to impaired waters and meet the total maximum daily load established for those waters.

(3) "Conservation rate structure" means a schedule of utility water rates designed to promote efficient use of water by providing economic incentives.

(4) "Consumptive use means any use of water which reduces the supply from which it is withdrawn or diverted.

(5) "Department" means the Department of Environmental Protection.

(6) "Designated use" means the present and future most beneficial use of a body of water pursuant to the water quality classification system in Rule 62-302.400, F.A.C.

(7) "Detention" means the delay of stormwater runoff prior to its discharge.

(8) "District" means a water management district created pursuant to Section 373.069, F.S.

(9) "District Water Management Plan" is defined in Section 373.019, F.S.

(10) "Drought rate structure" means an element of a utility rate structure intended to provide an economic incentive to reduce water use during times of drought.

(11) "Floodplain" means land area subject to inundation by flood waters from a river, watercourse, lake, or coastal waters. Floodplains are delineated according to their estimated frequency of flooding.

(12) "Florida Water Plan" is defined in Section 373.019, F.S.

(13) "Governing Board" means the governing board of a water management district created under Section 373.069, F.S.

(14) “Ground water” means water beneath the surface of the ground, whether or not flowing through known and definite channels.

(15) “Ground water basin” means a ground water flow system that has defined boundaries and may include permeable materials that are capable of storing or furnishing a significant water supply. The basin includes both the surface area and the permeable materials beneath it.

(16) “High recharge areas” means areas contributing significant volumes of water which add to the storage and flow of an aquifer through vertical movement from the land surface. The term significant will vary geographically depending on the hydrologic characteristics of that aquifer.

(17) “Informative billing” means a system of providing water utility customers with useful information on the relationship between the amount of water they use and the cost associated with that use. Examples of the information include the utility’s rate structure, amount of water used in the current month, amount of water used in the previous month, amount of water used in the same month of the previous year, information on the average usage of all customers in the same customer class, seasonal rates and applicable months, drought rates, information on conserving water, or other information deemed appropriate by the utility.

(18) “Impact Offset” is defined in Section 373.250, F.S.

(19) “Impaired water” means a water body or water body segment that does not meet one or more of its designated uses due in whole or in part to discharges of pollutants, and has been listed as impaired by order of the Secretary in accordance with the procedures set forth in Chapter 62-303, F.A.C.

(20) “Natural systems” for the purpose of this rule means an ecological system supporting aquatic and wetland-dependent natural resources, including fish and aquatic and wetland-dependent wildlife habitat.

(21) “Pollutant load reduction goal,” or PLRG, means estimated numeric reductions in pollutant loadings, usually established in a Surface Water Improvement and Management or other watershed management plan, that are needed to preserve or restore designated uses of receiving bodies of water and maintain water quality consistent with applicable state water quality standards. In some cases, PLRGs may provide the scientific basis for the development of a Total Maximum Daily Load.

(22) “Potable quality water offset” means the amount of potable quality water (Class F-I, G-I, or G-II ground water or water meeting drinking water standards) saved through the use of reclaimed water expressed as a percentage of the total reclaimed water used. The potable quality water offset is calculated by dividing the amount of potable water saved by the amount of reclaimed water used and multiplying the quotient by 100.

(23) “Prime recharge areas” means areas that are generally within high recharge areas and are significant to present and future ground water uses including protection and maintenance of natural systems and water supply.

(24) “Reasonable-beneficial use” is defined in Section 373.019, F.S.

(25) “Recharge fraction” means the portion of reclaimed water used in a reuse system that recharges an underlying potable quality ground water (Class F-I, G-I, or G-II ground water) that is used for potable supply, or augments a Class I surface water, expressed as a percentage of the total reclaimed water used.

(26) “Reclaimed water,” except as specifically provided in Chapter 62-610, F.A.C., means water that has received at least secondary treatment and basic disinfection, and is reused after flowing out of a domestic wastewater treatment facility.

(27) “Regional water supply plan” is defined in Section 373.019, F.S.

(28) “Retention” means the prevention of stormwater runoff from direct discharge.

(29) “Reuse” means the deliberate application of reclaimed water, in compliance with Department and District rules, for a beneficial purpose.

(30) “Reuse Utility” means a utility that produces reclaimed water or distributes reclaimed water to end users.

(31) “Seasonal rate structure” means a utility water rate structure in which the amount charged per unit of water increases during the peak demand season.

(32) “Secretary” means the Secretary of the Department of Environmental Protection.

(33) “State water quality standards” means water quality standards adopted by the Environmental Regulation Commission pursuant to Chapter 403, F.S., including standards composed of designated most beneficial uses (classification of waters), the numerical and narrative criteria applied to the specific water use or classification, the Florida anti-degradation policy (Rules 62-4.242 and 62-302.300, F.A.C.), and the moderating provisions contained in Chapters 62-4, 62-302, 62-520, and 62-550, F.A.C.

(34) “Stormwater” means the water that results from a rainfall event.

(35) “Stormwater management program” is defined in Section 403.031, F.S.

(36) "Stormwater management system" is defined in Section 373.403, F.S.

(37) "Stormwater recycling" means capturing stormwater for irrigation or other beneficial use.

(38) "Stormwater utility" is defined in Section 403.031, F.S.

(39) "Substitution credit" means the use of reclaimed water to replace all or a portion of an existing permitted use of resource-limited surface water or groundwater, allowing a different user or use to initiate a withdrawal or increase its withdrawal from the same resource-limited surface water or groundwater source provided that the withdrawal creates no net adverse impact on the limited water resource or creates a net positive impact if required by district rule as part of a strategy to protect or recover a water resource.

(40) "Supplementation of a reclaimed water system" or "supplementation" means the addition of water by a reuse utility from another source to reclaimed water supplies.

(41) "Surface water" is defined in Section 373.019, F.S.

(42) "Total maximum daily load," or TMDL, is defined in Section 403.031, F.S.

(43) "Water resource caution area" means a geographic area identified by a District as having existing water resource problems or an area in which water resource problems are projected to develop during the next twenty years.

(44) "Water" or "waters in the state" is defined in Section 373.019, F.S.

(45) "Watershed" is defined in Section 373.403, F.S.

(46) "Watershed management goal" means an overall goal for the management of water resources within a watershed.

Rulemaking Authority 373.026(7), 373.036, 373.043, 373.171 FS. Law Implemented 373.019, 373.023, 373.026, 373.036, 373.0395, 373.042, 373.0421, 373.046, 373.047, 373.103, 373.106, 373.114, 373.145, 373.171, 373.175, 373.203, 373.223, 373.246, 373.250, 373.403, 373.418, 373.451, 373.453, 403.031, 403.0615(3), 403.064, 403.067, 403.0891 FS. History–New 5-5-81, Formerly 17-40.02, Amended 12-5-88, Formerly 17-40.020, Amended 8-14-90, 12-17-91, Formerly 17-40.210, Amended 7-20-95, 5-7-05, 5-6-13, 5-3-14.

62-40.310 General Policies.

The following statement of general water resource implementation policy shall guide Department review of water management programs, rules, and plans. Water management programs, rules and plans, where economically and environmentally feasible, not contrary to the public interest, and consistent with Florida law, shall seek to:

(1) Water Supply.

(a) Promote the availability of sufficient water for natural systems, and sufficient and affordable water for all existing and future reasonable-beneficial uses. Uses of water authorized by a permit shall be limited to reasonable-beneficial uses.

(b) Promote water resource development and water supply development pursuant to Sections 373.0361 and 373.0831, F.S.

(c) Reserve, by rule, water from use by permit applicants, in such locations and quantities, and for such seasons of the year, as in the judgment of the District or Department, may be required for the protection of fish and wildlife, or the public health and safety. Such reservations shall be subject to periodic review and revision in light of changed conditions. However, all presently existing legal uses of water shall be protected so long as such use is not contrary to the public interest.

(d) Champion and develop sound water conservation practices and public information programs.

(e) Advocate and direct the reuse of reclaimed water as an integral part of water and wastewater management programs, rules, and plans consistent with protection of the public health and surface and ground water quality.

(f) Improve the efficiency and effectiveness of reuse of reclaimed water by encouraging those uses that increase potable quality water offsets or recharge fractions, where consistent with water quality protection.

(g) Encourage the use of water of the lowest acceptable quality for the purpose intended.

(h) Encourage the development of local and regional surface and ground water supplies within districts rather than transfer water across District boundaries.

(i) Encourage the use of water from sources nearest the area of use or application whenever practical, in accordance with and subject to the limitations of Sections 373.016(4)(a) and (b), and Sections 373.1962(9), 373.1963, 373.223(3) and 373.229(3), F.S.

(j) Encourage demand management and the development of alternative water supplies, including water conservation, reuse of reclaimed water, desalination, stormwater and industrial wastewater recycling, recharge, and aquifer storage and recovery.

(k) Protect aquifers and surface waters from depletion through water conservation, use of alternative water supplies, implementation of water shortage plans, and preservation of the functions of high recharge areas.

(2) Water Quality Protection and Management.

(a) Restore and protect the quality of ground and surface water by solving current problems and ensuring high quality treatment for stormwater and wastewater.

(b) Identify existing and future public water supply areas and protect them from contamination.

(3) Flood Protection and Floodplain Protection.

(a) Encourage nonstructural solutions to water resource problems and consider nonstructural alternatives whenever structural works are proposed.

(b) Manage the construction and operation of facilities that dam, divert, or otherwise alter the flow of surface waters to minimize damage from flooding, soil erosion or excessive drainage.

(c) Encourage the management of floodplains and other flood hazard areas to prevent or reduce flood damage, consistent with establishment and maintenance of desirable hydrologic characteristics and associated natural systems.

(d) Encourage the development and implementation of a strict floodplain management program by state, regional, and local governments designed to preserve floodplain functions and associated natural systems.

(e) Avoid the expenditure of public funds that encourage or subsidize incompatible new development or significant expansion of existing development in high-hazard flood areas.

(f) Minimize flood-related emergencies, human disasters, loss of property, and other associated impacts.

(4) Natural Systems Protection and Management.

(a) Establish minimum flows and levels to protect water resources and the environmental values associated with marine, estuarine, freshwater, and wetlands ecology.

(b) Mitigate adverse impacts resulting from prior alteration of natural hydrologic patterns and fluctuations in surface and ground water levels.

(c) Utilize, preserve, restore, and enhance natural water management systems and discourage the channelization or other alteration of natural rivers, streams and lakes.

(5) Management Policies.

(a) Protect the water storage and water quality enhancement functions of wetlands, floodplains, and aquifer recharge areas through acquisition, enforcement of laws, and the application of land and water management practices that provide for compatible uses.

(b) Emphasize the prevention of pollution and other water resource problems.

(c) Develop interstate agreements and undertake cooperative programs with Alabama and Georgia to provide for coordinated management of surface and ground waters.

Rulemaking Authority 373.026(7), 373.036(1)(d), 373.043, 373.171 FS. Law Implemented 373.023, 373.026, 373.036(1)(d), 373.0361, 373.0391, 373.0391, 373.0395, 373.042 373.0421, 373.046, 373.0831, 373.103, 373.171, 373.175, 373.1961, 373.1962(9), 373.1963, 373.223, 373.229, 373.246, 373.250, 373.413, 373.414, 373.416, 373.418, 373.451, 373.453, 403.0615(3), 403.064, 403.0891 FS. History–New 7-1-81, Formerly 17-40.03, Amended 12-5-88, Formerly 17-40.030, Amended 8-13-90, 12-17-91, Formerly 17-40.310, Amended 7-20-95, 5-7-05.

62-40.410 Water Supply Protection and Management.

The following shall apply when the use of water is regulated pursuant to Part II of Chapter 373, F.S.:

(1) No permit shall be granted to authorize the use of water unless the applicant establishes that the proposed use is a reasonable-beneficial use, will not interfere with presently existing legal uses of water, and is consistent with the public interest.

(2) In determining whether a water use is a reasonable-beneficial use, the following factors will be considered:

(a) The quantity of water requested for the use;

(b) The demonstrated need for the use;

(c) The suitability of the use to the source of water;

(d) The purpose and value of the use;

(e) The extent and amount of harm caused;

(f) The practicality of mitigating any harm by adjusting the quantity or method of use;

(g) Whether the impact of the withdrawal extends to land not owned or legally controlled by the user;

(h) The method and efficiency of use;

(i) Water conservation measures taken and available to be taken;

(j) The feasibility of alternative sources such as reclaimed water, stormwater, aquifer storage and recovery, brackish water and

salt water;

(k) The present and projected demand for the source of water;

(l) The long-term yield available from the source of water;

(m) The extent of water quality degradation caused;

(n) Whether the proposed use would cause or contribute to flood damage;

(o) Whether the proposed use would significantly induce or increase saltwater intrusion;

(p) The amount of water which can be withdrawn without causing harm to the resource;

(q) Whether the proposed use would adversely affect public health; and

(r) Whether the proposed use would significantly affect natural systems.

(3) Water may be reserved from permit use in such locations and quantities, and for such seasons of the year, as is required for the protection of fish and wildlife or the public health or safety. Such reservations shall be subject to periodic review and revision in light of changed conditions. However, all presently existing legal users of water shall be protected so long as such use is not contrary to the public interest. Reservations shall be established in accordance with Rule 62-40.474, F.A.C.

(4) In implementing consumptive use permitting programs, the Department and the Districts shall recognize the rights of property owners, as limited by law, to make consumptive uses of water from their land, and the rights of other users, as limited by law, to make consumptive uses of water, for reasonable-beneficial uses in a manner consistent with the public interest that will not interfere with any presently existing legal use of water.

(5) Permits authorizing consumptive uses of water which cause unanticipated significant adverse impacts on off-site land uses existing at the time of permit application, or on legal uses of water existing at the time of permit application, shall be considered for modification, to curtail or abate the adverse impacts, unless the impacts can be mitigated by the permittee.

(6) In implementing consumptive use permitting programs, the Department and Districts shall strive to prevent harm to natural systems without the need for artificial maintenance of natural systems by pumped groundwater augmentation. If groundwater augmentation is authorized, reasonable assurance must be provided that such augmentation will not cause harm to natural systems.

(a) In the adoption and implementation of consumptive use permitting rules regarding use of pumped ground water to artificially maintain natural systems that otherwise would be adversely affected by withdrawals for water supply, consideration shall be given to the following factors:

1. Whether there are other economically, environmentally, and technically feasible means to avoid the impacts, including the use of alternative water sources, that would reduce or eliminate the impact. In determining economic feasibility, the Department and Districts shall consider costs and benefits;

2. The current condition of the natural system, and whether the system would be enhanced over the current condition through augmentation;

3. The geographic extent of the system to be augmented; and

4. The amount of water made available for water supply compared to the amount required for augmentation.

(b) The use of reclaimed water and recycled stormwater is encouraged in situations when the augmentation of wetlands is conducted, where practical and consistent with water quality protection.

(c) This paragraph is not intended to exclude other means to avoid or mitigate adverse impacts to natural systems.

(7) The Districts shall determine whether Section 373.233, F.S., entitled “Competing Applications”, and implementing rules, are applicable to pending applications.

(8) For all water use classes, when economic conditions or population growth rates result in the actual water use being lower than permitted water use, a modification to reduce the permitted allocation shall only be made by the District when there is no reasonable likelihood that the allocation will be needed during the permit term. For agricultural consumptive use permits for irrigation, reductions in actual use compared to permitted consumptive use that are due to weather events, crop diseases, nursery stock availability, or changes in crop type shall not result in a permit modification by the District to reduce the permitted allocation during the term of the permit. Nothing in this subsection shall be construed to alter the Districts’ authority to reduce permitted consumptive use under circumstances not addressed by this subsection, nor be construed to alter the water conservation requirements of the permit for the duration of the permit.

(9) Any reallocation of an existing permitted quantity of water shall be reviewed by the District and shall be subject to full compliance with the applicable permitting criteria of the District.

Rulemaking Authority 373.016, 373.019, 373.026(7), 373.036, 373.043, 373.171, 373.219, 373.223, 373.236 FS. Law Implemented 373.016,

373.019, 373.023, 373.026, 373.036, 373.042, 373.0421, 373.103, 373.171, 373.175, 373.219, 373.223, 373.233, 373.236, 373.246, 373.250, 373.413, 373.414, 373.416, 373.418, 373.703, 403.064, 403.0891 FS. History–New 7-20-95, Amended 5-7-05, 5-7-06, 5-6-13.

62-40.411 Water Shortage.

(1) To the extent practical, the Districts shall seek to achieve a consistent approach to water shortage phases and related restrictions, particularly where political jurisdictions fall within more than one District.

(2) Except when an emergency order is issued under Sections 373.175 and 373.246, F.S., when a District declares a phased water shortage, it will impose water use restrictions in a minimum of three and a maximum of four phases depending upon the severity of the shortage. The phases are as follows:

(a) A “moderate” water shortage shall result in the imposition of Phase 1 water restrictions.

(b) A “severe” water shortage shall result in the imposition of Phase 2 water restrictions.

(c) An “extreme” water shortage shall result in the imposition of Phase 3 water restrictions.

(d) A “critical” water shortage shall result in the imposition of Phase 4 water restrictions.

(3) In implementing the phased water use restrictions, the factors the District shall consider include:

(a) The source of the water supply experiencing the shortage;

(b) The relative impact of the various categories of water users on the water body for which the shortage is declared;

(c) The availability and practicality of alternative sources;

(d) The economic impacts that the restrictions are likely to have on each category of user. To the degree practical, the governing board shall impose water use restrictions in a manner that distributes the burden of the restrictions equitably among water users, relative to their impact on the sources experiencing the shortage;

(e) The potential for harm to natural systems;

(f) Water shortage plans of regional water supply authorities and local governments;

(g) The appropriate geographic scope of the restrictions;

(h) The effectiveness of the restriction imposed in terms of reducing water use and protecting the relevant water supply source; and

(i) The impact of the restriction on the public health, safety and welfare.

(4) Use classifications to be used when implementing water use restrictions shall include the following:

(a) Indoor uses, which include water used for indoor personal and household needs, and similar needs at businesses;

(b) Essential uses such as fire fighting, sanitation, health and medical use;

(c) Agricultural uses, such as production of vegetable and other crops, citrus and fruit trees, nursery plants, pasture, sod, aquaculture, soil flooding, and freeze protection;

(d) Commercial and industrial uses in which water is integral to the production of goods and services, including power generation;

(e) Water utility use, which may include both water used for potable supply and water used for maintaining and operating the supply system;

(f) Landscape irrigation, which is the outdoor irrigation of grass, trees and other plants in places such as residences, businesses, golf courses, parks, recreational areas, cemeteries, and public buildings; and

(g) Other uses such as aesthetic ponds, fountains and water features, environmental restoration or enhancement, cooling and air conditioning, and navigation.

(5) The District may expand upon or further subdivide the use classifications in paragraphs (a) through (g) above for purposes of issuing restrictions on specific uses.

Rulemaking Authority 373.026(7), 373.036(1)(d), 373.043, 373.171 FS. Law Implemented 373.023, 373.026, 373.103, 373.171, 373.175, 373.1961, 373.223, 373.246, 373.250, 373.418, 403.064 FS. History–New 5-7-05.

62-40.412 Water Conservation.

(1) The overall water conservation goal of the state shall be to prevent and reduce wasteful, uneconomical, impractical, or unreasonable use of water resources. Conservation of water shall be required unless not economically, environmentally, or technically feasible.

(2) The Districts shall seek to accomplish this goal by:

(a) Assisting local governments, water supply utilities, regional water supply authorities, and other parties in designing and implementing plans and programs to conserve water. Such programs may include analyzing the effectiveness of particular water conservation measures.

(b) Coordinating with the Florida Department of Agriculture and Consumer Services in the development of agricultural water conservation programs and best management practices pursuant to Section 570.085, F.S.

(c) Requiring efficient use of water. In determining efficiency requirements, the Districts shall consider the effectiveness of efficiency measures already being implemented, including whether a public water supply utility has achieved the per capita water use goal if such a goal is adopted by rule by the appropriate District, and the need for and feasibility of additional measures. Efficiency measures that shall be considered, but not necessarily required of each water user, include the following:

1. Programs and measures that promote or require efficient irrigation practices;

2. Imposition of year-round restrictions, which may include variances or exemptions, on particular irrigation activities or irrigation sources. If time of day watering restrictions are implemented, watering shall be restricted from 10:00 a.m. to 4:00 p.m. to the extent practical;

3. Minimization of unaccounted-for water losses;

4. The use of conservaton rate structures wherever practical. A District shall afford a utility wide latitude in adopting a rate structure, and shall limit its review to whether the utility has provided reasonable assurance that the rate structure contains a schedule of rates designed to promote efficient use of water by providing economic incentives. The District shall not fix or revise rates or rate structures. Such rates may be phased in over time;

5. The use of informative billing practices for utilities. Such practices may be phased in over time;

6. Accurate measurement and reporting of water use, including metering; and

7. Promotion of water-conserving plumbing fixtures and appliances, water-efficient landscaping, and automatic rain sensors or soil moisture sensors.

(d) Considering incentives, such as longer term permits, greater certainty of supply during water shortages, and permit extensions, for permittees that implement conservation measures significantly beyond those required in the permitting process;

(e) Striving to achieve consistent water conservation requirements for water users in cities, counties or other political jurisdictions that fall within more than one District;

(f) Maintaining public information and education programs for long- and short-term water conservation goals;

(g) Including water conservation in regional water supply planning; and

(h) Promoting the efficient and effective reuse of reclaimed water and recycling of stormwater and industrial wastewater through measures including regulation, incentives, public education, and technical assistance consistent with the provisions of Rule 62-40.416, F.A.C.

(3) To demonstrate compliance with the efficiency requirement in paragraph (2)(c), a public water supply utility may propose a goal-based water conservation plan or program in lieu of the measures in subparagraphs 62-40.412(2)(c)1. through 7., F.A.C., above, or other standard requirements of a District. Such a plan or program shall allow flexibility in choosing water conservation measures to be implemented, and be affordable. The goal-based water conservation plan or program may include any of the measures in subparagraphs 62-40.412(2)(c)1. through 7., F.A.C., above, efficient and effective use of reclaimed or recycled water, educational or incentive programs, or other effective measures proposed by the water supply utility. Progress toward goals must be measurable. If a public water supply utility proposing a water conservation plan or program provides reasonable assurance that the plan or program will achieve effective water conservation at least as well as the standard water conservation requirements adopted by the appropriate District, then the District shall approve the plan or program, and the plan or program shall satisfy water conservation requirements imposed as a condition to obtaining a consumptive use permit. For purposes of this subsection, the term "public water supply utility" shall include both publicly-owned and privately-owned public water supply utilities.

(4) In order to incentivize conservation of water, if actual water use is less than permitted water use due to documented implementation of water conservation measures, the permitted allocation shall not be modified by the District due to these circumstances during the term of the permit. Nothing in this subsection shall be construed to alter the Districts' authority to reduce permitted consumptive use under circumstances not addressed by this subsection.

Rulemaking Authority 373.016, 373.019, *373.026, 373.036, 373.043, 373.171, 373.219, 373.223, 373.236 FS. Law Implemented 373.016, 373.019, 373.023, 373.026, 373.036, 373.103, 373.145, 373.171, 373.175, 373.219, 373.223, 373.227, 373.236, 373.246, 373.250, 373.418, 373.621, 373.703, 373.711, 403.064, 403.0891 FS. History– New 7-20-95, Amended 1-7-97, 5-7-05, 5-6-13.*

62-40.416 Water Reuse and Recycling.

(1) The reuse of reclaimed water, the recycling of stormwater for irrigation and other beneficial uses, and the recycling of industrial wastewater, shall be promoted. In the adoption and implementation of consumptive use permitting rules, the reuse or recycling of water shall be required of water users unless objective evidence demonstrates that such reuse or recycling is not economically, environmentally, or technically feasible. In determining economic feasibility, the consideration shall include costs and benefits of the recycled or reclaimed water use, including the amount of reclaimed or recycled water that can be produced or used relative to the cost, and, in the case of a reclaimed water provider, the likelihood that potential end users will utilize the reclaimed water. The data included in the applicable reuse feasibility study performed pursuant to Section 403.064, F.S., and the study's conclusions shall be considered by the District in making its determination of feasibility. A public water supply utility may develop a reuse or recycling plan and include that plan as part of its goal-based water conservation plan allowed by subsection 62-40.412(3), F.A.C., but inclusion of a reuse or recycling plan into a goal-based water conservation plan shall not alleviate any requirement to implement reuse when feasible.

(2) The Department encourages local governments to implement programs for reuse of reclaimed water, recycling of stormwater for irrigation and other beneficial uses, and recycling of industrial wastewater. The Districts are encouraged to establish incentives, such as longer permit duration and cost-sharing, for local governments and other interested parties to implement programs for reuse of reclaimed water and the recycling of stormwater. These rules shall not be deemed to pre-empt any such local reuse programs.

(3) Metering of reclaimed water use and implementation of volume-based charges, where a user of reclaimed water pays for service based, at least in part, on the actual metered volume of reclaimed water used, are encouraged for new reclaimed water facilities and programs to effectively manage reclaimed water supplies, when expected to result in more efficient and effective water use. The Districts are encouraged to develop incentives, including funding programs, for the installation of meters on reclaimed water.

(4) The Department and the Districts shall encourage reuse that is efficient and effective and will increase potable quality water offset or recharge fraction, where consistent with water quality protection.

(5) Reclaimed water may be presumed available to a consumptive use permit applicant when a reuse utility exists, which has determined it has uncommitted reclaimed water capacity, and that has distribution facilities, that are initially provided by the utility at its cost, to the site of affected applicant's proposed use.

(6) Wastewater utilities located within, serving a population located within, or discharging within a water resource caution area shall perform the reuse feasibility analysis pursuant to Section 403.064, F.S. A reuse feasibility study prepared under Section 403.064(6), F.S., satisfies a District requirement to prepare a reuse feasibility study.

(7) An applicant may propose an impact offset derived from the use of reclaimed water as part of a permit application.

(a) The portion of a surface water or groundwater allocation made available by an impact offset will be based on the beneficial water resource impact provided by the impact offset project. In evaluating the impact offset proposed and supported by analyses provided by the applicant, the District shall consider the degree to which the reclaimed water offsets harmful impacts otherwise caused by the withdrawal, including:

1. Saltwater intrusion;
2. Wetland or other surface water impacts;
3. Groundwater impacts;
4. Impacts to existing legal uses;
5. Harm to existing offsite land uses;
6. Other water resource impacts.

(b) If an applicant meets the conditions for permit issuance after consideration of the impact offset, the District shall incorporate the impact offset into the permit. The duration of an impact offset shall be limited to the duration of the consumptive use permit in which it is incorporated.

(c) For permits containing an impact offset, if a permittee proposes to decrease the amount of reclaimed water provided, change the location of the reclaimed water use, or change the location or amount of the surface water or groundwater withdrawal, the permittee shall apply for a permit modification for review by the District to determine the resource impacts associated with the change and determine if the conditions for permit issuance are met.

(d) When reviewing an application for renewal of a consumptive use permit containing an impact offset, the District shall renew the allocation based on the continuation of the impact offset, provided the conditions for permit issuance are met.

(e) Impact offsets shall not be granted for past actions or actions taken under existing permits unless the offsets are already authorized in a permit. This limitation shall not restrict the district's consideration of the effect of past actions when considering the potential impacts of a permit application, or consideration of a permittee's request to modify an existing permit to quantify the portion of the surface or groundwater allocation made and remaining available by an impact offset.

(8) In areas where withdrawals are unable to meet the conditions for permit issuance due to resource limitations, an applicant may propose the use of a substitution credit derived from the use of reclaimed water as part of a permit application. Such resource-limited areas include, but are not limited to, areas where a District has adopted rules limiting withdrawals from a specified water resource within a geographic area, and areas where withdrawals are limited by an adopted minimum flow or level or the associated recovery or prevention strategy.

(a) The proposed withdrawal, after application of the substitution credit, must result in no net adverse impact on the limited water resource or create a net positive impact if required by District rule as part of a strategy to protect or recover a water resource.

(b) The amount of the substitution credit may be the same as, more than, or less than the permitted withdrawal to be terminated, and is dependent on the following factors:

1. The specific timing, location, and amount of the existing permitted withdrawal to be terminated;

2. The specific timing and location of the desired withdrawal by the applicant;

3. The particular hydrogeology of the area; and

4. Whether the District's rule establishes a requirement for no net adverse impact or a net positive impact on the water resource.

(c) If an applicant meets the conditions for permit issuance after consideration of the substitution credit, the District shall incorporate the substitution credit into the permit. The duration of a substitution credit shall be limited to the duration of the consumptive use permit in which it is incorporated.

(d) The benefit of a substitution credit, or a portion thereof, shall accrue to the reuse utility providing the reclaimed water, or one or more entities designated by the reuse utility, provided the reuse utility or designated entity demonstrates a demand for the water and meets the conditions for permit issuance. If the reuse utility or designated entity cannot demonstrate a demand for all of the water made available by the reduction in the permitted withdrawal, any remaining water shall be available for use in accordance with District rules.

(e) For permits containing a substitution credit, if a permittee proposes to decrease the amount of reclaimed water provided, change the location of the reclaimed water use, or change the location or amount of the surface water or groundwater withdrawal, the permittee shall apply for a permit modification for review by the District to determine the resource impacts associated with the change and determine if the conditions for permit issuance are met.

(f) When reviewing an application for renewal of a consumptive use permit containing a substitution credit, the District shall renew the allocation based on the continuation of the substitution credit provided the conditions for permit issuance are met.

(g) Substitution credits shall not be granted for past actions or actions taken under existing permits, unless the credits are already authorized in a permit. This limitation shall not restrict the District's consideration of the effect of past actions when considering the potential impacts of a permit application, or consideration of a permittee's request to modify an existing permit to quantify the amount of any substitution credit remaining available.

(h) Substitution credits recognized in a consumptive use permit cannot be transferred to other users, except in the same manner as the permit itself and in compliance with applicable water management district rules.

(9) Supplementation of reclaimed water systems is a strategy that can benefit Florida's water resources by reducing reliance on traditional water supplies and maximizing the use of reclaimed water.

(a) When use of water for supplementation is requested, as part of the permit application review, the District shall require that an applicant provide reasonable assurance that:

1. The use of water for supplementation will increase the amount of reuse, thereby resulting in a reduction in the overall use of higher quality sources for non-potable purposes, and, if applicable, reduce the amount of reclaimed water disposal to the extent practicable; and

2. The quantity of water requested for supplementation to achieve the requirements in subparagraph 62-40.416(9)(a)1., F.A.C., has been minimized to the extent environmentally, technically, and economically feasible. When using stormwater for supplementation, environmental feasibility may include a consideration of water quality benefits achieved by reducing stormwater discharges.

(b) To meet the requirements of subparagraph 62-40.416(9)(a)2., F.A.C., the District shall require a plan from the applicant for the use of supplemental water in the reclaimed water system. The plan shall demonstrate why the requested quantity of water is

needed to reasonably meet demands, how it will be used efficiently in the system, and, if applicable, how it will be used to expand the system. The plan shall consider the following elements to the extent applicable to the utility's requested use of supplemental water in the reclaimed water system:

1. Use of lower quality water sources;
2. The appropriate level of certainty to be provided to end users during drought conditions;
3. Reclaimed water interconnects with other reuse utilities;
4. Providing customers with information explaining the need to conservatively use reclaimed water;
5. Regulatory constraints or requirements on discharges;
6. Demand management when using the supplemental water, which can include financial incentives for voluntary use reductions;
7. Creation of additional storage; and
8. Any other measures identified by the applicant to demonstrate the efficient use of supplemental water.

Rulemaking Authority 373.016, 373.019, 373.026(7), 373.036, 373.043, 373.171, 373.223, 373.236 FS. Law Implemented 373.016, 373.019, 373.023, 373.026, 373.036, 373.039, 373.042, 373.0421, 373.103, 373.171, 373.175, 373.223, 373.233, 373.236, 373.246, 373.250, 373.413, 373.414, 373.416, 373.418, 373.703, 403.0615(3), 403.064, 403.0891 FS. History–New 7-20-95, Amended 1-7-97, 5-7-05, 5-6-13, 5-3-14.

62-40.422 Interdistrict Transfer.

The following shall apply to the transfers of surface and ground water where such transfers are regulated pursuant to Part II of Chapter 373, F.S.:

(1) The transfer or use of surface water across District boundaries shall require approval of each involved District. The transfer or use of ground water across District boundaries shall require approval of the District where the withdrawal of ground water occurs.

(2) In deciding whether the transfer and use of surface water across District boundaries is consistent with the public interest pursuant to Section 373.223, F.S., the Districts shall consider the extent to which:

(a) Comprehensive water conservation and reuse programs are implemented and enforced in the area of need;

(b) The major costs, benefits, and environmental impacts have been adequately determined including the impact on both the supplying and receiving areas;

(c) The transfer is an environmentally and economically acceptable method to supply water for the given purpose;

(d) The present and projected water needs of the supplying area are reasonably determined and can be satisfied even if the transfer takes place;

(e) The transfer plan incorporates a regional approach to water supply and distribution including, where appropriate, plans for eventual interconnection of water supply sources; and

(f) The transfer is otherwise consistent with the public interest based upon evidence presented.

(3) The interdistrict transfer and use of ground water must meet the requirements of Section 373.2295, F.S.

Rulemaking Authority 373.026(7), 373.036(1)(d), 373.043, 373.171 FS. Law Implemented 373.023, 373.026, 373.036(1)(d), 373.103, 373.171, 373.1961, 373.223, 373.2295, 373.246, 373.250, 373.418, 403.064, 403.0891 FS. History–New 5-5-81, Formerly 17-40.05, 17-40.050, 17-40.402, 17-40.422, Amended 7-20-95, 5-7-05.

62-40.425 Watershed Management.

(1)A comprehensive watershed approach provides an important tool for managing the cumulative impacts of human activities. Where possible, the Department and Districts shall promote a watershed management approach for addressing water quality, water supply, natural systems, and floodplain management and flood protection issues, and shall encourage the development of comprehensive watershed management plans.

(2) It shall be a goal of watershed management programs to protect, preserve and restore the quality, quantity, and environmental values of surface and ground water resources; to prevent existing environmental, water quantity, and water quality problems from becoming worse; to reduce existing flooding problems; improve existing water quality; promote and protect the availability of sufficient water for all existing and future reasonable-beneficial uses and natural systems, and preserve or restore natural systems.

(3) As part of SWIM plans or other watershed management plans, programs, or rules, the Department, water management districts, Department of Agriculture and Consumer Services, and local governments are encouraged to implement protection measures as appropriate to enhance or preserve surface water resources. Protection measures shall be based on scientific evaluations

of targeted surface waters and the need for enhancement or preservation of these surface water resources. Protection measures shall include a combination of nonstructural pollution prevention best management practices and structural best management practices.

Rulemaking Authority 373.026(7), 373.036(1)(d), 373.043, 373.171 FS. Law Implemented 373.023, 373.026, 373.036(1)(d), 373.171, 373.1961, 373.223, 373.418, 373.451, 373.453, 403.064, 403.067, 403.0891 FS. History–New 5-7-05.

62-40.430 Water Quality.

(1) Standards.

(a) Water quality standards shall be enforced pursuant to Chapters 403 and 373, F.S., to protect waters of the State from point and nonpoint sources of pollution.

(b) State water quality standards adopted by Department rule shall be a part of the Florida Water Plan.

(2) Impaired Waters.

(a) The Department shall use a watershed management approach to develop and implement Total Maximum Daily Loads (TMDLs) for impaired waters. It shall be a goal of the TMDL watershed management program to increase coordination, cooperation, and communication between state, regional, and local government agencies, the private sector, and all watershed stakeholders. The Department's TMDL watershed management program shall strive to maximize the use of existing plans, data, and information developed for the watershed by the Districts and others.

(b) The TMDL watershed management program is based on a rotating basin approach throughout Florida's fifty-two major watersheds. To implement this approach, thirty groups of watersheds, or basins, have been specified in which a five-phase cycle will be conducted, as applicable. The five phases are:

1. Preliminary basin status evaluation leading to the development of a planning list of potentially impaired waters pursuant to Chapter 62-303, F.A.C.;

2. Strategic monitoring to collect additional information to be used in the development of a basin assessment, the development of a revised planning list of potentially impaired waters, and a verified list of impaired waters to be adopted by the Secretary and submitted to the United States Environmental Protection Agency as the state's basin specific 303(d) list of impaired waters;

3. The development of TMDLs for waters on the verified (and subsequently adopted 303(d)) list of impaired waters;

4. The development by DEP, in cooperation with the Districts and basin stakeholders, of a basin management action plan for waters with TMDLs that specifies the equitable allocation of needed pollutant load reductions, and the specific activities to be undertaken to reduce pollutant loadings to achieve the TMDLs and to restore the designated uses of the impaired waters. The basin management action plan shall include, where applicable, any written agreements among stakeholders expressing their commitment to implement the plan; and

5. The implementation of the basin management action plan and the monitoring of results.

(c) In the development of a basin management action plan, the Department shall consider regulatory and non-regulatory alternatives to reduce basin-specific nonpoint source loadings, including programs developed by the Florida Department of Agriculture and Consumer Services pursuant to Section 403.067, F.S., and the need for the adoption of basin-specific criteria for stormwater management systems. When determined by the Department, in consultation with the Districts, to be necessary to achieve a TMDL, the Department and Districts shall adopt such criteria for permitting stormwater management systems.

(d) In cooperation and coordination with the Department, the Districts shall establish pollutant load reduction goals for SWIM and other water bodies, and include them as part of a SWIM plan, other watershed management plan, or District-wide or basin-specific rules.

(e) To accelerate the restoration of impaired waters, the Districts and local governments, in cooperation and coordination with the Department, are encouraged to give priority to the development of watershed management plans for waters on the verified (and subsequently adopted 303(d)) list of impaired waters. Watershed management goals, which may include pollutant load reduction goals, shall be included in watershed management plans developed by the Districts and are encouraged in watershed management plans developed by local governments. These plans and goals shall be coordinated with the Surface Water Improvement and Management (SWIM) program, the Department's TMDL watershed management program, the National Estuary Program, and the National Pollutant Discharge Elimination System (NPDES) program.

(f) The Department and the Districts shall consider economic, environmental, and technical factors in implementing programs to achieve total maximum daily loads or pollutant load reduction goals. These goals shall be considered in local comprehensive plans submitted or updated in accordance with Section 403.0891(3)(a), F.S.

(g) Waters on the state's verified (and subsequently adopted 303(d)) list of impaired waters shall receive priority consideration for water quality restoration activities undertaken by federal agencies, state agencies, and water management districts. Local governments shall be encouraged to give similar priority consideration to waters on the list.

Rulemaking Authority 373.026(7), 373.036(1)(d), 373.043, 373.171 FS. Law Implemented 373.023, 373.026, 373.036(1), 373.103, 373.171, 373.418, FS. History–New 5-5-81, Formerly 17-40.06, 17-40.060, 17-40.403, 17-40.430, Amended 5-7-05.

62-40.431 Stormwater Management Program.

(1) Effective stormwater management is essential to reduce existing nonpoint source pollution problems and to protect surface water resources from stormwater pollution from existing and new land uses.

(2) The following goals are established to provide guidance for Department, District and local government stormwater management programs:

(a) The primary goals of the state's stormwater management program are to maintain, to the maximum extent practical, during and after construction and development, the pre-development stormwater characteristics of a site; to reduce stream channel erosion, pollution, siltation, sedimentation and flooding; to reduce stormwater pollutant loadings discharged to waters to preserve or restore designated uses; to reduce the loss of fresh water resources by encouraging the recycling of stormwater; to enhance ground water recharge by promoting infiltration of stormwater in areas with appropriate soils and geology; to maintain the appropriate salinity regimes in estuaries needed to support the natural flora and fauna; and to address stormwater management on a watershed basis to provide cost effective water quality and water quantity solutions to specific watershed problems.

(b) Inadequate management of stormwater throughout a watershed increases stormwater flows and velocities, contributes to erosion and sedimentation, overtaxes the carrying capacity of streams and other conveyances, disrupts the functions of natural systems, undermines floodplain management and flood control efforts in downstream communities, reduces ground water recharge, threatens public health and safety, and is the primary source of pollutant loading entering Florida's rivers, lakes and estuaries, thus causing degradation of water quality and a loss of designated uses. Accordingly, it is a goal to eliminate the discharge of inadequately managed stormwater into waters and to minimize other adverse impacts on natural systems, property and public health, safety and welfare caused by improperly managed stormwater.

(c) It shall be a goal of stormwater management programs to reduce unacceptable pollutant loadings from older stormwater management systems, constructed before the adoption of Chapter 62-25, F.A.C., (February 1, 1982), by developing and implementing watershed management and stormwater master plans, or District-wide or basin-specific rules, or by implementing basin management action plans.

(3) Stormwater Management Program Implementation – As required by Section 403.0891, F.S., the Department, Districts and local governments shall cooperatively implement on a watershed basis a comprehensive stormwater management program designed to minimize the adverse effects of stormwater on land and water resources. Stormwater management programs shall use a combination of nonstructural and structural best management practices as needed to protect, maintain and restore the functions of natural systems and the designated uses of waters. The stormwater management program shall be implemented through the regulation of new surface water management systems under Part IV of Chapter 373, F.S., the regulation of existing stormwater management systems under the National Pollutant Discharge Elimination System stormwater program pursuant to Section 403.0885, F.S., and through watershed management programs. All such programs shall be mutually compatible with the State Comprehensive Plan (Chapter 187, F.S.), the Local Government Comprehensive Planning and Land Development Regulation Act (Chapter 163, F.S.), the Surface Water Improvement and Management Act (Sections 373.451-.4595, F.S.), the Florida Watershed Restoration Act (Section 403.067, F.S.), Chapters 373 and 403, F.S., and this chapter. Programs shall be implemented in a manner that will improve and restore the quality of waters that do not meet their designated uses, and maintain the water quality of those waters that meet them.

(a) The Department shall be the lead agency responsible for coordinating the statewide stormwater management program by establishing goals, objectives and guidance for the development and implementation of stormwater management programs by the Districts and local governments.

(b) The Districts that have implemented a comprehensive surface water management program under Part IV of Chapter 373, F.S., shall be the chief administrators of the state stormwater management program. The Department shall implement the state's stormwater management program in Districts that do not have the economic and technical resources to implement a comprehensive surface water management program.

(c) The Department shall adopt TMDLs and the Department or the Districts, as appropriate to their responsibilities, shall set regional stormwater management goals and policies on a watershed basis, including stormwater pollutant load reduction goals necessary to preserve or restore designated uses of receiving waters. For water bodies that fully attain their designated use and meet the applicable state water quality standards, the pollutant load reduction goal shall be zero. Such goals and policies shall be implemented through District SWIM plans, through TMDLs adopted by the Department and their associated basin management action plans, through preparation of watershed management plans in other designated priority watersheds, and through appropriate regulations.

(d) Local governments shall establish stormwater management programs that are in accordance with the state and District stormwater quality and quantity goals. Local governments may establish a stormwater utility or other dedicated source of funding to implement a local stormwater management program which shall include the development and implementation of a stormwater master plan and provisions, such as an operating permit system, to ensure that stormwater systems are properly operated and maintained.

(e) Section 189.4155, F.S., requires that special districts, such as water control districts created under Chapter 298, F.S., must be consistent with the applicable local government comprehensive plan adopted under Part II, Chapter 163, F.S., in the construction and expansion of public facilities, or in a major alteration which affects the quantity or quality of the level of service of a public facility. In order to be consistent with the goals and objectives of the water resource implementation rule, water control districts created pursuant to Chapter 298, F.S., or special act, and other special districts as defined in Section 189.403(1), F.S., which have water management powers are encouraged to:

1. Be consistent with Department and district stormwater quality and quantity goals for the construction and expansion of water control and related facilities.

2. Operate existing water control and related facilities consistent with applicable Department and district stormwater quality and quantity goals. Any modification or alteration of existing water control and related facilities shall be consistent with Department and district stormwater quality and quantity goals.

Rulemaking Authority 373.026(7), 373.036(1)(d), 373.043, 373.171 FS. Law Implemented 373.023, 373.026, 373.036(1)(d), 373.046, 373.103, 373.171, 373.1961, 373.223, 373.413, 373.418, 373.451, 373.453, 403.064, 403.067, 403.0885, 403.0891, 403.0893 FS. History–New 5-7-05.

62-40.432 Surface Water Management Regulation.

(1) The following shall apply to the regulation of surface water pursuant to Part IV, Chapter 373, F.S.

(a) The construction and operation of facilities which manage or store surface waters, or other facilities which drain, divert, impound, discharge into, or otherwise impact waters in the state, and the improvements served by such facilities, shall not be harmful to water resources or inconsistent with the objectives of the Department or District.

(b) In determining the harm to water resources and consistency with the objectives of the Department or District, consideration shall be given to:

1. The impact of the facilities on:

a. Water quality;

b. Fish and wildlife;

c. Wetlands, floodplains, estuaries, and other water resources;

d. Reasonable-beneficial uses of water;

e. Recreation;

f. Navigation;

g. Saltwater or pollution intrusion, including any barrier line established pursuant to Section 373.033, F.S.;

h. Minimum flows and levels established pursuant to Sections 373.042 and 373.0421, F.S.; and

i. Other factors relating to the public health, safety, and welfare.

2. Whether the facilities meet applicable design or performance standards;

3. Whether adequate provisions exist for the continued satisfactory operation and maintenance of the facilities; and

4. The ability of the facilities and related improvements to avoid increased damage to off-site property, water resources, natural systems or the public caused by:

a. Floodplain development, encroachment or other alteration;

b. Retardance, acceleration or diversion of flowing water;

c. Reduction of natural water storage capacity;

d. Facility failure; or

e. Other actions adversely affecting off-site water flows or levels.

(2) Minimum Stormwater Treatment Performance Standards.

(a) When a stormwater management system complies with rules establishing the design and performance criteria for such systems, there shall be a rebuttable presumption that the discharge from such systems will comply with state water quality standards. The Department and the Districts, pursuant to Section 373.418, F.S., shall, when adopting rules pertaining to stormwater management systems, specify design and performance criteria for new stormwater management systems which:

1. Achieve at least 80 percent reduction of the average annual load of pollutants that would cause or contribute to violations of state water quality standards.

2. Achieve at least 95 percent reduction of the average annual load of pollutants that would cause or contribute to violations of state water quality standards in Outstanding Florida Waters.

3. If a District or the Department adopts basin-specific design and performance criteria in order to achieve an adopted TMDL or the pollutant load reduction goals established in a watershed management plan, such design and performance criteria shall replace those specified in subparagraphs 1. and 2. above.

(b) Erosion and sediment control plans detailing appropriate methods to retain sediment on-site shall be required for land disturbing activities.

(c) The pollutant loading from older stormwater management systems shall be reduced as necessary to restore or maintain the designated uses of waters.

Rulemaking Authority 373.026(7), 373.036(1)(d), 373.043, 373.171 FS. Law Implemented 373.023, 373.026, 373.036(1)(d), 373.042, 373.0421, 373.103, 373.171, 373.1961, 373.223, 373.250, 373.413, 373.414, 373.416, 373.418, 373.451, 373.453, 403.064, 403.067, 403.0891 FS. History–New 2-20-91, Formerly 17-40.420, 17-40.432, Amended 7-20-95, 1-7-97, 5-7-05.

62-40.450 Flood Protection.

Flood protection shall be implemented within the context of other interrelated water management responsibilities. Florida will continue to be dependent on some structural water control facilities constructed in the past, and new structural facilities may sometimes be unavoidable in addressing existing and future flooding or other water-related problems. However, the Department and the Districts shall promote nonstructural flood protection strategies.

(1) Flood Protection Responsibilities.

(a) Local governments have the primary responsibility for regulating land use, enforcing construction criteria for flood prone areas, establishing local stormwater management levels of service, constructing and maintaining local flood control facilities, and otherwise preventing flood damages to new and existing development.

(b) District flood protection responsibilities relate primarily to serving regional water conveyance and storage needs. Districts have the authority to plan, construct, and operate water control facilities, as well as regulate discharges into works of the District or facilities controlled by the District.

(c) Rules adopted under Part IV of Chapter 373, F.S., shall require that appropriate precautions be taken to protect public health and safety in the event of failure of any water control structures, such as pumps and levees.

(d) Department and District programs shall discourage siting of incompatible public facilities in floodplains and flood prone areas wherever possible. Where no feasible alternative exists to siting an incompatible public facility in a floodplain or flood prone area, the facility shall be designed to minimize flood damage risks and adverse impacts on natural flood detention and conveyance capabilities.

(e) Each District shall clearly define in its District Water Management Plan, in basin specific plans, or rules, the District's responsibilities related to flood emergencies, including its mechanisms for coordinating with emergency response agencies.

(2) District Facilities.

(a) District water control facilities shall be operated and maintained in accordance with established plans or schedules.

(b) Districts shall assess the design characteristics and operational practices of existing District water control facilities to ascertain opportunities for minimizing adverse impacts on water resources and associated natural systems. Where feasible, facility design modifications or operational changes shall be implemented to enhance natural systems or fulfill other water management responsibilities.

Rulemaking Authority 373.026(7), 373.036(1)(d), 373.043, 373.171 FS. Law Implemented 373.023, 373.026, 373.036(1)(d), 373.086, 373.103, 373.171, 373.413, 373.414, 373.416, 373.418, 403.0891 FS. History–New 7-20-95, Amended 5-7-05.

62-40.458 Floodplain Protection.

(1) The Department and the Districts shall provide leadership to protect and enhance the beneficial values of floodplains. This shall include active coordination with local governments, special districts, and related programs of federal agencies, the Department of Community Affairs, and the Department of Health. Nothing in this section is intended to diminish the Department's and District's responsibilities regarding flood protection.

(a) The Department and the Districts shall pursue development of adequate floodplain protection information, including:

1. District determination of flood levels for priority floodplains. At a minimum, this shall include the 100-year flood level, with other flood levels to be determined where needed for watershed-specific management purposes. Districts are encouraged to determine the 10-year flood level for the purpose of assisting the Department of Health to regulate septic tanks in floodplains pursuant to Rule 64E-6.007, F.A.C.

2. Identification of floodplains with valuable natural systems for potential acquisition.

3. Identification of floodplain areas having potential for restoration of natural flow regimes.

(b) The Department and the Districts shall develop jointly a comprehensive system of coordinated planning, management, and acquisition to protect and, where feasible, enhance floodplain functions and associated natural systems in floodplains. This system shall include implementation of policies and programs to:

1. Acquire and maintain valuable natural systems in floodplains.

2. Protect the natural water storage and water conveyance capabilities of floodplains.

3. Where feasible, enhance or restore natural flow regimes of rivers and watercourses that have been altered for water control purposes.

(c) District regulatory programs shall minimize incompatible activities in floodplains. For regulated floodplains, each District, at a minimum, shall ensure that such activities:

1. Will not result in significant adverse effects on surface and ground water levels and surface water flows.

2. Will not result in significant adverse impacts to existing surface water storage and conveyance capabilities of the floodplain.

3. Will not result in significant adverse impacts to the operation of District facilities.

4. Will assure that any surface water management facilities associated with the proposed activity will be capable of being effectively operated and maintained.

5. Will not cause violations of water quality standards in receiving waters.

6. Will not otherwise be harmful to water resources.

(2) Each District shall provide to local governments and water control districts available information regarding floodplain delineation and floodplain functions and associated natural systems, and assist in developing effective measures to manage floodplains consistently with this chapter.

Rulemaking Authority 373.026(7), 373.036(1)(d), 373.043, 373.171 FS. Law Implemented 373.023, 373.026, 373.036(1)(d), 373.103, 373.171, 373.413, 373.414, 373.416, 373.418 FS. History–New 7-20-95, Amended 5-7-05.

62-40.470 Natural Systems Protection and Management.

Programs, plans, and rules to accomplish natural systems protection and management shall include rules to address adverse cumulative impacts, the establishment of minimum flows and levels (Rule 62-40.473, F.A.C.) and may include reservations and other protection measures for surface water resources (Rules 62-40.425, 62-40.430, and 62-40.431, F.A.C.).

Rulemaking Authority 373.026(7), 373.036(1)(d), 373.043, 373.171 FS. Law Implemented 373.023, 373.026, 373.036(1)(d), 373.042, 373.0421, 373.103, 373.171, 373.1961, 373.223, 373.246, 373.418, 403.0891 FS. History–New 7-20-95, Amended 5-7-05.

62-40.473 Minimum Flows and Levels.

(1) In establishing minimum flows and levels pursuant to Sections 373.042 and 373.0421, F.S., consideration shall be given to natural seasonal fluctuations in water flows or levels, nonconsumptive uses, and environmental values associated with coastal, estuarine, riverine, spring, aquatic, and wetlands ecology, including:

(a) Recreation in and on the water;

(b) Fish and wildlife habitats and the passage of fish;

(c) Estuarine resources;

(d) Transfer of detrital material;

(e) Maintenance of freshwater storage and supply;

(f) Aesthetic and scenic attributes;

(g) Filtration and absorption of nutrients and other pollutants;

(h) Sediment loads;

(i) Water quality; and

(j) Navigation.

(2) Water bodies experience variations in water flows and levels that often contribute to significant functions of the system, such as those described in subsection 62-40.473(1), F.A.C. Minimum flows and levels should be expressed as multiple flows or levels defining a minimum hydrologic regime, to the extent practical and necessary to establish the limit beyond which further withdrawals would be significantly harmful to the water resources or the ecology of the area as provided in Section 373.042(1), F.S. However, a minimum flow or level need not be expressed as multiple flows or levels if other resource protection tools, such as reservations implemented to protect fish and wildlife or public health and safety, that provide equivalent or greater protection of the hydrologic regime of the water body, are developed and adopted in coordination with the minimum flow or level.

(3) Established minimum flows and levels shall be protected during the construction and operation of water resource projects and, where relevant, to the issuance of permits pursuant to Section 373.086 and Parts II and IV of Chapter 373, F.S.

(4) Established minimum flows and levels shall be protected during declaration of a water shortage pursuant to Section 373.175 or 373.246, F.S., except when the drought is of a severity that such protection would compromise public health and safety, or such protection would otherwise be inconsistent with the public interest as determined by the governing board.

(5) After the effective date of this rule, recovery and prevention strategies shall be developed as follows:

(a) At the time the minimum flow or level is initially adopted, if the water body is below or is projected to fall within 20 years below, the initial minimum flow or level, the District shall simultaneously approve the recovery or prevention strategy required by Section 373.0421(2), F.S.

(b) After the initial adoption, when a minimum flow or level is revised, if the water body is below or is projected to fall within 20 years below, the revised minimum flow or level, the District shall simultaneously approve the recovery or prevention strategy required by Section 373.0421(2), F.S. or modify an existing recovery or prevention strategy. The District may adopt the revised minimum flow and level prior to the approval of the recovery or prevention strategy if the revised minimum flow and level is less constraining on existing or projected future consumptive uses.

(c) For water bodies without a prevention or recovery strategy, when the District determines the water body has fallen below, or is projected to fall within 20 years below, the adopted minimum flow or level, the District shall expeditiously approve a recovery or prevention strategy.

(6) A minimum flow or level recovery or prevention strategy shall include phasing or a timetable which will allow for the provision of sufficient water supplies for all existing and projected reasonable-beneficial uses, including development of additional water supplies and implementation of conservation and other efficiency measures concurrent with, to the extent practical, and to offset, reductions in permitted withdrawals. In the development of a recovery or prevention strategy, the District shall consider the need for water resource or water supply development, additional regulatory measures, and implementation of additional water conservation measures.

(7) All approved applicable recovery or prevention strategies shall be expeditiously implemented.

(8) For water bodies that are below their established minimum flow or level, renewals of existing consumptive use permits, increased allocations, or new withdrawals shall be allowed only if they meet applicable District rules, including those implementing the recovery or prevention strategy.

(9) A minimum flow and level priority list and schedule, meeting the requirements of Section 373.042(2), F.S. shall be submitted to the Department annually. At a minimum, the schedule shall include the minimum flows and levels planned for establishment in the next three years. The priority list shall also identify whether or not voluntary scientific peer review will be undertaken for those water bodies and the basis for the decision. The District shall identify any water bodies included on the list which may be affected by withdrawals occurring in other Districts.

(10) In determining whether to conduct voluntary independent scientific peer review of all scientific or technical data, methodologies, and models, including all scientific and technical assumptions employed in each model, used to establish a minimum flow or level pursuant to Section 373.042(4), F.S., the District shall consider:

(a) Whether or not the minimum flow or level is based on a previously peer-reviewed methodology;

(b) The level of complexity of the minimum flow and level;

(c) Whether or not the water body for which the minimum flow and level is being developed includes water resource characteristics that are substantially different than previously peer reviewed minimum flows or levels; and

(d) The degree of public concern regarding the minimum flow and level.

Rulemaking Authority 373.026(7), 373.036, 373.043, 373.171 FS. Law Implemented 373.023, 373.026, 373.036(1)(d), 373.042, 373.0421, 373.086, 373.103, 373.171, 373.175, 373.223, 373.246, 373.250, 373.413, 373.414, 373.416, 373.418, 373.451, 373.453, 373.703, 403.064, 403.0891 FS. History–New 5-5-81, Formerly 17-40.08, Amended 12-5-88, Formerly 17-40.080, 17-40.405, Formerly 17-40.473, Amended 7-20-95, 5-7-05, 5-6-13.

62-40.474 Reservations.

(1) The governing board or the department, by rule, may reserve water from use by permit applicants, pursuant to Section 373.223(4), F.S., in such locations and quantities, and for such seasons of the year, as in its judgment may be required for the protection of fish and wildlife or the public health and safety. Such reservations shall be subject to periodic review at least every five years, and revised if necessary in light of changed conditions. However, all presently existing legal uses of water shall be protected so long as such use is not contrary to the public interest.

(a) Reservations may be used for the protection of fish and wildlife to:

1. Aid in a recovery or prevention strategy for a water resource with an established minimum flow or level;

2. Aid in the restoration of natural systems which provide fish and wildlife habitat;

3. Protect flows or levels that support fish and wildlife before harm occurs;

4. Protect fish and wildlife within an Outstanding Florida Water, an Aquatic Preserve, a state park, or other publicly owned conservation land with significant ecological value; or

5. Prevent withdrawals in any other circumstance required to protect fish and wildlife.

(b) Reservations may be used for the protection of public health and safety to:

1. Prevent sinkhole formation;

2. Prevent or decrease saltwater intrusion;

3. Prevent the movement or withdrawal of groundwater pollutants; or

4. Prevent withdrawals in any other circumstance required to protect public health and safety.

(2) Reservations shall, to the extent practical, clearly describe the location, quantity, timing, and distribution of the water reserved.

(3) Reservations can be adopted prospectively for water quantities anticipated to be made available. When water is reserved prospectively, the reservation rule shall state when the quantities are anticipated to become available and how the reserved quantities will be adjusted if the actual water made available is different than the quantity anticipated.

(4) The District shall conduct an independent scientific peer review of all scientific or technical data, methodologies, and models, including all scientific and technical assumptions employed in each model, used to establish a reservation if the District determines such a review is needed. In determining whether to conduct an independent scientific peer review the District should include consideration of:

(a) Whether or not the reservation is based on a previously peer-reviewed methodology;

(b) The level of complexity of the reservation;

(c) Whether or not the water body for which the reservation is being developed includes water resource characteristics that are substantially different than previously peer reviewed reservations; and

(d) The degree of public concern regarding the reservation.

(5) During the annual development and submittal of the minimum flow and level priority list, required by Section 373.042, F.S., the District shall identify any water bodies for which a reservation of water is proposed under Section 373.223(4), F.S., and whether the reservation is proposed for the protection of fish and wildlife or the public health and safety.

Rulemaking Authority 373.026(7), 373.036, 373.043, 373.171 FS. Law Implemented 373.023, 373.026, 373.036, 373.042, 373.046, 373.103,

373.106, 373.171, 373.175, 373.223, 373.246, 373.418, 373.451, 373.453, 373.703, 403.0891 FS. History–New 5-7-06, Amended 5-6-13.

62-40.510 Florida Water Plan.

(1) In cooperation with the water management districts, regional water supply authorities, and others, the Department shall develop the Florida Water Plan pursuant to Section 373.036, F.S. The Florida Water Plan shall include:

(a) The programs and activities of the Department related to water supply, water quality, flood protection and floodplain management, and natural systems;

(b) The water quality standards of the Department;

(c) The District Water Management Plans or District Strategic Plan;

(d) Performance measures; and

(e) This chapter.

(2) At a minimum, the Florida Water Plan shall be made available on the Department's website and updated annually.

Rulemaking Authority 373.026(7), 373.036(1), 373.043, 373.171 FS. Law Implemented 373.023, 373.026, 373.033, 373.036(1), 373.042, 373.0421 373.046, 373.103, 373.171, 373.175, 373.185, 373.223, 373.246, 373.250, 373.413, 373.4135, 373.414, 373.416, 373.418, 373.423, 373.429, 373.451, 373.453, 373.703, 373.711, 403.0615(3), 403.064, 403.0891 FS. History–New 7-20-95, Amended 5-7-05, 5-6-13.

62-40.520 District Water Management Plans.

(1) Each District shall develop a comprehensive water management plan, based on at least a 20-year planning period, which is consistent with the provisions of this chapter and Section 373.036(2), F.S. District Water Management Plans are comprehensive guides to the Districts in carrying out all their water resource management responsibilities, including water supply, flood protection, water quality management, and protection of natural systems. The plans shall provide general directions and strategies for District activities, programs, and rules. They will be implemented by a schedule of specific actions of the District, which may include program development, water resource projects, land acquisition, funding, technical assistance, facility operations, and rule development.

(2) Districtwide water supply assessments shall be developed in accordance with the provisions of Section 373.036(2)(b)4., F.S. The assessment shall determine whether sources of water are adequate to supply water for all existing and projected reasonable-beneficial uses and to sustain the water resources and related natural systems. If it is determined that sources of water are not adequate, the affected area shall have a regional water supply plan developed in accordance with Section 373.0361, F.S. and Rule 62-40.531, F.A.C. The determinations shall be updated at least every 5 years. Within one year of the determination that a regional water supply plan is needed for a water supply planning region, the region shall also be designated as a water resource caution area. Domestic wastewater treatment facilities which are located within, or serve a population located within, or discharge within water resource caution areas shall be subject to the reuse requirements of Section 403.064, F.S.

(3) Based on economic, environmental, and technical analyses, a course of remedial or preventive action shall be specified for each current and anticipated future water resource problem that is identified in the District Plan.

(4) Remedial or preventive measures shall include consideration of measures such as: water supply development projects; water resource development projects; water resource restoration projects pursuant to Section 403.0615, F.S.; purchase of lands; conservation of water; development of alternative supplies such as desalination, aquifer storage and recovery, reuse of reclaimed water and recycling of stormwater and industrial wastewater; enforcement of Department or District rules; and actions taken by local government pursuant to a local government comprehensive plan, local ordinance, or zoning regulation.

(5) District Plans shall also for identify areas where collection of data, water resource investigations, water resource development or conservation projects, or the implementation of regulatory programs are necessary to address water resource problems.

(6) District plans shall address, at a minimum, the following subjects:

(a) District overview;

(b) Water management goals;

(c) Water management responsibilities, including:

1. Water supply protection and management, to include source protection and regional water supply planning;

2. Flood protection and floodplain management. This shall include the District's strategies and priorities for managing facilities and floodplains, and a schedule for District mapping of floodplains;

3. Water quality protection and management for both surface water and ground water. This shall include the District's strategies, priorities, and schedules to develop pollutant load reduction goals and any basin-specific rules as needed to assure that a TMDL is met; and

4. Natural systems protection and management. This shall reflect the schedule for establishing minimum flows and levels required by Section 373.0421, F.S.

(d) For each water management responsibility, the following shall be included:

1. Resource assessments, including identification of regionally significant water resource issues and problems within the District;

2. Water management policies for identified issues and problems; and

3. Implementation strategies for each issue and problem, including tasks, schedules, responsible entities, and measurable benchmarks.

(e) Integrated plan, describing how the water problems of each county in the District are identified and addressed;

(f) Intergovernmental coordination, including measures to implement the plan through coordination with the plans and programs of local, regional, state and federal agencies and governments; and

(g) Procedures for plan development, including definitions and public participation.

(7) A District Water Management Plan is intended to be a planning document and is not self-executing.

(8) At a minimum, District Plans shall be updated and progress assessed every five years. Each District shall include in the Plan a procedure for evaluation of the District's progress towards implementing the Plan. Such procedure shall occur at least annually and a copy of the evaluation shall be provided to the Department each year by November 15 for review and comment.

(9) Plan development shall include adequate opportunity for participation by the public and governments. Districts shall be deemed to have afforded adequate opportunity for participation to the public and governments, by holding public workshops with advance notice by publication as required by law. Districts shall hold public workshops at least 90 days before Plan acceptance or amendment by the Governing Board. At the workshops, a preliminary list of schedules to be included in the Plan shall be presented.

Rulemaking Authority 373.026(7), 373.036, 373.043, 373.171 FS. Law Implemented 373.023, 373.026, 373.033, 373.036, 373.361, 373.0391, 373.0395, 373.042, 373.0421, 373.046, 373.086, 373.103, 373.171, 373.175, 373.185, 373.1961, 373.223, 373.246, 373.250, 373.413, 373.414, 373.416, 373.418, 373.423, 373.429, 373.451, 373.453, 403.0615, 403.064, 403.067, 403.0891 FS. History–New 5-5-81, Formerly 17-40.09, Amended 12-5-88, Formerly 17-40.090, Amended 8-14-90, 12-17-91, Formerly 17-40.501, 17-40.520, Amended 7-20-95, 1-7-97, 5-7-05.

62-40.530 Department Review of District Water Management Plans.

(1) After acceptance by the District Governing Board, District Water Management Plans shall be submitted to the Department.

(2) Within sixty days after receipt of a Plan for review, the Department shall review each Plan for consistency with this chapter and recommend any changes to the Governing Board.

(3) After consideration of the comments and recommendations of the Department, the Governing Board shall, within sixty days, either incorporate the recommended changes into the Plan or state in the Plan, with specificity, the reasons for not incorporating the changes.

(4) Plan amendments shall follow the same process as for initial Plan acceptance.

Rulemaking Authority 373.026(7), 373.036(1)(d), 373.043, 373.171 FS. Law Implemented 373.023, 373.026, 373.033, 373.036(1)(d), 373.0391, 373.0395, 373.042, 373.046, 373.086, 373.103, 373.106, 373.171, 373.175, 373.185, 373.1961, 373.223, 373.246, 373.413, 373.4135, 373.414, 373.416, 373.418, 373.423, 373.429, 373.451, 373.453, 403.0615(3), 403.064, 403.0891 FS. History–New 7-20-95.

62-40.531 Regional Water Supply Plans.

(1) As part of the District Water Management Plans, each governing board shall develop a regional water supply plan for each water supply planning region for which the districtwide water supply assessment determines that sources of water are not adequate to supply water for all existing and projected reasonable-beneficial uses and to sustain the surface and ground water resources and related natural systems. The planning shall be conducted in an open public process, in coordination and cooperation with local governments, regional water supply authorities, government-owned and privately owned water utilities, self-suppliers, and other affected and interested parties. As part of meeting the requirements of Section 373.0361, F.S., for regional water supply plans:

(a) The planning horizon shall be at least 20 years and shall include intermediate water use projections for every 5 year interval.

(b) Water use estimates and projections shall be provided for the following use classes:

1. Public Supply,
2. Domestic Self Supply,
3. Agriculture,
4. Recreational Irrigation,
5. Industrial/Commercial/Institutional,
6. Thermoelectric.

(c) The University of Florida's Bureau of Economic and Business Research (BEBR) medium population projections shall be considered for population projections. Any adjustment or deviation from the BEBR projections shall be fully described and the original BEBR data shall be presented along with the adjusted data.

(2) Each plan shall fully evaluate water resource and water supply development options, including the potential for water conservation, and alternative sources such as desalination, aquifer storage and recovery, use of surface water reservoirs, and reuse of reclaimed water, to meet the regional demands.

(3) Conservation and reuse shall be evaluated to the same degree as other options.

(4) Each plan shall include water supply development projects as defined in Section 373.019(21), F.S. Water supply development projects generally include activities intended to benefit specific individual utilities or other users. Examples include the following types of projects when they provide a localized benefit: wellfields, aquifer storage and recovery wells, desalination facilities, water storage reservoirs, conservation programs to improve water use efficiency, and reuse facilities.

(5) Each plan shall provide a list of water resource development projects as defined in Section 373.019(19), F.S. Water resource development projects generally include those intended to provide regional benefits as opposed to utility-specific or localized benefits. A project that benefits a specific utility may be classified as a water resource development project if that project provides a regional benefit. Examples include the following types of projects when they provide regional benefits: aquifer recharge, aquifer storage and recovery systems, water storage reservoirs, reuse of reclaimed water projects, and water conservation programs to improve water use efficiency. Water resource development may also include studies that match reclaimed water generators with users, feasibility studies, pilot projects, demonstration projects, and mobile irrigation labs.

(6) The Regional Water Supply Plan shall include any recovery or prevention strategy developed for an adopted minimum flow or level, and account for any existing reservations of water.

(7) At the time a district updates its regional water supply plan, if the district intends to establish water reservations, it shall include in its plan a priority list and schedule for the establishment of the proposed reservations. However, nothing in this subsection shall preclude a district from adopting a rule establishing a water reservation not identified on the priority list or schedule.

(8) Each plan, or the determination of the need for a plan, shall be updated at least every 5 years.

Rulemaking Authority 373.026(7), 373.036(1), (2), 373.043, 373.171 FS. Law Implemented 373.023, 373.026, 373.036(1)(d), 373.0395, 373.042, 373.046, 373.103, 373.106, 373.171, 373.1961, 373.223, 373.246, 373.418, 373.451, 373.453, 403.0615(3), 403.064, 403.0891 FS. History–New 5-7-05.

62-40.540 Water Data.

(1) All local governments, water management districts, and state agencies are directed by Section 373.026(2), F.S., to cooperate with the Department in making available to the Department such scientific or factual data as they may possess. The Department shall prescribe the format and ensure the quality control for all water quality data collected or submitted.

(2) The Department is the state's lead water quality monitoring agency and central repository for surface water and ground water information. The Department shall coordinate Department, District, state agency, and local government water quality monitoring activities to improve data and reduce costs.

(3) The Department's FLORIDA STORET water quality data base shall be the central repository of the state's water quality data. To assure that it is readily available to the public and for use in the Department's watershed management program, all appropriate water quality data collected by the Department, Districts, local governments, and state agencies shall be placed in the FLORIDA STORET system within one year of collection.

(4) The Department's biennial state water quality assessment (the "305(b) Report") shall be the state's general guide to water quality assessment and should be used as the basis for assessments unless more recent, more accurate, or more detailed information is available. The 305(b) report shall be based, in part, on the assessment methodology set forth in Chapter 62-303, F.A.C.

(5) Appropriate monitoring of water quality and water withdrawal shall be required of permittees.

(6) The Districts shall implement a strategy for measuring, estimating, and reporting withdrawal and use of water by permitted and exempted users. Thresholds for measurement requirements and reporting applicable to permittees shall be established and adopted by rule; however, all water use permits for more than an annual average of 100,000 gallons per day shall require that the use be measured by a cost-effective method. This information shall be reported to the Districts at reasonable intervals. The Districts are encouraged to summarize and analyze water use in the District at least annually.

(7) The Department and the Districts shall coordinate in the development and implementation of a standardized computerized statewide data base and methodology to track activities authorized by environmental resource permits in wetlands and waters of the state. The data base will be designed to provide for the rapid exchange of information between the Department and the Districts. The Department will serve as the central repository for environmental resource permit data and shall specify the data base organization and electronic format in which the data are to be provided by the Districts.

Rulemaking Authority 373.026(7), 373.036(1)(d), 373.043, 373.171 FS. Law Implemented 373.023, 373.026, 373.036(1)(d), 373.103, 373.171, 373.413, 373.414, 373.418, FS. History–New 7-20-95, Amended 5-7-05.

62-40.610 Review and Application.

(1) This chapter shall be reviewed periodically, but in no case less frequently than once every four years.

(2) Within 12 months after adoption or revision of this chapter, the Districts shall have revised their rules and reviewed their programs to be consistent with the provisions contained herein.

(3) District rules adopted after this chapter takes effect shall be reviewed by the Department for consistency with this chapter.

(4) At the request of the Department, each District shall initiate rulemaking pursuant to Chapter 120, F.S., to consider changes the Department determines to be necessary to assure consistency with this chapter. The Department shall be made a party to the proceeding.

(5) District water policies may be adopted which are consistent with this chapter, but which take into account differing regional water resource characteristics and needs.

(6) A District shall initiate rulemaking or program review to consider implementation of programs pursuant to Sections 373.033, 373.042, 373.106, Part II, Part III, or Part IV of Chapter 373, F.S., where the Department or District determines that present or projected conditions of water shortages, saltwater intrusion, flooding, drainage, or other water resource problems, prevent or threaten to prevent the achievement of reasonable-beneficial uses, the protection of fish and wildlife, or the attainment of other water resource implementation rule directives.

(7) The Department and Districts shall assist other governmental entities in the development of plans, ordinances, or other programs to promote consistency with this chapter and District water management plans.

Rulemaking Authority 373.026(7), 373.036(1)(d), 373.043, 373.171 FS. Law Implemented 373.023, 373.026, 373.033, 373.036(1)(d), 373.0391, 373.0395, 373.042, 373.0421, 373.103, 373.106, 373.114, 373.171, 373.1961, 373.223, 373.246, 373.250, 373.418, 403.064, 403.0891 FS. History–New 5-5-81, Formerly 17-40.10, 17-40.100, Amended 12-17-91, Formerly 17-40.601, Formerly 17-40.610, Amended 7-20-95, 5-7-05.

b. Chapter 62-524, F.A.C.
New Potable Water Well Permitting in Delineated Areas

Florida Department of State website link to Chapter 62-524:
https://www.flrules.org/gateway/ChapterHome.asp?Chapter=62-524

CHAPTER 62-524
NEW POTABLE WATER WELL PERMITTING IN DELINEATED AREAS

62-524.200 Definitions for New Potable Water Well Permitting in Delineated Areas
62-524.420 Procedures for Delineation of Areas for Application of New Potable Water Well Permitting
62-524.430 Maps Containing Delineated Areas
62-524.550 Well Construction Requirements for New Potable Water Well Permitting in Delineated Areas
62-524.600 Water Quality Testing for New Potable Water Well Delineated Areas
62-524.650 Clearing for Use of New Potable Water Wells in Delineated Areas
62-524.700 Permit Requirements for New Potable Water Wells in Delineated Areas
62-524.710 Exemption from New Potable Water Well Permitting in Delineated Areas
62-524.720 Fees for New Potable Water Wells in Delineated Areas (Repealed 2/2012)
62-524.730 Inspections of New Potable Water Wells in Delineated Areas (Repealed 2/2012)
62-524.740 Violations and Penalties for New Potable Water Wells in Delineated Areas

62-524.200 Definitions for New Potable Water Well Permitting in Delineated Areas.

(1) “Available Potable Water System” means, for the purpose of this chapter, a public water system, as defined in Rule 62-550.200, F.A.C., which has sufficient capacity and is legally able to serve specific additional connections.

(2) “Delineated Area” means a surface area identified pursuant to Rule 62-524.420, F.A.C., within which ground water contamination is known to exist or which encompasses vulnerable areas or areas in which the Department provides a subsidy for restoration or replacement of contaminated drinking water supplies.

(3) “Ground Water Contamination” means, for the purpose of this chapter, the presence outside an applicable zone of discharge in Class F-I, G-I, or G-II ground water of one or more substances in quantities which exceed a primary drinking water maximum contaminant level as set forth in Chapter 62-550, F.A.C., present an imminent hazard pursuant to Section 403.855, F.S., or for which the State Health Officer in the Department of Health, based upon a written request from the Department, has advised the Department in writing is present in deleterious amounts. The determination, under this section, of the existence of ground water contamination based upon the presence of deleterious amounts shall not constitute the establishment of a standard under either Chapter 62-520 or 62-550, F.A.C. If the concentration of any primary drinking water standard in the natural background quality of the ground water is greater than the stated maximum contaminant level, the representative background value shall be the prevailing standard.

(4) “New Potable Water Well” means any excavation that is drilled or bored, or converted from non-potable water use, after delineation in an area delineated pursuant to Rule 62-524.400, F.A.C., when the intended use of such excavation is for the location and acquisition of ground water which supplies water for human consumption. This does not include repair of an existing potable water well.

(5) “Vulnerable area” is an area in which research or monitoring data indicate that ground water is vulnerable to nitrate contamination because of the presence of potential

sources of nitrate contamination, and because of land surface and subsurface characteristics.

Rulemaking Authority 373.309, 403.061, 403.062 FS. Law Implemented 373.309, 376.307 FS. History–New 5-16-89, Amended 3-3-92, Formerly 17-524.200, Amended 2-7-95.

62-524.420 Procedures for Delineation of Areas for Application of New Potable Water Well Permitting.

(1) Based upon available data, the Department shall identify and locate, for the purpose of application of the requirements of this chapter, areas within which ground water contamination is known to exist or which encompasses vulnerable areas or areas in which the Department provides a subsidy for restoration or replacement of contaminated drinking water supplies.

(2) The Department shall rely on data from samples collected and analyzed using Department approved quality assurance/ quality control procedures. Where quality assurance/quality control procedures are not documented the Department shall evaluate the data for completeness and accuracy in order to determine acceptability for use in delineation under this chapter.

(3) Sources of ground water data to be used for delineation of areas under this chapter shall include:

(a) Local, state, and federal agencies.

(b) Water management districts.

(c) Department programs.

(4) For wells, sites, or sources with known ground water contamination, where insufficient site specific ground water data exist for determination of contaminant plume boundaries, a delineated area shall be established in the following manner:

(a) A 1000-foot setback from the well, site or source boundary.

(b) Where data from the distribution or movement of ground water contamination indicate that a 1000-foot setback is insufficient the Department shall establish an alternate setback based on such data.

(5) For sites with a history of application of ethylene dibromide where insufficient site specific ground water data exist for determination of contaminant plume boundaries, the Department shall delineate an area which encompasses the area of application and a setback, based on data on the distribution of ethylene dibromide contamination, or a 1000-foot setback, whichever is larger.

(6) For sites where a hydrogeologic investigation of ground water has been conducted and the nature and extent of a contaminant plume is documented and sufficient data exist for predictive ground water modelling, the Department shall delineate an area which encompasses the ground water contamination and its predicted movement for the next two years.

(7) Where the source or site which resulted in an area being delineated is the subject of remediation for ground water clean-up, the effect of this remediation shall be considered by the Department in subsequent delineation updates.

(8) For areas in which the Department provides a subsidy for restoration or replacement of contaminated drinking water supplies through extending existing water lines or developing new water supply systems under Sections 376.307(4)(b)3. and (c),

F.S., the Department shall delineate an area which encompasses such extended water lines or water lines constructed as part of a new water system and a 1000-foot setback.

(9) For areas in which the Department determines that ground water is vulnerable to contamination with nitrate, the Department shall delineate such vulnerable areas. The Department shall determine where vulnerable areas exist by using the following information when available:

(a) Physical properties of soils;

(b) Vadose zone media;

(c) Hydrogeologic characteristics of aquifer systems;

(d) Depth to ground water;

(e) Recharge;

(f) Karst features;

(g) Topography;

(h) Presence of Class G-II ground water or other potable ground water with less than 10,000 mg/L total dissolved solids;

(i) Water quality data; and

(j) Nitrogen application or loading rates for potential sources of nitrate contamination.

(10) In delineating areas under this rule, the Department shall coordinate with other affected agencies, particularly those receiving delegation under Rule 62-524.800, F.A.C., in the technical aspects of delineation.

(11) The Department shall present delineated areas to the Environmental Regulation Commission for approval at rulemaking public hearings duly noticed as required by Section 120.54, F.S.

(a) At such public hearings the Commission, when approving delineated areas, shall consider the known ground water contamination and its projected movement until the next delineation update.

(b) If requested by the Commission, the Department shall present the data, predictive ground water modelling, and mapping procedure used to delineate each area presented to the Commission.

(c) The Commission shall consider any other competent evidence regarding delineated areas.

(d) Approval by the Commission of a delineated area shall result in that area being included on maps or other means of location and description prepared by the Department as described in subsections (12) and (13). Each approved map or other means of location and description shall contain an effective date and shall be made available as provided in subsections (12) and (13).

(12) To facilitate the permitting process, the Department shall provide maps which indicate all sections which contain any portion of a delineated area. Prior to construction of a new potable water well within a mapped section, the potential applicant should contact the appropriate permitting authority which shall determine if the proposed well is within a delineated area. Such maps or other information shall be made available by the Department to interested persons upon written request and upon payment of appropriate costs.

(13) Following each update, the Department shall make available to water management districts, regional planning councils, the Department of Health, and county building and zoning departments, maps or other information on areas for application of

the requirements of this chapter.

(a) Where maps are provided, they shall be of an appropriate scale as determined by the Department based on the accuracy and precision of the data.

(b) For each delineated area the Department shall provide a list of those contaminants to be tested pursuant to Rule 62-524.600, F.A.C., and shall specify any casing or solvent bond restrictions.

(14) Maps or other information on areas for application of the requirements of this chapter shall be periodically updated by the Department. Additional areas, or revision to existing areas, for application of the requirements of this chapter may be delineated at any time as technical information becomes available.

Rulemaking Authority 373.309, 403.061, 403.062 FS. Law Implemented 373.309, 376.307 FS. History–New 5-16-89, Amended 3-25-90, 7-4-91, 5-6-93, Formerly 17-524.420, Amended 2-7-95, 12-9-96.

62-524.430 Maps Containing Delineated Areas.

The following maps, which are incorporated herein by reference, show surface areas, delineated pursuant to Rule 62-524.420, F.A.C. Each map listed contains a month and year which corresponds to the date the Department prepared the most recent map showing any portion of a delineated area. Copies of these maps may be examined at the Department of Environmental Protection, Bureau of Information Systems, or copies may be obtained, upon receipt of reproduction and other appropriate costs, from the Department of Environmental Protection, Bureau of Information Systems, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

(1) ALACHUA COUNTY:

Archer	11/94
Gainesville East	11/94
High Springs	11/94
High Springs SW	11/94
Micanopy	11/94
Monteocha	11/94
Newberry	11/94
Orange Heights	11/94
Waters Lake	11/94

(2) BREVARD COUNTY:

Melbourne East	11/94

(3) BROWARD COUNTY:

Cooper City	11/94
Fort Lauderdale North	11/94
Fort Lauderdale South	11/94
North Miami	11/94
Port Everglades	11/94

(4)	CITRUS:	
	Crystal River	11/94
	Homosassa	11/94
(5)	COLUMBIA:	
	Columbia	11/94
	Fort White	11/94
	Lake City West	11/94
	Mikesville	11/94
(6)	DADE COUNTY:	
	Hialeah	11/94
	North Miami	11/94
	South Miami	11/94
(7)	DESOTO:	
	Arcadia	11/94
(8)	DUVAL COUNTY:	
	Baldwin	11/94
	Jacksonville	11/94
	Jacksonville Heights	11/94
	Marietta	11/94
(9)	ESCAMBIA COUNTY:	
	Cantonment	11/94
	Pensacola	11/94
	Seminole (AL)	11/94
	West Pensacola	11/94
(10)	GILCHRIST:	
	High Springs SW	11/94
	Waters Lake	11/94
(11)	GLADES COUNTY:	
	Moore Haven	11/94
(12)	HAMILTON:	
	Ellaville	11/94
	Fort Union	11/94
(13)	HARDEE:	
	Griffins Corner	11/94
(14)	HERNANDO:	
	Masaryktown	11/94
	Port Richey NE	11/94
	Weekiwachee Springs	11/94
(15)	HIGHLANDS COUNTY:	
	Avon Park	11/94
	Child	11/94
	Crewsville	11/94

	Frostproof	11/94
	Lake Arbuckle	11/94
	Lake Arbuckle SW	11/94
	Lake June In Winter	11/94
	Lake Placid	11/94
	Sebring	11/94
	Venus SW	11/94
(16)	HILLSBOROUGH COUNTY:	
	Brandon	11/94
	Citrus Park	11/94
	Dover	11/94
	Ft. Lonesome	11/94
	Lithia	11/94
	Lutz	11/94
	Plant City West	11/94
	Sulphur Springs	11/94
	Tampa	11/94
	Thonotosassa	11/94
	Wimauma	11/94
(17)	INDIAN RIVER:	
	Vero Beach	11/94
(18)	JACKSON COUNTY:	
	Alford	11/94
	Bascom	11/94
	Campbellton	11/94
	Cottondale East	11/94
	Cottondale West	11/94
	Cypress	11/94
	Dellwood	11/94
	Fairchild (GA)	11/94
	Graceville	11/94
	Kynesville	11/94
	Malone	11/94
	Marianna	11/94
	Oakdale	11/94
	Grangeburg (AL)	11/94
	Saffold (AL)	11/94
	Sills	11/94
	Sneads	11/94
	Steam Mill (GA)	11/94
(19)	LAKE COUNTY:	
	Astatula	11/94
	Center Hill	11/94
	Clermont East	11/94

	Clermont West	11/94
	Eustis	11/94
	Howey In The Hills	11/94
	Lake Louisa	11/94
	Lake Louisa SW	11/94
	Lake Nellie	11/94
	Leesburg East	11/94
	Mascotte	11/94
	Sorrento	11/94
	Umatilla	11/94
(20)	LEON COUNTY:	
	Tallahassee	11/94
(21)	LEVY:	
	Morriston	11/94
(22)	MADISON:	
	Cherry Lake	11/94
	Madison	11/94
	Nankin (GA)	11/94
	Pinetta	11/94
(23)	MANATEE:	
	Ft. Lonesome	11/94
	Wimauma	11/94
(24)	MARION COUNTY:	
	Belleview	11/94
	Lady Lake	11/94
	Lake Weir	11/94
	Ocala East	11/94
	Ocala West	11/94
	Oxford	11/94
(25)	MARTIN COUNTY:	
	Indiantown	11/94
	Okeechobee 4 SE	11/94
(26)	ORANGE COUNTY:	
	Apopka	11/94
	Astatula	11/94
	Clermont East	11/94
	Eustis	11/94
	Forest City	11/94
	Lake Jessamine	11/94
	Lake Louisa	11/94
	Orlando East	11/94
	Orlando West	11/94
	Sorrento	11/94
	Windermere	11/94
	Winter Garden	11/94

(27)	OSCEOLA:	
	Ashton	11/94
	Intercession City	11/94
	Lake Louisa SW	11/94
	Narcoossee	11/94
(28)	PASCO:	
	Lutz	11/94
(29)	PINELLAS:	
	Elfers	11/94
(30)	POLK COUNTY:	
	Alturas	11/94
	Auburndale	11/94
	Babson Park	11/94
	Bartow	11/94
	Bereah	11/94
	Davenport	11/94
	Dundee	11/94
	Eloise	11/94
	Frostproof	11/94
	Gum Lake	11/94
	Hesperides	11/94
	Homeland	11/94
	Intercession City	11/94
	Lake Arbuckle	11/94
	Lake Louisa SW	11/94
	Lake Wales	11/94
	Lake Weohyakapka	11/94
	Lakeland	11/94
	Mulberry	11/94
	Nichols	11/94
	Plant City East	11/94
	Polk City	11/94
	Providence	11/94
	Socrum	11/94
	Winter Haven	11/94
(31)	PUTNAM:	
	Baywood	11/94
(32)	SANTA ROSA:	
	Milton South	11/94
	Pace	11/94
(33)	SEMINOLE COUNTY:	
	Aurantia	11/94
	Bithlo	11/94
	Casselberry	11/94
	Forest City	11/94

	Geneva	11/94
	Sanford	11/94
	Titusville SW	11/94
(34)	ST. JOHNS COUNTY:	
	Picolata	5/00
(35)	ST. LUCIE:	
	Fort Pierce NW	11/94
	Okeechobee 1 NE	11/94
(36)	SUMTER:	
	Bushnell	11/94
	Webster	11/94
(37)	SUWANNEE:	
	Dowling Park	11/94
	Fort Union	11/94
	Hildreth	11/94
	Hillcoat	11/94
	Live Oak East	11/94
	O'Brien	11/94
(38)	VOLUSIA COUNTY:	
	Aurantia	11/94
	De Land	11/94
	Geneva	11/94
	Orange City	11/94
	Titusville SW	11/94

Rulemaking Authority 373.309, 403.061 FS. Law Implemented 373.309 FS. History–New 3-25-90, Amended 10-4-90, 7-4-91, Formerly 17-524.430, Amended 2-7-95, 6-27-00.

62-524.550 Well Construction Requirements for New Potable Water Well Permitting in Delineated Areas.

(1) New potable water wells shall comply with the minimum construction standards contained in Rule 62-532.500, F.A.C. Additional requirements may be assigned by the permitting authority relative to depth restrictions, location of screened or open hole interval, and length of casing where warranted by local specific information.

(2) Methods for constructing new potable water wells shall be limited to rotary drilling, boring, or other method specifically approved by the permitting authority pursuant to subsection 62-524.700(1), F.A.C., which meets the water well construction criteria in Rule 62-532.500, F.A.C., except as required below.

(a) Well casing and liner pipe shall be new, free of breaks, corrosion and dents, straight and true, and not out of round. Welded or seamless black or galvanized steel pipe or casing, or stainless steel pipe or casing, or approved types of nonmetallic pipe shall be used for well casing or liner pipe.

(b) Solvent-bonded couplings shall be prohibited in areas with known ground water

contamination which includes solvent components.

(c) To prevent the interchange of water and loss of artesian pressure, contaminated, unconfined ground water intervals shall be sealed off prior to drilling through the underlying confining interval. Uncontaminated, unconfined ground water intervals shall be sealed off or otherwise protected prior to drilling into deeper, contaminated ground waters.

(d) For any well casing installed in a bore hole, the annular space shall be filled from bottom to top with not less than a nominal two inch thickness of neat cement grout.

(e) A concrete pad measuring three feet by three feet by four inches shall be constructed around the elevated portion of the casing so that the casing is centered in the pad to prevent soil erosion and seepage of surface contamination into the annular space.

(f) A minimum elevation of one foot of casing above land surface shall be required.

(g) A raw water tap shall be provided to allow sampling of the well before exposure to storage or treatment.

(h) The well casing shall be visibly and permanently marked above the land surface with the latitude and longitude and the permit number issued by the permitting authority for that well.

(i) To the extent practical, potable water wells shall be located outside an area delineated under Rule 62-524.420, F.A.C.

(j) Where the source of contamination and the direction of ground water flow are known, in an area delineated under Rule 62-524.420, F.A.C., to the extent practical, potable water wells shall be located upgradient of the source.

(k) New potable water wells shall be located on ground least subject to inundation.

(l) Any new potable water well constructed within a delineated area that does not meet the construction standards of this section shall be abandoned and plugged in accordance with Rule 62-532.500, F.A.C., and applicable water management district rules.

Rulemaking Authority 373.309, 403.061, 403.062 FS. Law Implemented 373.309 FS. History–New 5-16-89, Amended 3-25-90, 3-3-92, Formerly 17-524.550, Amended 12-9-96.

62-524.600 Water Quality Testing for New Potable Water Well Delineated Areas.

(1) New potable water wells shall be tested using methods as specified in Rule 62-524.420, F.A.C., for the presence in the untreated water of the ground water contamination which resulted in the delineation.

(2) The Department shall accept only test results obtained from water samples collected and analyzed by the Department of Health. The well construction permit applicant shall be responsible for the cost of sample collection, shipping, and analysis.

Rulemaking Authority 373.309, 403.061, 403.062 FS. Law Implemented 373.309 FS. History–New 5-16-89, Amended 3-3-92, 5-6-93, Formerly 17-524.600.

62-524.650 Clearing for Use of New Potable Water Wells in Delineated Areas.

(1) If no ground water contamination is found upon testing of a new potable water well in a delineated area pursuant to Rule 62-524.600, F.A.C., the Department of Health

shall be responsible for issuance of a letter of clearance to the well construction permit applicant.

(2) If ground water contamination is found upon testing pursuant to Rule 62-524.600, F.A.C., or other ground water contamination is found, a well shall not be cleared for use without a demonstration, through water quality testing, that a filter or other permanent remedy prevents the users of the well from being exposed through ingestion, inhalation, or dermal absorption, as appropriate for a contaminant, to ground water contamination.

Rulemaking Authority 373.309, 403.061, 403.062 FS. Law Implemented 373.309 FS. History–New 3-3-92, Formerly 17-524.650, Amended 12-9-96.

62-524.700 Permit Requirements for New Potable Water Wells in Delineated Areas.

(1) A construction permit shall be obtained from the appropriate water management district pursuant to Rule 62-524.800, F.A.C., for all new potable water wells prior to installation or conversion. Applicants shall submit a proposed well design with the completed application, and the permit fee, to the permitting authority. Permit application shall be made under existing well construction permitting programs pursuant to Chapter 62-532, F.A.C., using forms adopted by the permitting authority for this purpose. In addition to the general requirements of this chapter, the permit shall address the following requirements through special conditions:

(a) Well construction including method of construction, depth, location of cased and screened intervals, casing material and grouting.

(b) Any special cleaning requirements for casing or drilling equipment.

(c) Water quality testing.

(d) Unique well identifiers where needed.

(2) Permitting and construction of new potable water wells, except for a well to be used for a public water system as defined in Rule 62-550.200, F.A.C., are prohibited in delineated areas where a distribution line of an available potable water system is within 500 feet of the boundary of the property for which a well construction permit is being sought. Such prohibition applies unless the property owner or applicant obtains documentation from the public water system or the Department's Water Supply Restoration and Replacement Program, and submits such documentation to the permitting entity, which demonstrates either of the following:

(a) That economic factors caused by physical or legal impediments to construction to a distribution line prevent the property owner or permit applicant from obtaining potable water through connection to the distribution line; or

(b) That necessary water distribution line extensions (excluding plumbing and meters) cannot be completed within 30 days of application to the Department for water supply restoration or replacement.

Rulemaking Authority 373.309, 403.061, 403.062 FS. Law Implemented 373.309 FS. History–New 5-16-89, Amended 3-3-92, Formerly 17-524.700, Amended 12-9-96.

62-524.710 Exemption from New Potable Water Well Permitting in Delineated Areas.

Exemption from the requirements of Rule 62-524.700, F.A.C., shall be granted to an applicant by the Department or the permitting authority upon demonstration using

hydrogeological, water quality, and other pertinent information that the exemption will not result in the impairment of the intent and purpose of this chapter. Detailed requirements for each exemption shall be negotiated between the permit applicant and the permitting authority on a case by case basis.

Rulemaking Authority 373.309, 403.061, 403.062 FS. Law Implemented 373.309, 373.326 FS. History–New 5-16-89, Formerly 17-524.710.

62-524.720 Fees for New Potable Water Wells in Delineated Areas.

Rulemaking Authority 373.309, 403.061, 403.062 FS. Law Implemented 373.309 FS. History–New 5-16-89, Amended 3-3-92, Formerly 17-524.720, Repealed 2-16-12.

62-524.730 Inspections of New Potable Water Wells in Delineated Areas.

Rulemaking Authority 373.309, 403.061, 403.062 FS. Law Implemented 373.309, 373.319 FS. History–New 5-16-89, Formerly 17-524.730, Repealed 2-16-12.

62-524.740 Violations and Penalties for New Potable Water Wells in Delineated Areas.

(1) Prohibited Acts.

(a) It shall be a violation of Section 373.309, F.S., and this chapter to construct, convert from non-potable use, or abandon any potable water well, or use for human consumption any well subject to permit under this chapter without having obtained a permit pursuant to Rule 62-524.700, F.A.C. This prohibition shall apply to both the water well contractor and the well owner.

(b) It shall be a violation of Section 373.309, F.S., and this chapter to use for human consumption, after delineation, any water well subject to permit under this chapter without having performed water quality testing pursuant to Rule 62-524.600, F.A.C.

(c) It shall be a violation of Section 373.309, F.S., and this chapter to use for human consumption, after delineation, any water well subject to permit under this chapter in which contaminants have been found without a demonstration through water quality testing that a filter or other means of preventing the users of such a well from being exposed to ground water contamination is effective.

(2) Penalties.

(a) Any person who violates any provision of this chapter, order, or permit issued under the authority of this chapter shall, upon conviction, be guilty of a misdemeanor of the second degree, punishable as provided in Sections 775.082 and 775.083, F.S. Continuing violation after an order or conviction shall constitute a separate violation for each day the violation occurs.

(b) Any water well contractor who is in violation of paragraph (1)(a) shall, in addition to paragraph (2)(a), also be subject to the penalty provisions in Chapter 62-531, F.A.C., including the license suspension and revocation provisions contained therein.

Rulemaking Authority 373.309, 403.061, 403.062 FS. Law Implemented 373.309, 373.323, 373.336 FS. History–New 5-16-89, Amended 3-25-90, Formerly 17-524.740.

c. Chapter 62-531, F.A.C.
Water Well Contractor Licensing Requirements

Florida Department of State website link to Chapter 62-531:
https://www.flrules.org/gateway/ChapterHome.asp?Chapter=62-531

CHAPTER 62-531
WATER WELL CONTRACTOR LICENSING REQUIREMENTS

62-531.200 Definitions Used in Water Well Contractor Rules
62-531.300 Application Requirements for Water Well Contractors
62-531.330 Water Well Contractor License Renewal
62-531.340 Water Well Contractor Fees
62-531.350 Water Well Contractor Examinations
62-531.360 Inactive Status of Water Well Contractor License
62-531.380 Display of Water Well Contractor License Number
62-531.390 Exemptions from Water Well Contractor Licensing Requirement (Repealed)
62-531.400 Procedures for Disciplinary Actions (Repealed)
62-531.450 Unlawful Acts, Grounds for Disciplinary Actions, and Penalties

62-531.200 Definitions Used in Water Well Contractor Rules.
The following words, when used in this Chapter, shall have the following meanings, except where the context clearly indicates a different meaning:

(1) "Abandonment of Water Wells" means the act of plugging a water well in accordance with Department and District rules.

(2) "Administrator" means an entity awarded a contract by the Florida Department of Environmental Protection to implement a program of approved coursework for water well contractor licensure and license renewal.

(3) "Approved Coursework" means Administrator or Department-approved training or instruction required for licensure and license renewal.

(4) "Continuing Education Credit" or "CEC" means attendance and completion of one hour (at least fifty minutes) of approved coursework or instruction that has been converted to a CEC by the Administrator or the Department.

(5) "Coursework Hour" means one hour (at least fifty minutes) of training or instruction.

(6) "Department" means the State of Florida Department of Environmental Protection.

(7) "District" means a Water Management District created pursuant to Chapter 373, F.S.

(8) "Drilling Equipment" means a drilling rig consisting of the machinery necessary to construct a well.

(9) "Construction of Water Wells" is defined in Section 373.303, F.S.

(10) "Repair" is defined in Section 373.303, F.S.

(11) "Water Well Contractor" is defined in Section 373.303, F.S.

Rulemaking Authority 373.043, 373.309, 373.337 FS. Law Implemented 373.308, 373.323, 373.324, 373.326, 373.329, 373.333 FS. History–New 5-25-89, Formerly 17-531.200, Amended 7-17-03, 6-22-14.

62-531.300 Application Requirements for Water Well Contractors.

(1) The Water Management Districts (Districts) shall accept applications for licensing as a water well contractor from any person who is at least 18 years of age, has knowledge of those rules adopted by the Department and the District which deal with the regulation of water wells, has at least two years experience in constructing, repairing, or abandoning wells, and has taken and completed a minimum of 12 approved coursework hours earned in the two-year period directly preceding the last day (July 31st) of the biennial renewal cycle. In addition, each application shall:

(a) Be submitted on forms provided by the District and delivered by mail, hand delivery, or electronic transmittal to the District and shall be accompanied by a nonrefundable application fee as set forth in Rule 62-531.340, F.A.C.

(b) Contain proof of experience as provided in subsection (7) below.

(c) Include copies of certificates of completion of approved coursework. Confirmation of approved coursework completion will be accepted from the Department or the Administrator, if available, in lieu of certificates of completion.

(d) Include a request for the water well contractor examination described by Rule 62-531.350, F.A.C.

(2) Approved coursework and CECs shall be governed by the requirements in the Water Well Contractor Continuing Education Program Manual effective date 6-22-14, https://www.flrules.org/gateway/reference.asp?NO=Ref-03954, hereby adopted and incorporated by reference, and requires the use of the following forms, which are also adopted and incorporated by reference:

(a) Coursework Certificate of Attendance and Evaluation, Florida Water Well Contractor Continuing Education Program, Form

1, effective 6-22-14, http://www.flrules.org/Gateway/reference.asp?No=Ref-04128,

(b) Florida Water Well Contractor Continuing Education Program, Certificate of Completion, Form 2, effective 6-22-14, http://www.flrules.org/Gateway/reference.asp?No=Ref-04129,

(c) Application for Continuing Education Coursework Approval, Florida Water Well Contractor Continuing Education Program, Form 3, effective 6-22-14, http://www.flrules.org/Gateway/reference.asp?No=Ref-04130, and

(d) Application for Continuing Education Course Provider, Florida Water Well Contractor Continuing Education Program, Form 4, effective 6-22-14, http://www.flrules.org/Gateway/reference.asp?No=Ref-04131.

Copies of the Water Well Contractor Continuing Education Program Manual and the forms referenced therein are available on the Department's website at www.dep.state.fl.us or by writing the Department at 2600 Blair Stone Road, MS 3580, Tallahassee, FL 32399-2400.

(3) Completion of 12 approved coursework hours shall be required for licensure. A minimum of six approved coursework hours must be specifically related and relevant to water well construction industry drilling technologies, methodologies and practices and/or applicable State of Florida water well licensing, permitting and construction statutes and rules. No more than six approved coursework hours may be specifically related and relevant to water well contruction industry health and safety requirements, practices and procedures and/or business management and accounting practices and procedures. Completion of approved coursework hours can be converted one time either to CECs for contractor licensing or for contractor license point reduction, but not both.

(4) The District shall not schedule an applicant to take the required examination until his or her application has been reviewed and the applicant has met all other licensing conditions of this Chapter. The applicant shall be provided three opportunities to take and pass the examination within 12 months after the applicant has become eligible to take the exam, otherwise the applicant must submit a new application for licensure and fee to the District.

(5) A license shall not be issued until the applicant successfully passes the required examination.

(6) A license issued by any Water Management District shall be valid in every Water Management District in the state.

(7) As set forth in Section 373.323(3), F.S., satisfactory proof of two years experience in the construction, repair, or abandonment of water wells shall be demonstrated by providing the following:

(a) Evidence of the length of time the applicant has been engaged in the business of the construction, repair, or abandonment of water wells as a major activity, as attested to by a letter from three of the following persons:

1. A water well contractor;

2. A water well driller;

3. A water well parts and equipment vendor; or

4. A water well inspector employed by a governmental agency.

(b) A list of at least ten water wells that the applicant has constructed, repaired, or abandoned within the preceding five years. Of these wells, at least seven must have been constructed, as defined in Section 373.303(2), F.S., by the applicant. The list shall also include information relating to the 10 water wells including:

1. The name and address of the owner or owners of each well;

2. The location, primary use, and approximate depth and diameter of each well that the applicant has constructed, repaired, or abandoned; and

3. The approximate date the construction, repair, or abandonment of each well was completed.

(8) If at any time after application and before licensure, information provided in the application changes, including the applicant's address or principal place of business, the applicant shall update his or her application with any such changes within 30 days of the change or upon receipt of the license, whichever is sooner.

Rulemaking Authority 373.043, 373.309, 373.337 FS. Law Implemented 287.0571, 373.323, 373.326, 373.329 FS. History–New 8-18-73, Amended 10-9-84, Formerly 17-20.02, Amended 6-16-86, Formerly 17-20.020, Amended 5-25-89, Formerly 17-531.300, Amended 7-17-03, 11-25-07, 6-22-14.

62-531.330 Water Well Contractor License Renewal.

(1) Licenses issued pursuant to this chapter shall not be transferable and shall expire on July 31st of each odd numbered year of the biennial renewal cycle. A license may be renewed without examination for an ensuing two years by making application to the licensing District not later than the expiration date of the license and paying the biennial renewal fee. A contractor shall include his

or her current address in each license renewal application. Such application shall extend the validity of the current active license until the District takes final agency action on the license renewal application.

(2) Twelve CECs shall be required for renewal of a license. A minimum of six approved coursework hours for CE credit must be specifically related and relevant to water well construction industry drilling technologies, methodologies and practices and/or applicable State of Florida water well licensing, permitting and construction statutes and rules. No more than six approved coursework hours for CEC may be specifically related and relevant to water well construction industry health and safety requirements, practices and procedures and/or business management and accounting practices and procedures.

(3) Water well contractor licenses shall be renewed only after the license holder has completed twelve approved coursework hours for CEC earned in the two-year period directly preceding the last day (July 31st) of the biennial renewal cycle. However, if a water well contractor has received his or her first license within 180 days before the end of the biennium renewal of licenses, the continuing education requirements shall be waived for the licensee's first renewal cycle. Completion of approved coursework hours can be converted one time to either CECs for contractor licensing or for contractor license point reduction, but not both.

(4) Each application for license renewal shall include copies of certificates of completion of CEUs. Confirmation of approved coursework completion will be accepted from the Department or the Administrator, if available, in lieu of certificates of completion.

(5) A Florida licensed water well contractor who teaches approved coursework shall receive one CEC for each coursework hour of instruction.

(6) If a license is not renewed pursuant to subsection (1) before July 31 of each odd numbered year, the current license shall automatically revert to inactive status and may be renewed only in accordance with the requirements in Rule 62-531.360, F.A.C.

(7) Notwithstanding the renewal requirements of this chapter and Section 373.324(3), F.S., and those in Section 250.4815, F.S., for members of the Florida National Guard and the United States Armed Forces Reserves, any active water well contractor license issued under this chapter to a service member as defined in Section 250.01, F.S., or his or her spouse, both of whom reside in Florida, shall not become inactive while the service member is serving on military orders that take him or her over 35 miles from his or her residence and shall be considered an active license for up to 180 days after the service member returns to his or her Florida residence. If the license renewal requirements are met within the 180-day extension period, the service member or his or her spouse shall not be charged any additional costs, including late fees, above the normal license fees. This subsection does not waive renewal requirements such as registering, continuing education, and all associated fees. The service member must present to the water management district issuing the license a copy of his or her official military orders or a written verification from the member's commanding officer before the end of the 180-day period in order to qualify for the extension.

(8) No application for a renewal shall be granted if the applicant's license is suspended or revoked pursuant to Rule 62-531.450, F.A.C., until the period for such suspension or revocation has expired and the applicant is in compliance with any outstanding corrective actions, orders, or payment of any fines ordered by the District or delegated permitting authority.

(9) If at any time during licensure the contractor changes his or her residence or principal place of business, which ever was initially submitted to the licensing District, the contractor shall notify the licensing District within 30 days of any change of address..

Rulemaking Authority 373.043, 373.309, 373.337 FS. Law Implemented 373.323, 373.324, 373.326, 373.329 FS. History–New 5-25-89, Formerly 17-531.330, Amended 7-17-03, 11-25-07, 6-22-14.

62-531.340 Water Well Contractor Fees.

(1) The following fees are required for water well contractor license applications, biennial renewals, and late renewals:

(a) New License: A fee of $150 shall accompany each new application for a license.

(b) Biennial License Renewal: A fee of $50 shall accompany each application for a renewal of license.

(c) Late License Renewal: After July 31 of each odd numbered year, in addition to the normal license renewal fee, a late fee of $75 shall accompany each application for renewal of a license which has been inactive for one year or less.

(d) Administrative Fee for CEUs for License Renewal: A fee of $14 per CEU shall be submitted to the Administrator with the documentation of course completion.

(2) Regular employees of a political subdivision or governmental entity engaged in water well drilling shall be licensed in accordance with this chapter, but shall be exempt from paying the fees required in this chapter.

Rulemaking Authority 373.043, 373.309 FS. Law Implemented 373.323, 373.324, 373.329 FS. History–New 5-25-89, Formerly 17-531.340, Amended 11-25-07.

62-531.350 Water Well Contractor Examinations.

(1) Water well contractor examinations shall be written, comprehensive examinations that are standardized statewide. Upon request, however, the exam can be administered orally by the District. The standardized examinations shall be prepared by the Department, in consultation with the Districts and representatives of the water well contracting industry. The examinations shall be designed to determine the applicant's knowledge of applicable rules; ability to construct, repair, and abandon a well; and ability to supervise, direct, manage, and control the contracting activities of the water well contracting business.

(2) A grade on the examination of seventy percent or more shall be passing. Results of the examination shall be reported as either passing or failing. Each applicant is entitled to review the graded examination in the District office under staff supervision. Graded examinations are exempt from public disclosure pursuant to Section 119.071(1)(a), F.S., and shall not be revealed to persons other than the applicant who completed the examination. Examinations or copies of examinations shall not be released to applicants or to the public and shall be retained by the Districts in a secured location.

(3) Examinations shall be given by the District monthly as scheduled by the District.

(4) Examinations shall be conducted at the Water Management District in which the applicant resides or in which his principal place of business is located. Examinations for out of state applicants shall be conducted in the District in which most of the business of the applicant will take place.

Rulemaking Authority 373.043, 373.308, 373.309 FS. Law Implemented 373.323, 373.329 FS. History–New 8-18-73, Amended 10-9-84, Formerly 17-20.03, 17-20.030, Amended 5-25-89, Formerly 17-531.350, Amended 11-25-07, 6-22-14.

62-531.360 Inactive Status of Water Well Contractor License.

(1) A license not renewed before July 31 of each odd numbered year shall automatically revert to inactive status. Such license may be reactivated only if the licensee meets the requirements for reactivation in subsection (3) below.

(2) At least sixty days before the automatic reversion of a license to inactive status, the District which issued the license shall mail a notice of reversion to the last known address of the licensee as it appears on the District records. If the notice is mailed less than sixty days before the automatic reversion, the licensee shall still have sixty days in which to reactivate the license.

(3) A license which has become inactive pursuant to subsection (1) above, may be renewed or reactivated upon application to the District as follows:

(a) A license which has been inactive for one year or less after July 31 of each odd numbered year may be renewed pursuant to Rule 62-531.330, F.A.C., upon application to the District and upon payment of the renewal and late fees established in Rule 62-531.340, F.A.C. Such renewed license shall expire on July 31 of the next odd numbered year.

(b) A license which has been inactive for more than one year after July 31 of each odd numbered year may be reactivated upon application to the District for licensure pursuant to Rule 62-531.300, F.A.C.

Rulemaking Authority 373.043, 373.309 FS. Law Implemented 373.325 FS. History–New 5-25-89, Formerly 17-531.360.

62-531.380 Display of Water Well Contractor License Number.

(1) The District shall assign each water well contractor a unique, permanent license number, and shall issue a certificate with that license number to the water well contractor. License numbers are not transferable and shall not be used by another water well contractor.

(2) The license number shall be continuously displayed in a conspicuous place on both sides of each piece of drilling equipment owned, leased, or operated by the contractor. The number shall be easily readable by a person with normal vision and shall be in a color which will contrast with its background. The number shall be presented in numerals not less than two inches high.

Rulemaking Authority 373.043, 373.309, 373.337 FS. Law Implemented 373.323, 373.326, 373.329 FS. History–New 8-18-73, Amended 10-9-84, Formerly 17-20.06, 17-20.060, Amended 5-25-89, Formerly 17-531.380, Amended 6-22-14.

62-531.390 Exemptions from Water Well Contractor Licensing Requirement.

Rulemaking Authority 373.043, 373.309 FS. Law Implemented 373.326 FS. History–New 5-25-89, Formerly 17-531.390, Repealed 2-16-12.

62-531.400 Procedures for Disciplinary Actions.

Rulemaking Authority 373.043, 373.309 FS. Law Implemented 120.60, 373.306, 373.309, 373.323, 373.333 FS. History–New 8-18-73, Amended 10-9-84, Formerly 17-20.05, 17-20.050, Amended 5-25-89, Formerly 17-531.400, Repealed 6-22-14.

62-531.450 Unlawful Acts, Grounds for Disciplinary Actions, and Penalties.

(1) It is unlawful for any person to commit a violation specifically enumerated in Sections 373.336(1), F.S. When the Department, Districts, or delegated permitting authority finds a person has violated rules of the Department or Water Management District, or Part III, Chapter 373, F.S., the person shall be subject to an order imposing one or more of the penalties and corrective actions established in the Water Well Construction Disciplinary Guidelines and Citations Dictionary, effective date 6-22-14, adopted and incorporated by reference herein. A copy of the Citations Dictionary is available at the Department's website at: www.dep.state.fl.us or by writing the Department at 2600 Blair Stone Road, MS 3580, Tallahassee, FL 32311-2400, http://www.flrules.org/Gateway/reference.asp?No=Ref-03955.

(2) It is unlawful for a business entity to commit a violation specifically enumerated in Section 373.336(2), F.S. When the Department, Districts, or delegated permitting authority finds a business entity has violated rules of the Department or Water Management District, or Part III, Chapter 373, F.S., the person shall be subject to an order imposing one or more of the penalties and corrective actions established in the Water Well Construction Disciplinary Guidelines and Citations Dictionary, effective date 6-22-14.

(3) It shall be a violation of this rule for any licensed contractor, or any individual attempting to obtain a license or having a revoked, suspended, or inactive license, to commit one of the grounds for disciplinary action specifically enumerated in Section 373.333, F.S. When the Department, Districts, or delegated permitting authority finds a licensed contractor, or any individual attempting to obtain a license or having a revoked, suspended, or inactive license has violated rules of the Department or Water Management District, or Part III, Chapter 373, F.S., the person shall be subject to an order imposing one or more of the fines and diciplinary actions established in the Water Well Construction Disciplinary Guidelines and Citations Dictionary, effective date 6-22-14.

(4) The Department, Districts or delegated permitting authorities shall provide for disciplinary action in accordance with the Water Well Construction Disciplinary Guidelines and Citations Dictionary, effective date 6-22-14, and as provided for in Sections 373.333 and 373.336, F.S.

Rulemaking Authority 373.043, 373.308, 373.309 FS. Law Implemented 373.306, 373.309, 373.316, 373.319, 373.333, 373.335, 373.336 FS. History–New 8-18-73, Amended 10-9-84, Formerly 17-20.09, 17-20.090, Amended 5-25-89, 12-2-92, Formerly 17-531.450, Amended 12-25-02, 11-25-07, 6-22-14.

d. Chapter 62-532, F.A.C.
Water Well Permitting and Construction Requirements

Florida Department of State website link to Chapter 62-532:
https://www.flrules.org/gateway/ChapterHome.asp?Chapter=62-532

CHAPTER 62-532
WATER WELL PERMITTING AND CONSTRUCTION REQUIREMENTS

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62-532.200 Definitions for Water Well Permitting and Construction.
The following words and phrases, when used in this chapter, shall have the following meaning, except where the context clearly indicates a different meaning:

(1) “Abandoned Well” means a well the use of which has been permanently discontinued or which is in such a state of disrepair that it cannot be used for its intended purpose or for observation purposes.

(2) “Annulus” or “Annular Space” means any artificially created void existing between a well casing or liner pipe and a bore hole wall or between two casings or between tubing and casing or liner pipe.

(3) “Aquifer” means a geologic formation, group of formations, or part of a formation capable of yielding a significant amount of ground water to wells, springs or surface water.

(4) “Bentonite” means a pumpable grouting material used for plugging or sealing water wells, consisting of a high solid sodium montmorillonite. The grout shall yield solids ranging from 20 to 30 percent, with a minimum density equal to or greater than 9.4 pounds per gallon, and a permeability of approximately 1x10-7 centimeters per second or less, or shall be dry non-treated, high swelling sodium montmorillonite. High swelling is defined as having a minimum swell index of 18 cubic centimeters as determined by ASTM standard D-5890-95.

(5) “Bottled water” means water that is intended for human consumption and that is sealed in bottles or other containers.

(6) “Bottled water plant” means a food establishment, regulated by the Florida Department of Agriculture and Consumer Services, in which bottled water is prepared for sale.

(7) “Construction of Water Wells” means all parts and acts necessary to obtain ground water by wells, including the location and excavation of the well, but excluding the installation of pumps and pumping equipment.

(8) “Department” means the Department of Environmental Protection.

(9) “Dewatering” means the use of wells or other such equipment to temporarily lower a water level as may be necessary during construction activities.

(10) “District” means a water management district created pursuant to Chapter 373, F.S.

(11) “Drive Shoe” means any device specifically designed, fabricated, and installed to protect the bottom end of a water well casing or liner pipe from collapse or other damage while the casing or liner pipe is being driven into place in a water well.

(12) “Driven Casing” means casing that has been installed by driving where the bore hole is equal to or smaller in diameter than the nominal outside diameter of the casing.

(13) “Geothermal well” means a type of well used for the purpose of developing ground water as a medium for thermal heat exchange.

(14) “Limited use commercial public water system” means a public water system not covered or included in the Florida Safe Drinking Water Act, which serves one or more nonresidential establishments

and provides piped water.

(15) “Limited use community public water system” means a public water system not covered or included in the Florida Safe Drinking Water Act, which serves five or more private residences or two or more rental residences, and provides piped water.

(16) “Liner” means a metallic or nonmetallic pipe which is installed either within the outer casing to improve, repair, or protect the outer casing or below the outer casing to seal off caving material which may be encountered in the open hole of the well.

(17) “Multifamily water system” means a water system that provides piped water for three to four residences, one of which may be a rental residence.

(18) “Neat Cement Grout” means a mixture of water and Portland cement (American Concrete Institute Type I, Type II, or Type III); or a mixture of water and Portland cement of a type or kind approved by the permitting authority; or a mixture of water, Portland cement of a type or kind approved by the permitting authority, and an amount of those additives approved for use in cement grouts and approved by the permitting authority.

(19) “Nominal” means those standard sizes of pipe from one-eighth inch to 12 inches, specified on the inside diameter, which may be less than or greater than the number indicated. When referred to the grouting annulus, nominal means either the available void thickness between telescoped casing varying less than 0.20 inches below standard where one inch of grout is required and 0.35 inches below standard where two inches of grout is required, or the average available void thickness between the borehole and outside wall of the casing.

(20) “Permitting Authority” means the Department or any district, or political subdivision that has been delegated the authority to issue permits under Chapter 373, Part III, F.S.

(21) “Potable water” means water that is satisfactory for human consumption, dermal contact, culinary purposes, or dishwashing.

(22) “Private water system” means a water system that provides piped water to one or two residences, one of which may be a rental residence.

(23) “Public water system” means a system for the provision to the public of water for human consumption through pipes or other constructed conveyances, if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.

(24) “Repair” means any action which involves the physical alteration or replacement of any part of a well, but does not include the alteration or replacement of any portion of a well which is above ground surface.

(25) “Telescoping Casing” means an interior casing extending below and sealed within an exterior casing.

(26) “Water Well” or “Well” means any excavation that is drilled, cored, bored, washed, driven, dug, jetted, or otherwise constructed when the intended use of such excavation is for the location, acquisition, development, or artificial recharge of ground water, but such term does not include any well for the purpose of obtaining or prospecting for oil, natural gas, minerals, or products of mining or quarrying; for inserting media to dispose of oil brines or to repressure oil-bearing or natural gas-bearing formation; for storing petroleum, natural gas, or other products; or for temporary dewatering of subsurface formations for mining, quarrying, or construction purposes.

(27) “Water Well Contractor” means an individual who is responsible for the construction, repair, or abandonment of a water well and who is licensed under Chapter 62-531, F.A.C., to engage in the business of construction, repair, or abandonment of wells.

(28) “Well Seal” means an approved arrangement or device to prevent contaminants from entering the well at the upper terminal.

Rulemaking Authority 373.309 FS. Law Implemented 373.303, 381.0062, 403.852 FS. History–New 8-17-74, Amended 7-16-81, Formerly 17-21.02, 17-21.020, Amended 7-30-89, 3-11-92, Formerly 17-532.200, Amended 3-28-02, 10-7-10.

62-532.400 Permit for Water Well Construction, Repair, or Abandonment.

(1) After the effective date upon which a district implements a permit system pursuant to Chapter 373, Part III, F.S., a permit shall be required before beginning construction, repair, or abandonment of any water well within such area. The permit shall be obtained from the permitting authority by making written application on Form Number 62-532.900(1), State of Florida Permit Application to Construct, Repair, Modify, or Abandon A Well, adopted and incorporated herein, and available as described in Rule 62-532.900, F.A.C. The application shall be made and submitted to the permitting authority by the owner or by the water well contractor on behalf of the owner. Any required fee shall be submitted with the permit application.

(2) Permit issuance shall require that:

(a) The application is in the proper form and contains the required information; provided that the proposed construction, repair, or abandonment will not violate applicable laws, rules, or orders of the permitting authority.

(b) Additional information shall be required by the permitting authority if needed to assess site specific conditions. Such information includes geophysical logs, geologic samples and logs, and well pumping tests.

(3) Receipt of the permit by the applicant shall constitute permission to begin well construction, repair, or abandonment.

(4) The permit shall be available for inspection at the site of the well during construction, repair, or abandonment of the well.

(5) Any permittee who desires to change the location of a well before the start of construction or before construction is completed shall apply to the permitting authority for an amendment to the well construction permit. When a permit fee was required to obtain the original permit no additional fee shall be charged to amend the permit. As a condition to approving an amended permit, the permitting authority shall require the sealing or plugging of any incomplete well.

(6) Each permit shall be valid for a period of one year. In the event construction, repair, or abandonment is not completed within that time, the permitting authority shall extend the time limit upon written request by the permittee or require the applicant to obtain a new permit before continuing construction, repair, or abandonment of a water well.

(7) Water wells shall be located to comply with the setback distances in Table I at the end of this chapter.

(8) A drinking water supply well installed by an installation used to serve that installation's operation is exempt from meeting the 500-foot setback distance from on-site slow rate and rapid rate land application flow systems, domestic wastewater residuals land application, phosphogypsum stack systems, and solid waste disposal facilities if reasonable assurance is provided by the installation owner that the ground water and drinking water source are protected. Reasonable assurance shall be demonstrated if:

(a) The planned withdrawal from the drinking water supply well will not cause the discharge from the operation to be captured by the well, or

(b) The drinking water supply well is withdrawing from a confined aquifer, or

(c) Additional monitoring of the ground water and the drinking water is provided to ensure that contaminants are not reaching the drinking water supply well and a commitment is made to treat the drinking water supply if a contaminant is detected or to provide an alternate drinking water supply, and

(d) The setback distances from sanitary hazards as provided in Table I shall apply.

Rulemaking Authority 373.309 FS. Law Implemented 373.306, 373.308, 373.309, 373.316, 403.862 FS. History–New 8-17-74, Amended 9-10-78, Formerly 17-21.04, 17-21.040, Amended 7-30-89, 3-11-92, Formerly 17-532.400, Amended 3-28-02, 10-7-10.

62-532.410 Water Well Completion Report.

Within 30 days after completion of the construction, repair, or abandonment of any water well, a written report shall be filed with the permitting authority on Form Number 62-532.900(2), State of Florida Well Completion Report, adopted and incorporated herein, and available as described in Rule 62-532.900, F.A.C.

Rulemaking Authority 373.309 FS. Law Implemented 373.309 FS. History–New 8-17-74, Formerly 17-21.05, 17-21.050, Amended 7-30-89, Formerly 17-532.410, Amended 10-7-10.

62-532.420 Emergency Water Well Permits.

(1) Permission to begin construction, repair, or abandonment of any well may be applied for by telephone when emergency conditions exist that justify such a request. The permitting authority shall grant an emergency permit to avert an imminent and substantial danger to the public health, safety, or welfare.

(2) The applicant for an emergency permit shall reduce his application to writing in accordance with the provisions of Rule 62-532.400, F.A.C., and submit it within ten days. All other provisions of this chapter shall remain applicable.

Rulemaking Authority 373.309 FS. Law Implemented 373.306, 373.309, 373.313, 373.326 FS. History–New 8-17-74, Formerly 17-21.06, 17-21.060, Amended 7-30-89, Formerly 17-532.420, Amended 10-7-10.

62-532.430 Intent to Deny a Water Well Construction Permit.

(1) The permitting authority shall issue an intent to deny whenever it determines that an application for a permit under Rule 62-532.400, F.A.C., fails to meet the requirements of Chapter 373, F.S., or any rule, order, or standard adopted pursuant thereto, or that the proposed well will be harmful to the water resources of the State.

(2) The intent to deny shall:

(a) State the grounds for denial, and

(b) Be served in writing upon the owner and user by registered or certified mail.

(3) Any person receiving an intent to deny may petition for hearing by filing a written petition with the permitting authority within 30 days of the receipt of the intent. The hearing shall be conducted pursuant to Chapter 120, F.S.

Rulemaking Authority 373.309 FS. Law Implemented 373.306, 373.309, 373.313, 373.333, 373.342 FS. History–New 8-17-74, Formerly 17-21.07, 17-21.070, Amended 7-30-89, Formerly 17-532.430.

62-532.440 Abandonment of Water Wells.

Rulemaking Authority 373.309 FS. Law Implemented 373.306, 373.309, 373.313, 373.316, 373.333 FS. History–New 8-17-74, Formerly 17-21.09, 17-21.090, Amended 7-30-89, Formerly 17-532.440, Repealed 10-7-10.

62-532.500 Water Well Construction Standards.

The following minimum standards shall apply to the construction, repair, and abandonment of water wells in the State unless exempted by a water management district rule with the concurrence of the Department. Operation requirements for public water systems are included in Chapter 62-555, F.A.C., and operation requirements for limited use public water systems, multifamily water systems, and private water systems are included in Chapter 64E-8, F.A.C.

(1) Well Casing, Liner Pipe, Coupling, and Well Screen Requirements.

(a) Well casing, liner pipe, coupling, and well screen shall be new or in like new condition. Such well casing, liner pipe, coupling, or well screen shall not be used unless free of breaks, corrosion and dents, is straight and true, and not out of round. Welded or seamless black or galvanized steel pipe or casing, or stainless steel pipe or casing, or approved types of nonmetallic pipe shall be used for well casing or liner

pipe. All well casing shall conform to one of the following standards: American Society for Testing and Materials (ASTM) A53/A53M-99b (1999), A135-01 (2001), A252-98 (1998), A589-96 (1996), or American Petroleum Institute (API) 5L-2000 (2000). Well casing that conforms to any of the aforementioned ASTM or API standards shall also conform to the 2000 American National Standard Institute for Welded and Seamless Wrought Steel Pipe (ANSI/ASME B36.10M-2000). All well casing shall be stenciled with the applicable standard, or proper documentation of manufacturer specifications must be supplied to the permitting authority upon request. Copies of these standards may be obtained from the American Society for Testing and Materials, 100 Barr Harbor Drive, P. O. Box C700, West Conshohocken, PA 19428-2959; the American Petroleum Institute, 1220 L Street NW, Washington, DC 20005-4070; and the American National Standards Institute, 1819 L Street NW, Washington, DC 20036, respectively.

(b) Black or galvanized steel casing installed by driving shall not have less than the dimensions and weights specified below.

Nominal Size (in.)	Outside Diameter (in.)	Wall Thickness (in.)	Plain End Weight (lbs./ft.)
1.25	1.660	.140	2.27
1.5	1.900	.145	2.72
2	2.375	.154	3.65
3	3.5	.216	7.58
3.5	4.000	.226	9.11
4	4.5	.237	10.79
5	5.563	.258	14.62
6	6.625	.280	18.97
8	8.625	.277	24.70
10	10.750	.307	34.24
12	12.750	.330	43.77
14-30		.375	
more than 30		.500	

Note: A 4 inch nominal size casing with a wall thickness of .188 inches and a plain end weight of 8.66 pounds/foot may be used if it conforms to standard API 5L-2000, Grade B, 60 KSI tensile strength. Other casing that meets these minimum tensile strength standards shall be acceptable. For example, A53/A53M-99b, Grade B, may also be substituted.

(c) Black or galvanized steel casing or liner pipe set into place without driving shall not have less than the dimensions and weights specified below.

Nominal Size (in.)	Outside Diameter (in.)	Wall Thickness (in.)	Plain End Weight (lbs./ft.)
1.25	1.660	.140	2.27
1.5	1.900	.145	2.72
2	2.375	.154	3.65
2.5	2.875	.203	5.79
3	3.500	.188	6.65
3.5	4.000	.188	7.65
4	4.500	.188	8.66
5	5.500	.188	10.79
6	6.625	.188	12.92
8	8.625	.188	16.94
10-16		.250	
>16		.375	

(d) Stainless steel pipe used for casing or liner pipe shall be Schedule 10S of the American National Standards Institute (ANSI/ ASME B36.19M-1985), or stronger classification.

(e) Polyvinyl Chloride (PVC) pipe may be used for well casing, liner pipe, and well screens. Any PVC pipe used for well construction or repair shall at a minimum meet the specifications for Schedule 40 or Standard Dimension Ratio (SDR) 21. The appropriate water management district shall require the use of stronger PVC casing if necessary to protect the integrity of the well.

(f) The Department shall approve a well casing or liner pipe not otherwise specified in paragraphs 62-532.500(1)(a) through (e), F.A.C., if the applicant makes a showing, certified by a professional engineer, to justify that such use would provide an equivalent material strength and durability. The following material has been approved pursuant to this procedure: DNS Well-Cor, Allied Tube and Conduit, A Division of Grinnel Corporation, 1440 Massaro Boulevard, Tampa, Florida, 33619.

Nominal Size (in.)	Outside Diameter (in.)	Wall Thickness (in.)
1.25	1.638	.085
2	2.360	.095
4	4.466	.150

(g) Well casing, liner pipe, coupling, and well screens used for potable water well construction or repair shall conform to 2008 NSF International Standard/American National Standard NSF/ANSI 14-2008e, Plastics Piping System Components and Related Materials, or NSF International Standard/American National Standard NSF/ANSI 61-2008, Drinking Water System Components – Health Effects, both of which are adopted and incorporated by reference herein. Copies of these copyrighted standards may be obtained from NSF International, P. O. Box 130140, Ann Arbor, MI 48113-0140.

(h) Steel well casing and liner pipe shall be joined in a watertight manner by threaded couplings, electrical welding methods, or other methods approved by the appropriate water management district which provide equivalent protection. PVC pipe shall be joined by solvent bonded couplings, threaded couplings, heat welding, or other methods approved by the appropriate water management district which provide equivalent protection.

(i) Nonmetallic and stainless steel well casing or liner pipe shall not be installed by driving unless prior approval is obtained from the appropriate water management district based on a demonstration that the

integrity of the well casing or liner pipe will be maintained. For well casing or liner pipe installed by driving, the casing or pipe shall not butt together inside threaded couplings unless the joint is electrically welded so as to be completely watertight. A drive shoe is required for use on casing or pipe installed by driving unless prior approval is obtained from the appropriate water management district based on a demonstration that a drive shoe is not necessary to maintain the integrity of the casing or pipe.

(2) Geothermal well heat exchanger pipe and fitting materials shall meet the standards and specifications in the document Closed-Loop/Geothermal Heat Pump Systems Design and Installation Standards, Revised Edition 2008, published by the International Ground Source Heat Pump Association, Oklahoma State University, which is adopted and incorporated by reference herein. In addition, the reference Closed-Loop/Ground-Source Heat Pump Systems Installation Guide, 1988, Oklahoma State University, is excellent and is included here as a guidance document. Copies of all of these references may be obtained from the International Ground Source Heat Pump Association, Oklahoma State University, 374 Cordell South, Stillwater, OK 74078-8018.

(a) All geothermal well heat exchanger pipe and fitting materials shall be stenciled with the applicable standard, or proper documentation of manufacturer specifications must be supplied to the permitting authority upon request.

(b) The Department or the permitting authority shall approve geothermal well heat exchanger pipe and fitting materials not meeting the standards and specifications in the document adopted in subsection 62-532.500(2), F.A.C., if the applicant makes a showing, certified by a professional engineer, to justify that such use would provide an equivalent material strength and durability.

(3) Well Construction Criteria.

(a) Well casings, which are seated into unconsolidated earth material, shall extend from the upper terminus of the well to the well screen. The well screen shall be attached to the casing with a watertight seal.

(b) Well casings that are seated into a rock layer or other consolidated earth material, shall be continuous and shall extend from the upper terminus of the well to no less than the top of the uppermost consolidated unit. Wells constructed of telescoping casings shall be considered as a continuous casing provided the grout requirements are met. The lower terminus of the well casing shall extend to or below the water level of the aquifer intended to supply water to the well or receive fluids from the well. In addition, all caving zones below the uppermost consolidated unit shall be cased.

(c) Geothermal wells shall be grouted in accordance with subparagraph 62-532.500(3)(i)6., F.A.C.

(d) For public water system wells using telescoped casing, the casing shall be overlapped by not less than 20 feet when increases or reductions occur in casing size, unless another footage is approved by the appropriate water management district or permitting authority. Not less than two centralizing spacers shall be used in the overlapped sections, and the annular space in the overlapped sections shall be completely sealed with cement grout.

(e) Prevention of Interchange of Water and Loss of Artesian Pressure. All water wells shall be properly designed and constructed to prevent an interchange of water between water bearing zones that may result in deterioration of the quality of water in one or more water bearing zones, or will result in a loss of artesian pressure. If a well cannot be properly completed to prevent such an unauthorized interchange of water between water bearing zones or to prevent a loss of artesian pressure, the well shall be abandoned and plugged in accordance with this chapter or other directions from the permitting authority, which are appropriate for the hydrogeologic conditions encountered.

(f) In the construction, repair, or abandonment of a water well, caution shall be taken to maintain the work site so as to minimize the potential entrance of contaminants into the bore hole and the ground water resource.

(g) Only water from a potable water source shall be used in the construction, repair or abandonment of a water well, including water for cleaning of well materials, drilling equipment, and water used to mix drilling fluids.

(h) Use of Explosives. The use of dynamite or other high-grade explosives in the construction or repair of water wells is prohibited.

(i) Grouting and Sealing.

1. All well casings seated into a consolidated formation shall be seated or sealed with neat cement grout.

2. Except as provided in 3. below, wells with driven casing into natural earth or a bore hole equal to or smaller in diameter than the outside diameter of the casing shall be sealed by adding dry bentonite to the casing string at land surface and allowing that material to be carried down the outside of the casing as the casing is driven to completion. Dry bentonite shall be applied to maintain a grout seal around the casing.

3. In the construction of water wells with driven casing, for limited use commercial public water systems, limited use community public water systems, public water systems, potable water wells permitted pursuant to Chapter 62-524, F.A.C., and water wells serving bottled water plants, the minimum acceptable seal shall be accomplished by undercutting or under-reaming the last five feet of the hole before seating the casing. A minimum of one foot of such enlarged hole must be into the consolidated formation in which the casing will be seated. The entire enlarged portion of the hole shall be filled with cement grout, and then the casing shall be driven through the cement grout and seated into the enlarged one-foot portion of the consolidated formation. The uppermost 20 feet of casing shall be sealed with no less than a two-inch nominal thickness of cement grout. No other minimum seal shall be acceptable unless approved by the appropriate water management district or delegated permitting authority as providing equivalent protection to the resource.

4. For any part of a well casing with an outside diameter of four inches or larger intended to be installed in a bore hole which is larger in diameter than the inside diameter of the casing, the annular space shall be filled from bottom to top with not less than a nominal two-inch thickness of neat cement grout. For well casings with an outside diameter of less than four inches, intended to be installed in a bore hole which is larger in diameter than the inside diameter of the casing, the minimum grout thickness shall be a nominal one inch thickness of neat cement grout. The casing shall be centered in the bore hole prior to grouting. In those cases where, during grouting operations, circulation of the grout is lost so that the annular space being grouted cannot be filled in one continuous operation, a tremie pipe shall be installed in the annular space to a point immediately above the zone of lost circulation and the annulus shall be bridged at that point by sand or other approved material introduced through the pipe. Grouting of the annular space shall be completed using the tremie pipe or other equivalent method approved by the permitting authority.

5. Any district may grant individual exceptions or, with the concurrence of the Department, may exempt any areas of that district from the requirements of cement grouting the annular space between the well casing and bore hole wall of that part of a well which penetrates an unconsolidated formation upon demonstration that:

a. The unconsolidated formation material is of such a caving nature that upon stopping the circulation of drilling fluid through the well the aquifer material will immediately cave into and fill up the annular space between the well casing and bore hole wall.

b. A flow space is not created by such construction that will allow any movement of waters along the outside of the well casing which did not naturally occur prior to construction of the well.

6. Except as provided in subparagraph 5. above, grouting and sealing of water wells shall be accomplished by the practices and methods recommended by Appendix C of American Water Works Association (AWWA) Standard A100-97 (1997), AWWA Standard for Water Wells, and grouting and sealing of geothermal wells shall be accomplished by the practices and methods recommended by the Vertical Geothermal Heat Pump Systems Engineering Design and Field Procedures Manual, published by the International Ground Source Heat Pump Association, First Edition 2000, Oklahoma State University, which are adopted and incorporated by reference herein. Copies of these recommended practices and methods may be obtained from the American Water Works Association, 6666 West Quincy Avenue,

Denver, CO 80235; and the International Ground Source Heat Pump Association, Oklahoma State University, 374 Cordell South, Stillwater, OK 74078-8018, respectively.

7. Alternate grouting methods and materials providing equivalent protection shall be approved in writing by the permitting authority. Alternatives to the grouting methods described in subparagraphs 1.-6. above, must be requested for use from the permitting authority as part of the construction permit application, or once construction begins only in situations where the methods in the rules are not working. In either situation, a detailed explanation of what and why alternate methods are requested must be provided. Alternate grout materials (other than neat cement grout) must be requested in the construction permit application, or once construction begins only when neat cement grout is not providing or will not provide as good a seal as the alternate materials.

(4) Top of the Well.

(a) Well Covers.

1. Whenever there is an interruption in work on the well, such as overnight shutdown, the well opening shall be sealed with a tamper resistant cover.

2. Except for those areas of a district designated by the Department with the concurrence of the permitting authority, any well in which pumping equipment is installed seasonally or periodically shall, whenever pumping equipment is not installed, be capped with steel or reinforced concrete cover, or valve.

3. Any cased well equipped with permanently installed pumping equipment shall have that pumping equipment and any necessary piping installed through a well seal.

4. Any unused well shall be capped in a watertight manner with a threaded, welded, or bolted cover or valve.

(b) Upper Terminus.

1. At the time of well construction, all wells shall be accessible at the upper terminus of the well casing for inspection, servicing, and testing.

2. For private and multi-family water system wells and irrigation wells, the upper terminus of the well casing shall project at least 12 inches above finished grade. Where a potential physical structure or traffic hazard may be present or where a potential public health threat exists, the upper well casing terminus may be placed in an appropriate enclosure terminating at finished grade. The enclosure shall be designed to allow vertical access to the upper well casing terminus for maintenance and inspection and provide for gravity drainage of the enclosure. The upper well casing terminus shall be constructed to a point 18 inches or less below finished grade. The upper well casing terminus shall be sealed with a water tight seal to prevent the entrance of surface water and contaminants into the well.

3. For limited use commercial public water system wells and limited use community public water system wells constructed on or after April 1, 2002, the upper terminus of the well casing shall project at least 12 inches above the concrete apron around the well.

4. For public water system wells constructed on or after April 1, 2002, the upper terminus of the well casing shall project at least 12 inches above the pump house floor, pump pit floor, or concrete apron around the well.

5. For public water system wells, limited use commercial public water system wells, and limited use community public water system wells constructed on or after April 1, 2002, located at sites subject to flooding, the upper terminus of the well casing shall project at least 12 inches above the 100-year flood elevation and 100-year wave-action elevation. Where it is not practicable to comply with this requirement, the water management district or delegated permitting authority shall allow exceptions on a case-by-case basis provided the upper terminus of the well casing is fitted with a watertight seal.

6. Public water system wells, limited use commercial public water system wells, and limited use community public water system wells, shall be equipped with a sealable opening that will allow introduction of disinfectants and measurement of static water level and drawdown or artesian pressure.

(c) Well Aprons. For public water system wells, limited use commercial public water system wells, and limited use community public water system wells constructed on or after April 1, 2002, not located within a

pump house or pump pit, a concrete apron at least six feet by six feet and at least four inches thick shall be centered around the well. The bottom surface of the concrete apron shall be constructed on top of the finished grade, and the top surface of the concrete apron shall be sloped to drain away from the well casing.

(d) Flowing Wells. If the well flows at land surface, control shall be provided by valved pipe connections, watertight pump connections, or receiving reservoirs set at an altitude corresponding to the artesian head.

(5) Plugging. All abandoned wells shall be plugged by filling them from bottom to top with neat cement grout or bentonite and capped with a minimum of one foot of neat cement grout. An alternate method providing equivalent protection shall be approved in writing by the Department or the permitting authority.

Rulemaking Authority 373.309 FS. Law Implemented 373.309, 373.313, 373.316 FS. History–New 8-17-74, Formerly 17-21.10, 17-21.100, Amended 7-30-89, 3-11-92, Formerly 17-532.500, Amended 3-28-02, 10-7-10.

62-532.510 Water Well Inspections.

(1) During the construction, repair, or abandonment of any well, the Department or the permitting authority may conduct inspections as is necessary to ensure conformity with applicable standards. Duly authorized representatives of the Department or the permitting authority shall be given access, at reasonable times, to any premises for the purpose of such inspection.

(2) If during construction, repair, or abandonment, the Department or the permitting authority finds the work does not meet the requirements of rules and standards adopted pursuant to Chapter 373, F.S., the Department or the permitting authority shall give the owner and water well contractor written notice pursuant to the requirements in Section 120.60, F.S.

Rulemaking Authority 373.309 FS. Law Implemented 120.60, 373.316, 373.319, 373.323, 373.333 FS. History–New 8-17-74, Formerly 17-21.11, 17-21.110, Amended 7-30-89, Formerly 17-532.510.

62-532.600 Enforcement of Water Well Permitting and Construction Requirements.

Enforcement shall be as provided by Section 373.333, F.S.

Rulemaking Authority 373.309 FS. Law Implemented 373.129, 373.333 FS. History–New 8-17-74, Formerly 17-21.12, 17-21.120, Amended 7-30-89, Formerly 17-532.600.

62-532.610 Penalties for Violation of Water Well Permitting and Construction Requirements.

Penalties shall be as provided by Section 373.336, F.S.

Rulemaking Authority 373.309 FS. Law Implemented 373.336 FS. History–New 8-17-74, Formerly 17-21.13, 17-21.130, Amended 7-30-89, Formerly 17-532.610.

62-532.900 Forms.

Rulemaking Authority 373.309 FS. Law Implemented 373.309, 373.313, 373.316 FS. History–New 10-7-10, Repealed 2-16-12.

e. Chapter 62-555, F.A.C. Permitting, Construction, Operation and Maintenance of Public Water Systems

Florida Department of State website link to Chapter 62-555:
https://www.flrules.org/gateway/ChapterHome.asp?Chapter=62-555

CHAPTER 62-555
PERMITTING, CONSTRUCTION, OPERATION, AND MAINTENANCE OF PUBLIC WATER SYSTEMS

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62-555.310 Source and Siting Requirements for Public Water Systems.

(1) Suppliers of water shall obtain raw water from the best available source that is economically sensible and technically possible and shall make an effort to protect the source from contamination.

(2) To the extent practicable, suppliers of water and persons constructing public water systems shall avoid locating any part of a new public water system, and any expansion of an existing public water system, at any site that:

(a) Is subject to significant risk from contamination that could adversely affect the quality of drinking water or is subject to significant risk from floods, fires, or other disasters that could cause a breakdown of the public water system or any portion thereof; or

(b) Except for surface water impoundments, reservoirs, or intake structures (including pumping facilities) and except for underground piping and appurtenances, is within the floodplain of a 100-year flood or is lower than any recorded high tide.

Rulemaking Authority 403.861(9) FS. Law Implemented 403.852(12), 403.853(1) FS. History–New 11-19-87, Formerly 17-22.610, Amended 1-18-89, Formerly 17-555.310, Amended 8-28-03.

62-555.312 Location of Public Water System Wells.

For the purpose of this section, the phrase "new wells" shall mean wells being newly connected, or reconnected, to a public water system (PWS).

(1) All wells that were connected to a PWS on or after November 9, 1977, but before December 13, 1983, and wells that are, or will be, supplying a PWS serving premises with an estimated collective sewage flow of 2,000 gallons or less per day and that were, or will be, connected to the PWS on or after December 13, 1983, shall be no closer than 100 feet from any "on-site sewage treatment

and disposal system" (OSTDS) as defined in Section 381.0065(2), F.S., and Rule 64E-6.002, F.A.C., regardless of the location of the OSTDS. Wells that are, or will be, supplying a PWS serving premises with an estimated collective sewage flow greater than 2,000 gallons per day and that were, or will be, connected to the PWS on or after December 13, 1983, shall be no closer than 200 feet from any OSTDS, regardless of the location of the OSTDS.

(2) New wells shall not be placed within the setback distances discussed in subsection 62-532.400(7), F.A.C., and listed in Part A of Table I in Chapter 62-532, F.A.C.

(3) New wells shall be located no closer than 100 feet from other sanitary hazards that pose a potentially high risk to ground water quality and public health and shall be located no closer than 50 feet from other sanitary hazards that pose a moderate risk to ground water quality and public health. The following are examples of other sanitary hazards that pose a potentially high risk: active or abandoned mines; airplane or train fueling or maintenance areas at airports and railroad yards; animal feeding operations other than those regulated under Rule 62-670.500, F.A.C.; concentrated aquatic animal production facilities; domestic wastewater collection/transmission systems; drainage or injection wells, oil or gas production wells, and improperly constructed or abandoned wells (i.e., wells not constructed or abandoned in accordance with Chapter 62-532, F.A.C.); fertilizer, herbicide, or pesticide storage areas at agricultural sites, golf courses, nurseries, and parks; graveyards; impoundments and tanks that process, store, or treat domestic wastewater, domestic wastewater residuals, or industrial fluids or waste and that are not regulated under Rule 62-670.500, F.A.C.; industrial waste land application areas other than those regulated under Rule 62-670.500, F.A.C.; junkyards and salvage or scrap yards; pastures with more than five grazing animals per acre; pipelines conveying petroleum products, chemicals, or industrial fluids or wastes; and underground storage tanks that are not regulated under Chapter 62-761, F.A.C., but are used for bulk storage of a liquid pollutant or hazardous substance (as defined in Chapter 62-761, F.A.C.) other than sodium hypochlorite solution. The following are examples of other sanitary hazards that pose a moderate risk: aboveground storage tanks that are not regulated under Chapter 62-761, F.A.C., but are used for bulk storage of a liquid pollutant or hazardous substance (as defined in Chapter 62-761, F.A.C.) other than sodium hypochlorite solution; fertilizer, herbicide, or pesticide application areas that are not under the ownership or control of the supplier of water at agricultural sites, golf courses, nurseries, and parks; railroad tracks; stormwater detention or retention basins; and surface water.

(4) For wells connected to a community water system on or after August 28, 2003, except those connected under a construction permit for which the Department received a complete application before August 28, 2003, continuing protection of the well from the sanitary hazards described in subsection (3) above shall be provided during the entire useful life of the well through one of the following means:

(a) Ownership by the water supplier of all land within 100 feet of the well;

(b) Control by the water supplier of all land within 100 feet of the well via easements, lease agreements, or deed restrictions that appropriately limit use of the land;

(c) Wellhead protection, zoning, or other land use regulations that appropriately limit use of all land within 100 feet of the well; or

(d) Other appropriate means.

(5) New wells shall be located on their sites in such a manner that the wells are in an area free from, or least subject to, inundation with surface drainage and flood water; and to the extent practicable, new wells shall be located on their sites in such a manner that the wells are "upstream" from on-site or off-site sanitary hazards when considering the direction of ground water movement.

(6) The Department or the appropriate water management district or delegated permitting authority shall approve a decrease in the standard well setback distances described in subsections (1) through (4) above if justified by any of the following: the presence, thickness, and extent of natural barriers such as impermeable geological strata; the design and construction of the well, including the depth of the well; the drinking water treatment provided; or the use of alternative means to reduce public health risks, such as the use of encasement or restrained joints to eliminate or minimize leakage from a pipeline that is a sanitary hazard or the use of additional drinking water monitoring. However, water management districts and delegated permitting authorities shall obtain the Department's concurrence before decreasing well setback distances because of either the type of drinking water treatment provided or the use of alternative means to reduce public health risks.

Rulemaking Authority 373.309(1), 373.337, 403.861(9) FS. Law Implemented 373.309(1), 403.852(12) FS. History–Formerly 17-22.615(2), Amended 1-18-89, 5-7-90, Formerly 17-555.312, Amended 8-28-03.

62-555.314 Location of Public Water System Mains.

For the purpose of this section, the phrase "water mains" shall mean mains, including treatment plant process piping, conveying either raw, partially treated, or finished drinking water; fire hydrant leads; and service lines that are under the control of a public water system and that have an inside diameter of three inches or greater.

(1) Horizontal Separation Between Underground Water Mains and Sanitary or Storm Sewers, Wastewater or Stormwater Force Mains, Reclaimed Water Pipelines, and On-Site Sewage Treatment and Disposal Systems.

(a) New or relocated, underground water mains shall be laid to provide a horizontal distance of at least three feet between the outside of the water main and the outside of any existing or proposed storm sewer, stormwater force main, or pipeline conveying reclaimed water regulated under Part III of Chapter 62-610, F.A.C.

(b) New or relocated, underground water mains shall be laid to provide a horizontal distance of at least three feet, and preferably ten feet, between the outside of the water main and the outside of any existing or proposed vacuum-type sanitary sewer.

(c) New or relocated, underground water mains shall be laid to provide a horizontal distance of at least six feet, and preferably ten feet, between the outside of the water main and the outside of any existing or proposed gravity- or pressure-type sanitary sewer, wastewater force main, or pipeline conveying reclaimed water not regulated under Part III of Chapter 62-610, F.A.C. The minimum horizontal separation distance between water mains and gravity-type sanitary sewers shall be reduced to three feet where the bottom of the water main is laid at least six inches above the top of the sewer.

(d) New or relocated, underground water mains shall be laid to provide a horizontal distance of at least ten feet between the outside of the water main and all parts of any existing or proposed "on-site sewage treatment and disposal system" as defined in Section 381.0065(2), F.S., and Rule 64E-6.002, F.A.C.

(2) Vertical Separation Between Underground Water Mains and Sanitary or Storm Sewers, Wastewater or Stormwater Force Mains, and Reclaimed Water Pipelines.

(a) New or relocated, underground water mains crossing any existing or proposed gravity- or vacuum-type sanitary sewer or storm sewer shall be laid so the outside of the water main is at least six inches, and preferably 12 inches, above or at least 12 inches below the outside of the other pipeline. However, it is preferable to lay the water main above the other pipeline.

(b) New or relocated, underground water mains crossing any existing or proposed pressure-type sanitary sewer, wastewater or stormwater force main, or pipeline conveying reclaimed water shall be laid so the outside of the water main is at least 12 inches above or below the outside of the other pipeline. However, it is preferable to lay the water main above the other pipeline.

(c) At the utility crossings described in paragraphs (a) and (b) above, one full length of water main pipe shall be centered above or below the other pipeline so the water main joints will be as far as possible from the other pipeline. Alternatively, at such crossings, the pipes shall be arranged so that all water main joints are at least three feet from all joints in vacuum-type sanitary sewers, storm sewers, stormwater force mains, or pipelines conveying reclaimed water regulated under Part III of Chapter 62-610, F.A.C., and at least six feet from all joints in gravity- or pressure-type sanitary sewers, wastewater force mains, or pipelines conveying reclaimed water not regulated under Part III of Chapter 62-610, F.A.C.

(3) Separation Between Water Mains and Sanitary or Storm Sewer Manholes.

(a) No water main shall pass through, or come into contact with, any part of a sanitary sewer manhole.

(b) Effective August 28, 2003, water mains shall not be constructed or altered to pass through, or come into contact with, any part of a storm sewer manhole or inlet structure. Where it is not technically feasible or economically sensible to comply with this requirement (i.e., where there is a conflict in the routing of a water main and a storm sewer and where alternative routing of the water main or the storm sewer is not technically feasible or is not economically sensible), the Department shall allow exceptions to this requirement (i.e., the Department shall allow construction of conflict manholes), but suppliers of water or persons proposing to construct conflict manholes must first obtain a specific permit from the Department in accordance with Part V of this chapter and must provide in the preliminary design report or drawings, specifications, and design data accompanying their permit application the following information:

1. Technical or economic justification for each conflict manhole.

2. A statement identifying the party responsible for maintaining each conflict manhole.

3. Assurance of compliance with the design and construction requirements in sub-subparagraphs a. through d. below.

a. Each water main passing through a conflict manhole shall have a flexible, watertight joint on each side of the manhole to accommodate differential settling between the main and the manhole.

b. Within each conflict manhole, the water main passing through the manhole shall be installed in a watertight casing pipe

having high impact strength (i.e., having an impact strength at least equal to that of 0.25-inch-thick ductile iron pipe).

c. Each conflict manhole shall have an access opening, and shall be sized, to allow for easy cleaning of the manhole.

d. Gratings shall be installed at all storm sewer inlets upstream of each conflict manhole to prevent large objects from entering the manhole.

(4) Separation Between Fire Hydrant Drains and Sanitary or Storm Sewers, Wastewater or Stormwater Force Mains, Reclaimed Water Pipelines, and On-Site Sewage Treatment and Disposal Systems. New or relocated fire hydrants with underground drains shall be located so that the drains are at least three feet from any existing or proposed storm sewer, stormwater force main, or pipeline conveying reclaimed water regulated under Part III of Chapter 62-610, F.A.C.; at least three feet, and preferably ten feet, from any existing or proposed vacuum-type sanitary sewer; at least six feet, and preferably ten feet, from any existing or proposed gravity- or pressure-type sanitary sewer, wastewater force main, or pipeline conveying reclaimed water not regulated under Part III of Chapter 62-610, F.A.C.; and at least ten feet from any existing or proposed "on-site sewage treatment and disposal system" as defined in Section 381.0065(2), F.S., and Rule 64E-6.002, F.A.C.

(5) Exceptions. Where it is not technically feasible or economically sensible to comply with the requirements in subsection (1) or (2) above, the Department shall allow exceptions to these requirements if suppliers of water or construction permit applicants provide technical or economic justification for each exception and provide alternative construction features that afford a similar level of reliability and public health protection. Acceptable alternative construction features include the following:

(a) Where an underground water main is being laid less than the required minimum horizontal distance from another pipeline and where an underground water main is crossing another pipeline and joints in the water main are being located less than the required minimum distance from joints in the other pipeline:

1. Use of pressure-rated pipe conforming to the American Water Works Association standards incorporated into Rule 62-555.330, F.A.C., for the other pipeline if it is a gravity- or vacuum-type pipeline;

2. Use of welded, fused, or otherwise restrained joints for either the water main or the other pipeline; or

3. Use of watertight casing pipe or concrete encasement at least four inches thick for either the water main or the other pipeline.

(b) Where an underground water main is being laid less than three feet horizontally from another pipeline and where an underground water main is crossing another pipeline and is being laid less than the required minimum vertical distance from the other pipeline:

1. Use of pipe, or casing pipe, having high impact strength (i.e., having an impact strength at least equal to that of 0.25-inch-thick ductile iron pipe) or concrete encasement at least four inches thick for the water main; and

2. Use of pipe, or casing pipe, having high impact strength (i.e., having an impact strength at least equal to that of 0.25-inch-thick ductile iron pipe) or concrete encasement at least four inches thick for the other pipeline if it is new and is conveying wastewater or reclaimed water.

Rulemaking Authority 403.861(9) FS. Law Implemented 403.853(3), 403.861(12) FS. History–New 1-1-93, Formerly 17-555.314, Amended 8-28-03.

62-555.315 Public Water System Wells - Security; Number; Capacity; Under the Direct Influence of Surface Water; Control of Copper Pipe Corrosion and Black Water; and Disinfection and Bacteriological Surveys and Evaluations.

In addition to the rules set forth in Chapters 62-524 and 62-532, F.A.C., the requirements of this section apply to public water system wells.

(1) Well Security. Wellheads shall be enclosed by fences with lockable access gates, housed in lockable buildings or enclosures, or otherwise protected against tampering, vandalism, and sabotage.

(2) Number of Wells. A minimum of two wells shall be connected to each community water system that is using only ground water and that is serving, or is designed to serve, 350 or more persons or 150 or more service connections.

(3) Well Capacity. The total well capacity connected to a water system using only ground water shall equal at least the system's design maximum-day water demand (including design fire-flow demand if fire protection is being provided). In addition, if the water system is a community system serving, or designed to serve, 350 or more persons or 150 or more service connections, the total well capacity with the largest producing well out of operation shall equal at least the design average daily water demand, and preferably the design maximum-day water demand, for the system. If a community water system interconnects with another community water system to meet the requirements in subsection (2) above regarding number of wells, the total well capacity for the combined systems shall equal at least the total design maximum-day water demand for the combined systems and, with the largest

producing well out of operation for the combined systems, shall equal at least the design average daily water demand, and preferably the design maximum-day water demand, for the combined systems.

(4) Wells Under the Direct Influence of Surface Water. Ground water from some wells, especially shallow wells and radial horizontal collector wells, and ground water from springs or infiltration galleries may be under the direct influence of surface water. The Department shall determine whether ground water is under the direct influence of surface water by using the procedures described in subsection 62-550.517(2), F.A.C., and subparagraph 62-550.817(2)(a)1., F.A.C. Suppliers of water using ground water that is determined by the Department to be under the direct influence of surface water shall comply with applicable requirements under Rule 62-550.817, F.A.C.

(5) Control of Copper Pipe Corrosion and Black Water. Applicants for a construction permit to connect a new or altered well to a community water system, except those applicants who have submitted a complete application to the Department before August 28, 2003, shall include in the preliminary design report or design data accompanying their permit application the results of measurements for alkalinity, dissolved iron, dissolved oxygen, pH, total sulfide, and turbidity in a minimum of one sample of raw water from the new or altered well. These measurements may be performed by any authorized representative of the supplier of water or applicant; but field measurements for dissolved oxygen, pH, and turbidity shall be performed following the appropriate procedures in the Department of Environmental Protection Standard Operating Procedures for Field Activities, DEP-SOP-001/01, as incorporated into Rule 62-160.800, F.A.C., and all other measurements shall be performed using an appropriate method referenced in subsection 62-550.550(1), F.A.C., or in *Standard Methods for the Examination of Water and Wastewater* as adopted in Rule 62-555.335, F.A.C. If the result for total sulfide equals or exceeds 0.3 mg/L, the applicant shall do the following:

(a) Provide aeration or other appropriate treatment of the water from the new or altered well to remove total sulfide as necessary. Recommended types of aeration treatment for different water quality ranges are listed in the table below, which is incorporated herein as guidance and not as a requirement. Direct chlorination shall not be used to remove (i.e., oxidize) 0.3 mg/L or more of total sulfide unless the elemental sulfur formed during chlorination is removed.

POTENTIAL FOR IMPACTS WITHOUT TOTAL SULFIDE REMOVAL	WATER QUALITY RANGES	POTENTIAL WATER TREATMENT
Low	Total Sulfide < 0.3 mg/L Dissolved Iron < 0.1 mg/L1	Direct Chlorination2
Moderate	0.3 mg/L Total Sulfide 0.6 mg/L @ pH 7.2 **or** 0.3 mg/L Total Sulfide 0.6 mg/L @ pH > 7.2	Conventional Aeration3 (maximum removal efficiency 40-50%) **or** Conventional Aeration with pH Adjustment4,5 (maximum removal efficiency 40-50%)
Significant	0.6 mg/L < Total Sulfide 3.0 mg/L @ pH 7.2 **or** 0.6 mg/L < Total Sulfide 3.0 mg/L @ pH > 7.2	Forced Draft Aeration3 (maximum removal efficiency 90%) **or** Forced Draft Aeration with pH Adjustment4,5 (maximum removal efficiency 90%)
Very Significant	Total Sulfide > 3.0 mg/L	Packed Tower Aeration with pH Adjustment4,5 (maximum removal efficiency > 90%)
1. High iron content raises concern if chlorination alone is used and significant dissolved oxygen exists in the source water. Filtration may be required to remove particulate iron prior to water distribution.		
2. Direct chlorination of sulfide in water in the pH range normally found in potable sources produces elemental sulfur and increased turbidity. Finished-water turbidity should not be more than two nephelometric turbidity units greater than raw-water turbidity.		
3. Increased dissolved oxygen entrained during aeration may increase corrosivity.		
4. Reduction of alkalinity during pH adjustment and high dissolved oxygen entrained during aeration may increase corrosivity. Corrosion control treatment such as pH adjustment, alkalinity recovery, or use of inhibitors may be required.		
5. High alkalinity will make pH adjustment more costly, and use of other treatment may be in order. Treatment that preserves the		

natural alkalinity of the source water may enhance the stability of finished water.

(b) Provide in the preliminary design report or design data accompanying the applicant's permit application a water quality and treatment evaluation affirmatively demonstrating that the secondary maximum contaminant levels for color and odor will not be exceeded in the water supplier's drinking water distribution system or in water customers' potable water systems.

(6) Disinfection of Wells and Bacteriological Surveys and Evaluations of Wells. Wells shall be disinfected to inactivate any microbiological contaminant that may have been introduced into the wells during construction, repair, or maintenance and to allow the true microbiological character of well water to be determined through a bacteriological survey.

(a) Before new or altered wells, wells out of operation for more than six months, wells in which new pumping equipment has been installed, and wells taken out of operation for maintenance that might have contaminated the well are placed into, or returned to, operation, they shall be disinfected in accordance with Sections 1. through 4. and Section 5.2 of American Water Works Association (AWWA) Standard C654 as incorporated into Rule 62-555.330, F.A.C. In Section 5.2 of the aforementioned AWWA standard, references to Section 5.1 shall be interpreted to mean paragraph 62-555.315(6)(b) or (c), F.A.C., as appropriate. This paragraph does not apply to, and disinfection is not required for, wells that officially have been determined to be under the direct influence of surface water per subsection 62-550.517(2), F.A.C., and subparagraph 62-550.817(2)(a)1., F.A.C., and that are pumping to treatment plants with filtration and disinfection facilities meeting all applicable requirements in Rule 62-550.817, F.A.C.

(b) Following disinfection of a new or altered well or a well that has been out of operation for more than six months, a bacteriological survey of the well shall be conducted as set forth in subparagraphs 1. through 3. below unless the well is already considered microbially contaminated or susceptible to microbial contamination per subparagraph 2. below or paragraph (f) below. The total residual chlorine measurements required under subparagraph 1. may be performed by any authorized representative of the supplier of water or person constructing or altering the well but shall be performed following the appropriate procedures in the Department of Environmental Protection Standard Operating Procedures for Field Activities, DEP-SOP-001/01 as incorporated into Rule 62-160.800, F.A.C. The total coliform or *E. coli* analyses required under subparagraph 1. shall be performed by a laboratory of the Department of Health (DOH) or a laboratory certified by the DOH to perform bacteriological analyses of drinking water and shall be performed using an appropriate method referenced in subsection 62-550.550(1), F.A.C.

1. A total of at least 20 samples – each taken on a separate but consecutive workday and taken at least six hours apart from the other samples – shall be collected after first pumping the well to waste to remove all residual chlorine and then pumping the well to waste at a rate approximately equal to that of the permanent well pump for at least 15 minutes before each sample is collected, and the samples shall be analyzed for the presence of total residual chlorine, total coliform, and *E. coli*. Upon a showing by the supplier of water, or a determination by the Department, that historical records or other circumstances warrant it, the Department shall allow the required number of samples or the sample collection interval to be modified. Under no circumstances shall the Department allow fewer than ten samples to be collected, and under no circumstances shall the Department allow more than two samples to be collected per day. If the Department allows collection of two samples per day, the samples shall be collected at least six hours apart, and the well shall be pumped to waste for at least 15 minutes before each sample is collected.

2. If any sample shows the presence of free or combined chlorine, the sample shall be considered invalid. If any sample shows the presence of *E. coli*, the well shall be considered microbially contaminated unless the Department invalidates the sample or the supplier of water determines and eliminates the source of the *E. coli*, in which case the well shall be redisinfected in accordance with paragraph (a) above and resampled in accordance with subparagraph 1. above. If more than ten percent of the total number of samples collected show the presence of total coliform or if either of the last two samples collected shows the presence of total coliform, the well shall be redisinfected as necessary in accordance with paragraph (a) above and resampled in accordance with subparagraph 1. above or shall be considered susceptible to microbial contamination. If a well is considered microbially contaminated or susceptible to microbial contamination, the supplier of water shall provide treatment that reliably achieves at least four-log inactivation or removal of viruses in accordance with paragraph 62-555.320(12)(b), F.A.C. Additionally, the supplier of water shall conduct physical characteristics monitoring in accordance with subsection 62-550.517(2), F.A.C., when notified in writing by the Department to do so.

3. Bacteriological test results shall be considered unacceptable if the tests were completed more than 60 days before the Department received the results.

(c) Following disinfection of a well in which new pumping equipment has been installed or a well taken out of operation for maintenance that might have contaminated the well, a bacteriological evaluation of the well shall be conducted as set forth in subparagraphs 1. through 3. below unless the well is already considered microbially contaminated or susceptible to microbial

contamination per subparagraph 62-555.315(6)(b)2., F.A.C., or paragraph (f) below. The total residual chlorine measurements required under subparagraph 1. may be performed by any authorized representative of the supplier of water but shall be performed following the appropriate procedures in the Department of Environmental Protection Standard Operating Procedures for Field Activities, DEP-SOP-001/01 as incorporated into Rule 62-160.800, F.A.C. The total coliform analyses required under subparagraph 1. shall be performed by a laboratory of the Department of Health (DOH) or a laboratory certified by the DOH to perform bacteriological analyses of drinking water and shall be performed using an appropriate method referenced in subsection 62-550.550(1), F.A.C.

1. After pumping the well to waste for at least 15 minutes with zero chlorine residual, a total of at least two samples – each taken on a separate day and taken at least six hours apart from the other sample(s) – shall be collected, and the samples shall be analyzed for the presence of total residual chlorine and total coliform.

2. If any sample shows the presence of free or combined chlorine, the sample shall be considered invalid. If any sample shows the presence of total coliform, the well shall be redisinfected as necessary in accordance with paragraph (a) above and resampled in accordance with subparagraph 1. above until two consecutive samples show the absence of total coliform.

3. Bacteriological test results shall be considered unacceptable if the tests were completed more than 60 days before the Department received the results.

(d) Except as allowed under paragraph (e) below and except as allowed under any special construction permit condition established in accordance with paragraph 62-555.533(2)(f), F.A.C., no disinfected well shall be placed into, or returned to, operation until a bacteriological survey or evaluation has been completed if required by paragraph (b) or (c) above, results of the survey or evaluation have been submitted to the appropriate Department of Environmental Protection (DEP) District Office or Approved County Health Department (ACHD) if a survey or evaluation is required, and said DEP District Office or ACHD has approved the well for operation.

(e) When installing new well pumping equipment for which a public water system construction permit is not required per subsection 62-555.520(1), F.A.C., or when taking a well out of operation for maintenance that might contaminate the well, the well may be returned to operation without the Department's approval after completion of disinfection and after satisfactory completion of a bacteriological evaluation if such an evaluation is required under paragraph (c) above. If a bacteriological evaluation is required, the results of the evaluation shall be submitted to the appropriate Department of Environmental Protection District Office or Approved County Health Department along with the next monthly operation report(s) required under paragraph 62-555.350(12)(b), F.A.C., or if no monthly operation report is required under paragraph 62-555.350(12)(b), F.A.C., within ten days after the end of the month during which the evaluation was completed.

(f) All public water systems using ground water not under the direct influence of surface water are required by subsections 62-550.518(2), (3) and (10), F.A.C., to periodically sample the raw ground water for microbiological contamination. In the event a raw water sample is positive for *E. coli*, the relevant well(s) shall be considered microbially contaminated unless the Department invalidates the sample or the supplier of water determines and eliminates the source of the *E. coli*, after which the supplier of water shall disinfect and bacteriologically survey the well(s) in accordance with paragraphs (a) and (b) above. If a raw water sample is positive for total coliform bacteria and if the relevant well(s) are not already considered microbially contaminated or susceptible to microbial contamination, the supplier of water shall disinfect and bacteriologically survey the well(s) in accordance with paragraphs (a) and (b) above when notified in writing by the Department to do so.

Rulemaking Authority 373.309, 373.337, 403.861(9) FS. Law Implemented 373.309, 403.861(12), (17) FS. History–New 11-19-87, Formerly 17-22.615, Amended 1-18-89, 5-7-90, 1-1-93, Formerly 17-555.315, Amended 8-28-03.

62-555.320 Design and Construction of Public Water Systems.

Public water systems shall be designed and constructed to provide sufficient drinking water of a quality that will meet all applicable standards in Chapters 62-550, F.A.C., and requirements in this chapter. This section addresses the design and construction of all public water system components other than wells (but including well pumping equipment and appurtenances). Public water system wells are addressed in Chapters 62-524 and 62-532, F.A.C., and Rule 62-555.315, F.A.C.

(1) Sound Engineering Practice. New or altered public water system components shall be designed in accordance with sound engineering practice. Engineering references are listed in Rule 62-555.330, F.A.C.

(2) Innovative or Alternative Processes and Equipment. The Department encourages the development of new treatment processes and equipment. However, construction permits for innovative or alternative treatment processes or equipment (i.e.,

treatment processes or equipment not covered in the engineering references listed in Rule 62-555.330, F.A.C.) shall not be issued unless construction permit applicants include in the preliminary design report or design data accompanying their permit application supporting information demonstrating to the Department that the process or equipment is capable of consistently and reliably producing drinking water meeting applicable standards in Chapter 62-550, F.A.C., and requirements in this chapter. Supporting information shall include the following:

(a) The manufacturer's technical information;

(b) Data and reports from full-scale or pilot-plant installations that are operated under conditions comparable to those for which the process or equipment is being proposed and that are operated for a sufficient time to verify satisfactory performance of the process or equipment; and

(c) Operation and maintenance requirements and availability of technical support.

(3) Direct or Indirect Drinking Water Additives.

(a) Drinking water additives and treatment chemicals, including chemicals used to regenerate ion-exchange resins or generate disinfectants on site at treatment plants, shall conform to one of the following:

1. NSF International Standard 60 as adopted in Rule 62-555.335, F.A.C.;

2. The standards in *Water Chemicals Codex* as adopted in Rule 62-555.335, F.A.C.; or

3. The standards in *Food Chemicals Codex* as adopted in Rule 62-555.335, F.A.C.

(b) Newly installed or constructed public water system (PWS) components that come into contact with drinking water or drinking water treatment chemicals shall conform to the applicable standards, regulations, or requirements referenced in subparagraphs 1. through 3. below. Fire hydrants are not covered by this paragraph; and mechanical devices that were previously installed in a PWS and then are removed, repaired or refurbished, and reinstalled in the same PWS are not covered by this paragraph. In addition, this paragraph does not apply to PWS components that either come into contact with drinking water prior to its treatment by reverse osmosis or come into contact with drinking water treatment chemicals and that are installed or constructed under a construction permit for which the Department received a complete application before August 28, 2003.

1. Except for ion-exchange resins, precast or cast-in-place concrete structures, and cement mortar, which are addressed in subparagraphs 2. and 3. below, newly installed or constructed PWS components that come into contact with drinking water or drinking water treatment chemicals shall conform to one of the following:

a. NSF International Standard 61 as adopted in Rule 62-555.335, F.A.C.;

b. NSF International Standard 42, 44, 53, 55, 58, or 62 as adopted in Rule 62-555.335, F.A.C.;

c. Section 6 of NSF International Standard 14 as adopted in Rule 62-555.335, F.A.C.; or

d. The Food and Drug Administration's regulations for indirect food additives as contained in the April 1, 2002, revision of 21 CFR Parts 174 through 189, which are incorporated herein by reference.

2. Newly installed ion-exchange resins that come into contact with drinking water shall be part of an ion-exchange water softener that conforms to NSF International Standard 44 as adopted in Rule 62-555.335, F.A.C., or shall conform to one of the following:

a. NSF International Standard 61 as adopted in Rule 62-555.335, F.A.C.; or

b. The Food and Drug Administration's regulations for secondary direct food additives from ion-exchange resins as contained in the April 1, 2002, revision of 21 CFR 173.25, which is incorporated herein by reference.

3. Any newly installed or constructed precast or cast-in-place concrete structure or newly installed cement mortar that is not coated by a barrier material meeting the requirements of subparagraph 1 above and that comes into contact with drinking water or drinking water treatment chemicals shall meet the following requirements:

a. All cement, admixtures, form release agents, curing compounds, and sealers used in or on the concrete or mortar shall conform to NSF International Standard 61 as adopted in Rule 62-555.335, F.A.C.

b. Aggregate used in the concrete or mortar shall be clean (i.e., free of excess clay, silt, mica, organic matter, chemical salts, and coated grains) and shall be essentially free of those metals and radionuclides regulated under applicable primary drinking water standards.

c. Water used in the concrete or mortar shall meet applicable primary drinking water standards for inorganics, organics, and radionuclides.

(c) To determine or document whether drinking water additives or treatment chemicals or public water system components conform to the standards, regulations, or requirements listed in paragraph (a) or (b) above, suppliers of water or construction permit

applicants may conduct their own evaluations or may rely upon third-party or manufacturer certifications.

(d) The Department shall allow exceptions to the requirements in paragraph (b) above if suppliers of water or construction permit applicants provide the following:

1. Documentation that components conforming to the applicable standards, regulations, or requirements in paragraph (b) are not readily available; and

2. Assurance that the components being provided will not impart into drinking water or drinking water treatment chemicals any contaminant in an amount that could cause adverse human health effects.

(4) Flood Protection. Community water systems (CWSs) shall be designed and constructed so that structures, and electrical or mechanical equipment, used to treat, pump, or store drinking water, apply drinking water treatment chemicals, or handle drinking water treatment residuals are protected from physical damage by the 100-year flood and, in coastal areas subject to flooding by wave action, from physical damage by the 100-year wave action. Additionally, CWSs shall be designed and constructed so that the aforementioned structures and equipment remain fully operational and accessible during the 25-year flood and, in coastal areas subject to flooding by wave action, the 25-year wave action; a lesser flood or wave action may be used if suppliers of water or construction permit applicants provide justification for using a lesser flood or wave action, but in no case shall less than the ten-year flood or wave action be used.

(5) Security. Drinking water treatment or pumping facilities shall be enclosed by fences with lockable access gates, housed in lockable buildings or enclosures, or otherwise protected to prevent tampering, vandalism, and sabotage. Finished-drinking-water storage facilities shall be enclosed by fences with lockable access gates, shall have lockable access openings and lockable cages or enclosures obstructing access to ladders, or shall be otherwise protected to prevent tampering, vandalism, and sabotage.

(6) Capacity of Drinking Water Source and Treatment Facilities. The total capacity of all water source and treatment facilities connected to a water system shall at least equal the water system's design maximum-day water demand (including design fire-flow demand if fire protection is being provided). Applicants for a permit to construct or alter a drinking water treatment plant's source water or treatment facilities shall establish in the preliminary design report or drawings, specifications, and design data accompanying their permit application the design maximum-day capacity of the plant's source water facilities and the plant's treatment facilities and, if the plant is being designed to meet peak water demand or to supplement finished-drinking-water storage facilities in meeting peak water demand, the design peak capacity of the plant's source water facilities and the plant's treatment facilities. In turn, the Department shall specify in its construction permit for the plant's new or altered source water or treatment facilities the permitted maximum-day operating capacity of the plant and, if the plant is being designed to meet peak water demand or to supplement finished-water storage facilities in meeting peak water demand, the permitted peak operating capacity of the plant. The Department shall not specify a permitted plant operating capacity greater than the design capacity of the plant's treatment facilities as established by the applicant. However, the Department shall specify a permitted plant operating capacity less than the design capacity of the plant's treatment facilities if the actual design capacity of the plant's source water facilities, regardless of any water use permit limitations set by the water management district, is less than the design capacity of the plant's treatment facilities; in such a case:

(a) The construction permit for the plant's new or altered source water or treatment facilities shall indicate the design capacity of the plant's treatment facilities, shall state that permitted plant operating capacity is being limited because of the actual design capacity of the plant's source water facilities, and shall specify a permitted plant operating capacity equal to the actual design capacity of the plant's source water facilities.

(b) Each subsequent construction permit for new or altered source water facilities for the plant shall update the permitted plant operating capacity as appropriate.

(7) Raw Surface Water Pumping Stations. At each raw surface water pumping station that is constructed or altered under a construction permit for which the Department receives a complete application on or after August 28, 2003, and that is connected to a community water system (CWS) serving, or designed to serve, 350 or more persons or 150 or more service connections, the supplier of water shall provide an installed or uninstalled standby pump of sufficient capacity to replace the largest pump. However, for CWSs that have multiple pumping stations subject to this requirement, the supplier of water may provide one uninstalled standby pump for each size of raw surface water pump installed in the water system instead of providing a standby pump on site at each raw surface water pumping station; and for CWSs that have only one pumping station subject to this requirement and that are designed to serve 10,000 or fewer persons, as many as three water systems located in the same county, or within 50 miles of one another, may enter into a mutual aid agreement to share one appropriately sized, uninstalled standby pump instead of providing a standby pump

on site at each water system's raw surface water pumping station.

(8) Well Pump Housing, Well Pump Discharge Piping, and Well Pump Appurtenances.

(a) Housing of Well Pumps.

1. Well pumps shall be housed in a weatherproof building, room, or pit unless the pumps are submersible or completely weatherproof, in which case the pumps need only be protected against tampering, vandalism, and sabotage in accordance with subsection (5) above.

2. Well pumphouses (i.e., buildings or rooms) for which the Department receives a complete construction permit application on or after August 28, 2003, shall have a concrete floor that is elevated above the adjacent finished ground surface and that is sloped to drain away from wells and well pumps. In addition, such well pumphouses shall have an access opening or removable roof or walls as necessary to provide full access for servicing wells and well pumps.

3. Well pump pits are allowed only where the finished ground surface is above the 100-year flood elevation and, in coastal areas subject to flooding by wave action, the 100-year wave-action elevation. All pump pit access openings shall have watertight covers or shall be flanged upward and provided with overlapping covers, and all pump pits shall be drained by gravity or by dual sump pumps with an alarm system that is activated in the event either sump pump fails. Sump pump alarm systems shall include an audio-visual alarm near the pump pit, and if the pump pit is not at a site staffed 24 hours per day and seven days per week, the alarm also shall be telemetered to a place staffed 24 hours per day and seven days per week, or shall trigger an automatic telephone dialing or paging device, to enable notification of an authorized representative of the supplier of water. Pump pits for which the Department receives a complete construction permit application on or after August 28, 2003, shall have an opening as necessary to provide full access for servicing wells and well pumps and shall have a concrete floor sloped to drain away from wells and well pumps.

(b) Well Pump Discharge Piping.

1. New or altered discharge piping shall be designed and constructed in accordance with Section 3.2.7.3 in *Recommended Standards for Water Works* as incorporated into Rule 62-555.330, F.A.C., except that a check valve is not required in the discharge piping from a jet pump and except that the required smooth-nosed sampling tap shall be located as specified in subparagraph 2. below.

2. The discharge piping from each well pump shall include a smooth-nosed tap for sampling raw well water. All such sampling taps shall be located upstream of the check valve in the discharge piping if possible and upstream of all treatment facilities and chemical application points; shall be located at least 12 inches above the finished floor, pad, or ground surface below the tap; and shall be conveniently accessible and downward-opening. Raw well water sampling taps installed on or after August 28, 2003, except those installed under a construction permit for which the Department received a complete application before August 28, 2003, shall have no interior or exterior threads.

(c) Well Vents. Well pumps installed on or after August 28, 2003, except those installed under a construction permit for which the Department received a complete application before August 28, 2003, shall pump from a well that is vented to the atmosphere unless the well pump is a packer-type jet pump, the well casing also serves as well pump suction piping, the well is a flowing artesian well, there is no appreciable drawdown in the well, or the supplier of water provides justification for not venting the well to the atmosphere. All well vents shall terminate at least 12 inches above the 100-year flood elevation and, in coastal areas subject to flooding by wave action, at least 12 inches above the 100-year wave-action elevation. New or altered well vents shall be designed and constructed in accordance with Section 3.2.7.5 in *Recommended Standards for Water Works* as incorporated into Rule 62-555.330, F.A.C.

(9) Odor Control at Drinking Water Treatment Plants. Drinking water treatment plants shall comply with the objectionable odor prohibition under subsection 62-296.320(2), F.A.C. ("Objectionable odor" is defined in Rule 62-210.200, F.A.C.) Applicants for a permit to construct or alter drinking water treatment facilities, except those applicants who have submitted a complete application to the Department before August 28, 2003, shall provide in the preliminary design report or drawings, specifications, and design data accompanying their permit application assurance of compliance with subsection 62-296.320(2), F.A.C. Assurance of compliance may be based upon water quality data; use of appropriate water treatment processes and chemicals; proper treatment of vented gases; use of mitigative measures such as buffer zones owned or under the control of the supplier of water; etc.

(10) Color Coding of Piping at Drinking Water Treatment Plants. All new or altered, aboveground piping at drinking water treatment plants shall be color coded and labeled as recommended in Section 2.14 of *Recommended Standards for Water Works* as incorporated into Rule 62-555.330, F.A.C. In addition, all underground water main pipe that is installed at drinking water treatment plants on or after August 28, 2003, and that is conveying finished drinking water shall be color coded as required under

subparagraph 62-555.320(21)(b)3., F.A.C. This subsection does not apply to drinking water treatment plant piping installed or altered under a construction permit for which the Department received a complete application before August 28, 2003.

(11) Alarms for Nitrate/Nitrite Removal Equipment. An alarm system shall be provided for any drinking water treatment plant equipment that is installed or altered under a construction permit for which the Department receives a complete application on or after August 28, 2003, and that is necessary to achieve compliance with the primary drinking water standard for nitrate or nitrite. The alarm system shall be activated in the event of equipment failure and shall include an audio-visual alarm at the plant. If the plant is not staffed during all hours the plant is in operation, the alarm also shall be telemetered to a place staffed during all hours the plant is in operation, or shall trigger an automatic telephone dialing or paging device, to enable notification of an appropriately licensed water treatment plant operator.

(12) Disinfection of Drinking Water. All suppliers of water shall provide continuous disinfection of the drinking water they distribute. The necessary equipment and tanks shall be designed to comply with the applicable requirements in paragraphs (a) through (d) below and subsections 62-555.350(5) and (6), F.A.C. Applicants for a permit to construct or alter disinfection facilities at a drinking water treatment plant where the requirements in paragraph (a) or (b) below apply shall establish in the preliminary design report or drawings, specifications, and design data accompanying their permit application the following: the design level of *Cryptosporidium, Giardia lamblia,* or virus inactivation to be achieved by disinfection; if chemical disinfection is being used to achieve *Giardia lamblia* or virus inactivation, the design minimum residual disinfectant concentration (C) before or at the first customer and the corresponding design minimum disinfectant contact time (T); and if ultraviolet disinfection is being used to achieve *Cryptosporidium, Giardia lamblia,* or virus inactivation, the design minimum ultraviolet dose.

(a) Suppliers of water using surface water or ground water under the direct influence of surface water shall comply with applicable requirements under Rule 62-550.817, F.A.C.

(b) Suppliers of water using ground water that is not under the direct influence of surface water but that is from a well considered microbially contaminated or susceptible to microbial contamination per paragraph 62-555.315(6)(b) or (f), F.A.C., shall provide treatment that reliably achieves at least four-log (99.99 percent) inactivation or removal of viruses before or at the first customer at all flow rates. Additionally, by no later than December 31, 2005, suppliers of water using ground water that is not under the direct influence of surface water but that is exposed during treatment to the open atmosphere and possible microbial contamination shall provide treatment that reliably achieves at least four-log inactivation or removal of viruses before or at the first customer at all flow rates. For the purpose of this paragraph, aerators and other facilities that are protected against contamination from birds, insects, wind-borne debris, rainfall, and drainage are not considered to be exposing water to the open atmosphere and possible microbial contamination. Direct filtration and diatomaceous-earth filtration are considered to be achieving one-log (90 percent) removal of viruses when properly operated, and conventional filtration treatment and slow sand filtration are considered to be achieving two-log (99 percent) removal of viruses when properly operated. Chemical disinfection using free chlorine, chlorine dioxide, or ozone and chemical disinfection using chloramines with chlorine added prior to ammonia are considered to be achieving two-log, three-log (99.9 percent), or four-log inactivation of viruses when meeting the applicable CT value listed in Appendix E of the *Guidance Manual for Compliance with the Filtration and Disinfection Requirements for Public Water Systems Using Surface Water Sources* as adopted in Rule 62-555.335, F.A.C.

(c) Disinfectant contact time shall be calculated or determined as described in the definition of "disinfectant contact time" under Rule 62-550.200, F.A.C.

(d) All suppliers of water shall maintain a minimum free chlorine residual of 0.2 milligram per liter, or a minimum combined chlorine residual of 0.6 milligram per liter or an equivalent chlorine dioxide residual, throughout their drinking water distribution system at all times.

(13) Chlorination Facilities for Disinfection of Drinking Water.

(a) Gas Chlorination Facilities.

1. New chlorinators shall be the vacuum-operated, solution-feed type.

2. Chlorinator capacity shall be such that any applicable minimum CT value and the minimum residual disinfectant level specified in paragraph 62-555.320(12)(d), F.A.C., and subsection 62-555.350(6), F.A.C., can be maintained when maximum chlorine demand coincides with maximum flow rate at the point of chlorine application.

3. At each drinking water treatment plant that is using gas chlorination facilities to achieve *Giardia lamblia* or virus inactivation in accordance with paragraph 62-555.320(12)(a) or (b), F.A.C.; at each treatment plant that is using gas chlorination facilities for disinfection and that is connected to a community water system (CWS) having an actual or design average daily chlorine

consumption equaling or exceeding ten pounds per day; and at each treatment plant that has gas chlorine disinfection facilities constructed or altered under a construction permit for which the Department receives a complete application on or after August 28, 2003, and that is connected to a CWS serving, or designed to serve, 350 or more persons or 150 or more service connections, the supplier of water shall provide installed or uninstalled standby gas chlorination equipment (i.e., a standby chlorinator, including a standby vacuum regulator and a standby eductor, which is also referred to as an injector or ejector; a standby booster pump where booster pumps are used; and a standby evaporator where evaporators are used) of sufficient capacity to replace the largest equipment. However, for water systems that have multiple interconnected plants subject to this requirement, the supplier of water may provide one uninstalled standby for each type and size of gas chlorination equipment installed in the water system instead of providing standby gas chlorination equipment on site at each plant; and for water systems that have only one plant subject to this requirement and that are designed to serve 10,000 or fewer persons, as many as three water systems located in the same county, or within 50 miles of one another, may enter into a mutual aid agreement to share appropriately sized, uninstalled standby gas chlorination equipment instead of providing standby gas chlorination equipment on site at each water system's plant.

4. At each drinking water treatment plant that is using gas chlorination facilities to achieve *Giardia lamblia* or virus inactivation in accordance with paragraph 62-555.320(12)(a) or (b), F.A.C.; at each treatment plant that is using gas chlorination facilities for disinfection and that is connected to a community water system (CWS) having an actual or design average daily chlorine consumption equaling or exceeding ten pounds per day; and at each treatment plant that has gas chlorine disinfection facilities constructed or altered under a construction permit for which the Department receives a complete application on or after August 28, 2003, and that is connected to a CWS serving, or designed to serve, 350 or more persons or 150 or more service connections, the supplier of water shall provide devices for automatic switch-over of chlorine cylinders or containers.

5. Chlorine shall be fed into drinking water proportional to flow. Where the flow rate is reasonably constant, this may be accomplished by electrically interconnecting gas chlorination equipment with well or service pumps or by otherwise designing gas chlorination equipment to operate only when well or service pumps operate. Automatic flow proportioning control of chlorinators shall be provided where the flow rate fluctuates significantly. Furthermore, automatic residual control of chlorinators shall be provided where the chlorine demand fluctuates significantly, and automatic compound-loop control of chlorinators shall be provided where both the flow rate and the chlorine demand fluctuate significantly.

6. Scales shall be provided to accurately weigh chlorine cylinders or containers in use.

7. Chlorine shall be rapidly and thoroughly mixed with all drinking water being treated.

8. Chlorine storage and feed facilities shall be located in a room or area separate from other operating areas. If chlorine storage or feed facilities are enclosed in a room, the room shall be located at ground level and shall be provided with floor-level ventilation. New or altered chlorine rooms shall be designed and constructed in accordance with Section 5.4.1 in R*ecommended Standards for Water Works* as incorporated into Rule 62-555.330, F.A.C. If chlorine storage or feed facilities are not enclosed in a room, they shall be shielded from direct sunlight and rain and shall be located at ground level in an area that either has adequate natural ventilation or is equipped with a mechanical ventilation system. For the purpose of this subparagraph, an area is considered to have adequate natural ventilation if walls are not completely obstructing more than one side of the perimeter of the area. New or altered mechanical ventilation systems for chlorine storage or feed areas shall meet applicable requirements in Section 5.4.1.c of *Recommended Standards for Water Works* as incorporated into Rule 62-555.330, F.A.C.

9. At each drinking water treatment plant that is using gas chlorination facilities to achieve *Giardia lamblia* or virus inactivation in accordance with paragraph 62-555.320(12)(a) or (b), F.A.C., and at each treatment plant that is using gas chlorination facilities for disinfection and that is connected to a community water system serving, or designed to serve, 350 or more persons or 150 or more service connections, the supplier of water shall provide an audio-visual alarm system that is activated by high- and low-vacuum switches, a continuous chlorine residual analyzer, or a continuous oxidation-reduction potential meter to indicate loss of chlorination capability or chlorine residual. If the plant is not staffed during all hours the plant is in operation, the alarm also shall be telemetered to a place staffed during all hours the plant is in operation, or shall trigger an automatic telephone dialing or paging device, to enable notification of an appropriately licensed water treatment plant operator.

10. Suppliers of water shall provide the following safety or protective equipment at drinking water treatment plants with gas chlorination facilities.

a. At each treatment plant with gas chlorination facilities, the supplier of water shall provide in a convenient location, but not inside any room where chlorine is stored or handled, a self-contained breathing apparatus (SCBA) meeting the requirements of the National Institute for Occupational Safety and Health. However, for water systems that have multiple interconnected plants

withdrawing chlorine from only 150-pound or smaller cylinders, the supplier of water may provide an SCBA in each vehicle used by plant operators instead of providing an SCBA at each plant withdrawing chlorine from only 150-pound or smaller cylinders.

b. At each treatment plant with gas chlorination facilities, the supplier of water shall provide appropriate protective equipment in accordance with Table 15.5 in *Water Treatment Plant Design* as incorporated into Rule 62-555.330, F.A.C., except that the supplier of water shall provide a self-contained breathing apparatus in accordance with sub-subparagraph a. above instead of providing a gas mask in accordance with this sub-subparagraph and Table 15.5.

c. At each treatment plant withdrawing chlorine from ton containers or tank cars or trucks, the supplier of water shall provide continuous chlorine leak detection equipment that is connected to an alarm system. The alarm system shall include an audio-visual alarm at the plant, and if the plant is not staffed 24 hours per day and seven days per week, the alarm also shall be telemetered to a place staffed 24 hours per day and seven days per week, or shall trigger an automatic telephone dialing or paging device, to enable notification of an authorized representative of the supplier of water.

d. At each treatment plant withdrawing chlorine from ton containers or tank cars or trucks, the supplier of water shall provide an emergency chlorine leak repair kit meeting the requirements of the Chlorine Institute.

(b) Hypochlorination Facilities.

1. New hypochlorinators shall be positive displacement metering pumps or accurate vacuum-operated dosers.

2. Hypochlorinator capacity shall be such that any applicable minimum CT value and the minimum residual disinfectant level specified in paragraph 62-555.320(12)(d), F.A.C., and subsection 62-555.350(6), F.A.C., can be maintained when maximum chlorine demand coincides with maximum flow rate at the point of hypochlorite application.

3. At each drinking water treatment plant that is using hypochlorination facilities to achieve Giardia lamblia or virus inactivation in accordance with paragraph 62-555.320(12)(a) or (b), F.A.C.; at each treatment plant that is using hypochlorination facilities for disinfection and that is connected to a community water system (CWS) having an actual or design average daily chlorine consumption equaling or exceeding ten pounds per day; and at each treatment plant that has hypochlorite disinfection facilities constructed or altered under a construction permit for which the Department receives a complete application on or after August 28, 2003, and that is connected to a CWS serving, or designed to serve, 350 or more persons or 150 or more service connections, the supplier of water shall provide installed or uninstalled standby hypochlorination equipment (i.e., a standby electrolytic generator and brine pump where sodium hypochlorite is generated on site; a standby metering pump where metering pumps are used; a standby doser, including a standby vacuum regulator and a standby eductor, which is also referred to as an injector or ejector, where vacuum-operated dosers are used; and a standby booster pump where booster pumps are used) of sufficient capacity to replace the largest equipment. However, for water systems that have multiple interconnected plants subject to this requirement, the supplier of water may provide one uninstalled standby for each type and size of hypochlorination equipment installed in the water system instead of providing standby hypochlorination equipment on site at each plant; and for water systems that have only one plant subject to this requirement and that are designed to serve 10,000 or fewer persons, as many as three water systems located in the same county, or within 50 miles of one another, may enter into a mutual aid agreement to share appropriately sized, uninstalled standby hypochlorination equipment instead of providing standby hypochlorination equipment on site at each water system's plant.

4. Hypochlorite shall be fed into drinking water proportional to flow. Where the flow rate is reasonably constant, this may be accomplished by electrically interconnecting hypochlorination equipment with well or service pumps or by otherwise designing hypochlorination equipment to operate only when well or service pumps operate. Automatic flow proportioning control of hypochlorinators shall be provided where the flow rate fluctuates significantly. Furthermore, automatic residual control of hypochlorinators shall be provided where the chlorine demand fluctuates significantly, and automatic compound-loop control of hypochlorinators shall be provided where both the flow and the chlorine demand fluctuate significantly.

5. Hypochlorite metering pumps shall have antisiphon protection. For new or altered hypochlorination facilities, the antisiphon protection for metering pumps shall be in accordance with Section 5.1.5 in *Recommended Standards for Water Works* as incorporated into Rule 62-555.330, F.A.C.

6. For sodium hypochlorite facilities that are constructed or altered under a construction permit for which the Department receives a complete application on or after August 28, 2003, and that include a metering pump:

a. The pump shall be located as close as possible to, and lower than, the hypochlorite source with the pump suction line sloping upward from the pump to the hypochlorite source; or

b. The hypochlorite facilities shall be otherwise designed to prevent gas binding of the pump.

7. For hypochlorination facilities constructed or altered under a construction permit for which the Department receives a

complete application on or after August 28, 2003:

a. Hypochlorinator suction lines shall be located with the intake above the bottom of the hypochlorite container or shall be equipped with a strainer; or

b. The hypochlorination facilities shall be otherwise designed to avoid feeding sediment into the drinking water.

8. Sodium hypochlorite shall not be stored or handled together with any acid or any ammonia or organic compound, and calcium hypochlorite shall not be stored or handled together with any acid or any combustible, organic, or oxidizable material. The storage of sodium hypochlorite shall be carefully managed to limit degradation of the hypochlorite and to limit formation of chlorate; alternative approaches for managing sodium hypochlorite storage are discussed on page 243 in *Water Treatment Plant Design* as incorporated into Rule 62-555.330, F.A.C. Tanks for bulk storage of sodium hypochlorite shall have a liquid-level indicator, a vent, and an overflow discharging to a basin capable of containing accidental spills or overflows without uncontrolled discharge. Where bulk storage of sodium hypochlorite is provided, a day tank also shall be provided unless there is an alternative means for accurately measuring the daily amount of hypochlorite fed and there are alternative safeguards (e.g., continuous chlorine residual monitoring; audio-visual alarms activated by high chlorine residual levels; and staffing at the water treatment plant, or at a monitoring and control center for the plant, during all hours the plant is in operation) that maintain a similar level of protection against overfeeding of hypochlorite. Sodium hypochlorite bulk storage tanks that are installed on or after August 28, 2003, and that cannot be completely drained to a day tank shall be equipped with a valved drain to allow for complete drainage and periodic cleaning of the bulk storage tank; however, this requirement does not apply to bulk storage tanks installed under a construction permit for which the Department received a complete application before August 28, 2003.

9. Hypochlorite solution or day tanks shall have a lid or cover, shall have a valved drain, and shall be scale-mounted or have a means for measuring the liquid level in the tank. For new or altered hypochlorination facilities, solution or day tanks shall be designed and constructed in accordance with Sections 5.1.10 and 5.1.11 in *Recommended Standards for Water Works* as incorporated into Rule 62-555.330, F.A.C.

10. Hypochlorite shall be rapidly and thoroughly mixed with all drinking water being treated.

11. Housing for new or altered hypochlorite storage or feed facilities shall be designed and constructed in accordance with Section 5.1.14 in *Recommended Standards for Water Works* as incorporated into Rule 62-555.330, F.A.C. Waste hydrogen from on-site sodium hypochlorite generation systems constructed or altered under a construction permit for which the Department receives a complete application on or after August 28, 2003, shall be vented directly to the outside atmosphere using a dilution air blower as necessary to ensure the concentration of hydrogen always will be below the explosion level.

12. At each drinking water treatment plant that is using hypochlorination facilities to achieve *Giardia lamblia* or virus inactivation in accordance with paragraph 62-555.320(12)(a) or (b), F.A.C., and at each treatment plant that has hypochlorite disinfection facilities constructed or altered under a construction permit for which the Department receives a complete application on or after August 28, 2003, and that is connected to a CWS serving, or designed to serve, 350 or more persons or 150 or more service connections, the supplier of water shall provide an audio-visual alarm system that is activated by high- and low-pressure switches, a low-flow switch or flow meter, high- and low-vacuum switches, a continuous chlorine residual analyzer, or a continuous oxidation-reduction potential meter to indicate loss of hypochlorination capability or chlorine residual. If the plant is not staffed during all hours the plant is in operation, the alarm also shall be telemetered to a place staffed during all hours the plant is in operation, or shall trigger an automatic telephone dialing or paging device, to enable notification of an appropriately licensed water treatment plant operator.

13. At each drinking water treatment plant with hypochlorination facilities, the supplier of water shall provide appropriate safety or protective equipment in accordance with Table 15.5 in *Water Treatment Plant Design* as incorporated into Rule 62-555.330, F.A.C.

(14) Standby Power.

(a) By no later than December 31, 2005, each community water system (CWS) serving, or designed to serve, 350 or more persons or 150 or more service connections shall provide standby power for operation of that portion of the system's water source, treatment, and pumping facilities necessary to deliver drinking water meeting all applicable primary or secondary standards at a rate at least equal to the average daily water demand for the system. If a CWS interconnects with another CWS to meet this requirement, the portion of the combined systems' components provided with standby power shall be sufficient to deliver water at a rate at least equal to the average daily water demand for the combined systems.

(b) Where standby power is required under paragraph (a) above, it shall be provided through:

1. Connection to at least two independent power feeds from separate substations; or

2. One or more auxiliary power sources (i.e., generators or engines).

(c) Where standby power is required under paragraph (a) above and is provided through connection to independent power feeds from separate substations, the power feeds shall not be located in the same conduit or supported from the same utility pole and, if overhead power feeds are used, shall not cross or be located in an area where a single plausible occurrence (e.g., a fallen tree) could disrupt both power feeds.

(d) Where standby power is required under paragraph (a) above and is provided through an auxiliary power source, an in-place auxiliary power source is preferred. A portable auxiliary power source may be provided only if all of the following conditions are met:

1. A system to automatically start up the auxiliary power source and transfer electrical loads is not required under paragraph (e) below.

2. The supplier of water demonstrates that the water system has first priority for use of the portable auxiliary power source.

3. The supplier of water demonstrates that the portable auxiliary power source will at all times be in reasonably close proximity to (i.e., within 25 miles of) the water system components for which standby power is required.

(e) Where standby power is required under paragraph (a) above and the time delay required to manually transfer electrical loads from one power source to another could result in failure to maintain the minimum water distribution system pressure required under subsection 62-555.350(7), F.A.C., the supplier of water shall provide a system to automatically start up the auxiliary power source if an auxiliary power source is provided and to automatically transfer electrical loads.

(f) At each site where standby power is required under paragraph (a) above, the supplier of water shall provide by December 31, 2005, an audio-visual alarm system that is activated in the event any power source fails. If the site is not staffed during all hours the standby-powered water system components are in operation, the alarm also shall be telemetered to a place staffed during all hours the standby-powered water system components are in operation, or shall trigger an automatic telephone dialing or paging device, to enable notification of an authorized representative of the supplier of water.

(15) High-Service or Booster Pumps. For purposes of this subsection, well pump installations shall be considered high-service pumping stations if the well pumps serve as high-service pumps.

(a) Unless elevated finished-drinking-water storage is provided, the total capacity of all high-service pumping stations connected to a water system, or the capacity of a booster pumping station, shall be sufficient to:

1. Meet at least the water system's, or the booster station service area's, peak-hour water demand (and if fire protection is being provided, meet at least the water system's, or the booster station service area's, design fire-flow rate plus a background water demand equivalent to the maximum-day demand other than fire-flow demand); and

2. Maintain a minimum gauge pressure of 20 pounds per square inch throughout the water system's, or the booster station service area's, distribution system up to each customer's point of connection to the distribution system.

(b) Where elevated finished-drinking-water storage is provided, the total capacity of all high-service pumping stations connected to a water system, or the capacity of a booster pumping station, shall be sufficient to at least meet the water system's, or the booster station service area's, maximum-day water demand (including design fire-flow demand if fire protection is being provided) and to maintain distribution system pressure as specified in subparagraph 62-555.320(15)(a)2., F.A.C. In addition, the total capacity of the high-service pumping stations, or the capacity of the booster pumping station, combined with the useful elevated finished-water storage capacity shall be sufficient to meet the water system's, or the booster station service area's, peak-hour water demand for at least four consecutive hours (and if fire protection is being provided, shall be sufficient to meet the water system's, or the booster station service area's, design fire-flow rate plus a background water demand equivalent to the maximum-day demand other than fire-flow demand for the design fire-flow duration).

(c) At each high-service or booster pumping station that is constructed or altered under a construction permit for which the Department receives a complete application on or after August 28, 2003, and that is connected to a community water system (CWS) serving, or designed to serve, 350 or more persons or 150 or more service connections, the supplier of water shall provide an installed or uninstalled standby pump of sufficient capacity to replace the largest pump. However, for CWSs that have multiple interconnected pumping stations subject to this requirement, the supplier of water may provide one uninstalled standby pump for each size of high-service or booster pump installed in the water system instead of providing a standby pump on site at each high-service or booster pumping station; and for water systems that have only one pumping station subject to this requirement and that are designed to serve 10,000 or fewer persons, as many as three water systems located in the same county, or within 50 miles of one

another, may enter into a mutual aid agreement to share one appropriately sized, uninstalled standby pump instead of providing a standby pump on site at each water system's high-service or booster pumping station.

(16) Finished-Drinking-Water Meters. All water treatment plants that are connected to a community water system and water treatment plants that are connected to a non-community water system and that are constructed or altered under a construction permit for which the Department receives a complete application on or after August 28, 2003, shall be equipped with a totalizing flow meter to measure the net quantity of finished drinking water, excluding any filter backwash water, produced at the plant each day. All other drinking water treatment plants shall be equipped with at least elapsed time meters that can be used in conjunction with calibrated pumps to measure the net quantity of finished drinking water produced at the plant each day.

(17) Finished-Drinking-Water Sampling Taps. A conveniently accessible sampling tap shall be provided at each entry point to a drinking water distribution system (i.e., at each point where drinking water source and treatment facilities discharge to a drinking water distribution system) so that samples of finished drinking water may be taken in accordance with subsection 62-550.500(5), F.A.C. Each such sampling tap shall be located downstream from all water treatment processes at a point where all treatment chemicals have been thoroughly mixed with the water and shall be located upstream from all water customers. If a water system draws water from more than one source and combines the sources before distribution, a single finished-water sampling tap may be provided downstream from where all of the sources are combined at a point where all of the sources have been thoroughly mixed together.

(18) Pump Suction Piping. All pump suction piping that is conveying raw, partially treated, or finished drinking water shall be protected against infiltration. Pump suction piping that is conveying raw, partially treated, or finished drinking water and that is constructed or altered under a construction permit for which the Department receives a complete application on or after August 28, 2003, must be located aboveground or, if located underground, must be constantly under positive gauge pressure.

(19) Finished-Drinking-Water Storage Capacity. This subsection addresses finished-water storage capacity necessary for operational equalization to meet peak water demand. (If fire protection is being provided, additional finished-water storage capacity shall be provided as necessary to meet the design fire-flow rate for the design fire-flow duration.) The finished-water storage capacity necessary to meet the peak water demand for a consecutive system may be provided by the consecutive system or by a wholesale system delivering water to the consecutive system.

(a) Except as noted in paragraph (b) below, the total useful finished-water storage capacity (excluding any storage capacity for fire protection) connected to a water system shall at least equal 25 percent of the system's maximum-day water demand, excluding any design fire-flow demand.

(b) A total useful finished-water storage capacity less than that specified in paragraph (a) above is acceptable if the supplier of water or construction permit applicant makes one of the following demonstrations:

1. A demonstration consistent with Section 10.6.3 in *Water Distribution Systems Handbook* as incorporated into Rule 62-555.330, F.A.C., showing that the water system's total useful finished-water storage capacity (excluding any storage capacity for fire protection) is sufficient for operational equalization.

2. A demonstration showing that, in conjunction with the capacity of the water system's source, treatment, and finished-water pumping facilities, the water system's total useful finished-water storage capacity (excluding any storage capacity for fire protection) is sufficient to meet the water system's peak-hour water demand for at least four consecutive hours. For small water systems with hydropneumatic tanks that are installed under a construction permit for which the Department receives a complete application on or after August 28, 2003, the supplier of water or construction permit applicant also shall demonstrate that, in conjunction with the capacity of the water system's source, treatment, and finished-water pumping facilities, the water system's total useful finished-water storage capacity (i.e., the water system's total effective hydropneumatic tank volume) is sufficient to meet the water system's peak instantaneous water demand for at least 20 consecutive minutes.

(20) Hydropneumatic Tanks. New hydropneumatic tanks, including bladder- or diaphragm-type tanks, shall be designed and constructed in accordance with Section 7.2 in *Recommended Standards for Water Works* as incorporated into Rule 62-555.330, F.A.C., except that:

(a) The tanks need not be housed.

(b) Tanks installed on or after August 28, 2003, except those installed under a construction permit for which the Department received a complete application before August 28, 2003, shall have an automatic air or pressure relief valve.

(c) Bladder- or diaphragm-type tanks need not have an access manhole, water sight glass, or means for adding air other than a recharging valve.

(21) Drinking Water Piping and Appurtenances.

(a) All new or altered mains, including treatment plant process piping, and appurtenances conveying raw or partially treated drinking water shall be designed and constructed in accordance with Sections 8.0, 8.4, 8.5, and 8.7 in *Recommended Standards for Water Works* as incorporated into Rule 62-555.330, F.A.C., except that:

1. Asbestos-cement water mains shall be pressure and leakage tested in accordance with American Water Works Association (AWWA) Standard C603 as incorporated into Rule 62-555.330, F.A.C., and polyvinyl chloride water mains shall be pressure and leakage tested in accordance with AWWA Standard C605 as incorporated into Rule 62-555.330, F.A.C., while all other types of water mains shall be pressure and leakage tested in accordance with AWWA Standard C600 as incorporated into Rule 62-555.330, F.A.C.

2. Water mains and appurtenances that normally convey surface water, or ground water under the direct influence of surface water, and that are located upstream of all filtration and disinfection treatment facilities need not be disinfected.

3. All water mains and appurtenances other than those described in subparagraph 2. above shall be disinfected and bacteriologically evaluated in accordance with Rule 62-555.340, F.A.C.

(b) All new or altered piping, including treatment plant process piping, and appurtenances conveying finished drinking water shall be designed and constructed in accordance with Sections 8.0 through 8.5 and 8.7 through 8.11 in *Recommended Standards for Water Works* as incorporated into Rule 62-555.330, F.A.C., except that:

1. Asbestos-cement water mains shall be pressure and leakage tested in accordance with American Water Works Association (AWWA) Standard C603 as incorporated into Rule 62-555.330, F.A.C., and polyvinyl chloride water mains shall be pressure and leakage tested in accordance with AWWA Standard C605 as incorporated into Rule 62-555.330, F.A.C., while all other types of water mains shall be pressure and leakage tested in accordance with AWWA Standard C600 as incorporated into Rule 62-555.330, F.A.C.

2. All water mains and appurtenances shall be disinfected and bacteriologically evaluated in accordance with Rule 62-555.340, F.A.C.

3. All water main pipe, including fittings, installed on or after August 28, 2003, except pipe installed under a construction permit for which the Department received a complete application before August 28, 2003, shall be color coded or marked using blue as a predominant color to differentiate drinking water from reclaimed or other water. Underground plastic pipe shall be solid-wall blue pipe, shall have a co-extruded blue external skin, or shall be white or black pipe with blue stripes incorporated into, or applied to, the pipe wall; and underground metal or concrete pipe shall have blue stripes applied to the pipe wall. Pipe striped during manufacturing of the pipe shall have continuous stripes that run parallel to the axis of the pipe, that are located at no greater than 90-degree intervals around the pipe, and that will remain intact during and after installation of the pipe. If tape or paint is used to stripe pipe during installation of the pipe, the tape or paint shall be applied in a continuous line that runs parallel to the axis of the pipe and that is located along the top of the pipe; for pipes with an internal diameter of 24 inches or greater, tape or paint shall be applied in continuous lines along each side of the pipe as well as along the top of the pipe. Aboveground pipe at drinking water treatment plants shall be color coded and labeled in accordance with subsection 62-555.320(10), F.A.C., and all other aboveground pipe shall be painted blue or shall be color coded or marked like underground pipe.

(c) The Department shall allow the use of pipe and appurtenances that do not conform to applicable American Water Works Association (AWWA) standards as incorporated into Rule 62-555.330, F.A.C., only if suppliers of water or construction permit applicants provide documentation showing that the alternate pipe and appurtenances provide strength, durability, reliability, and public health protection at least equal to that provided by pipe and appurtenances that conform to applicable AWWA standards.

Rulemaking Authority 403.861(9) FS. Law Implemented 403.861(7) FS. History–New 11-19-87, Formerly 17-22.620, Amended 1-18-89, 5-7-90, 1-1-93, 3-8-94, Formerly 17-555.320, Amended 8-28-03.

62-555.322 Prohibition on Use of Lead Pipe, Solder, and Flux.

(1) As of January 18, 1989, any pipe, pipe fitting, solder, and flux that is used in the construction, alteration, or repair of any public water system shall be lead free as defined in subsection (2) below, and as of August 28, 2003, any plumbing fitting or fixture that is intended to dispense water for human consumption and that is used in the construction, alteration, or repair of any public water system shall be lead free as defined in subsection (2) below. This subsection shall not apply to leaded joints necessary for the repair of cast iron pipes.

(2) The phrase “lead free” shall mean:

(a) When used with respect to solder and flux, solder and flux containing not more than 0.2 percent lead;

(b) When used with respect to pipe and pipe fittings, pipe and pipe fittings containing not more than 8.0 percent lead; and

(c) When used with respect to plumbing fittings and fixtures intended to dispense water for human consumption, plumbing fittings and fixtures in compliance with Section 9 of NSF International Standard 61 as adopted in Rule 62-555.335, F.A.C.

Rulemaking Authority 403.861(9) FS. Law Implemented 403.853(1) FS. History–New 1-18-89, Formerly 17-555.322, Amended 8-28-03.

62-555.325 Fluoridation.

(1) Fluoride levels in drinking water shall not exceed the primary maximum contaminant level under Rule 62-550.310, F.A.C., or the secondary maximum contaminant level under Rule 62-550.320, F.A.C. The recommended optimal fluoride concentration for fluoridated community water systems is 0.8 milligram per liter. The recommended fluoride control range for fluoridated community water systems is 0.7 to 1.3 milligrams per liter.

(2) Equipment and Installation.

(a) Fluoride chemicals shall be fed into drinking water proportional to flow. Where the flow rate is reasonably constant, this may be accomplished by electrically interconnecting fluoride metering pumps with well or service pumps or by otherwise designing fluoride metering pumps to operate only when well or service pumps operate. Automatic flow proportioning control of fluoride metering pumps shall be provided where the flow rate varies significantly (i.e., where the flow rate varies by more than 20 percent).

(b) Fluoride metering pumps shall have antisiphon protection.

(c) Tanks and containers holding fluorosilicic acid shall be vented only to the outside atmosphere.

(d) Scales, loss-of-weight recorders, liquid-level indicators, or flow meters, as appropriate, shall be provided to accurately measure quantities of fluoride chemicals used.

(e) At each drinking water treatment plant with fluoridation facilities, the supplier of water shall provide appropriate safety or protective equipment in accordance with Table 15.5 in *Water Treatment Plant Design* as incorporated into Rule 62-555.330, F.A.C.

(f) Suppliers of water who fluoridate their water shall provide analytical equipment that uses the colorimetric or ion electrode method to measure the fluoride concentration in the treated water.

(g) New or altered fluoridation facilities shall be designed and constructed in accordance with Section 4.7 and Part 5 in *Recommended Standards for Water Works* as incorporated into Rule 62-555.330, F.A.C., and in accordance with *Water Fluoridation: A Manual for Engineers and Technicians* as incorporated into Rule 62-555.330, F.A.C.

(3) Quality Assurance and Reporting.

(a) For each drinking water treatment plant fluoridating water, the supplier of water shall measure and record daily the quantity of fluoride chemical used, calculate and record daily the fluoride dose, and measure and record daily the fluoride concentration in the finished drinking water at the entry to the drinking water distribution system. The daily measurements of fluoride concentration in finished water may be performed by any authorized representative of the supplier of water but shall be performed using an appropriate method referenced in subsection 62-550.550(1), F.A.C. If the daily measurements of fluoride concentration in finished water are not performed by a laboratory certified by the Department of Health to perform fluoride analyses of drinking water, the supplier of water shall collect check samples and have them analyzed in accordance with paragraph (b) below.

(b) For each public water system (PWS) fluoridating water and not using a certified laboratory to perform all daily measurements of fluoride concentration in the finished drinking water from each of the PWS's treatment plants, the supplier of water shall collect two check samples per month from the PWS's distribution system. Each check sample shall be "split" into two samples, one which shall be analyzed by an authorized representative of the supplier of water and one which shall be analyzed by a laboratory of the Department of Health or a laboratory certified by the Department of Health to perform fluoride analyses of drinking water.

(c) For each drinking water treatment plant fluoridating water, the supplier of water shall report the information required under paragraph (a) above and, if applicable, the results of the analyses required under paragraph (b) above to the Department of Health's Bureau of Dental Health within ten days after each month of operation using Form 62-555.900(5), Monthly Operation Report for PWSs Fluoridating Water, hereby adopted and incorporated by reference, effective August 28, 2003. Copies of this form are available from the Department of Environmental Protection, Drinking Water Section, M.S. 3520, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

(4) The Department of Health's Bureau of Dental Health is authorized to conduct inspections of fluoridation facilities at public water systems.

Rulemaking Authority 403.853(3), 403.861(6), (9), 403.862(1) FS. Law Implemented 403.852(12), (13), 403.853(3), (5) FS. History–New 11-19-87, Formerly 17-22.625, Amended 1-18-89, 1-3-91, Formerly 17-555.325, Amended 8-28-03.

62-555.330 Engineering References for Public Water Systems.

In addition to the requirements of this chapter, the requirements and standards contained in the following technical publications are hereby incorporated by reference and shall be applied in determining whether permits to construct or alter public water system components, excluding wells (but including well pumping equipment and appurtenances), shall be issued or denied. Each of these publications is available from the publisher or source listed for the publication, and each of these publications is available for review at the Department of Environmental Protection, Source and Drinking Water Program, MS 3520, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, at the Department of Environmental Protection district offices, and at the Approved County Health Departments. The specific requirements contained in this chapter supersede the requirements and standards contained in these publications. Where there are conflicts between these publications, suppliers of water and construction permit applicants shall comply with any one of the publications. Where there are multiple options or alternatives in these publications, suppliers of water and construction permit applicants shall comply with any one of the options or alternatives. The Department shall allow exceptions to the requirements and standards in these publications if suppliers of water or construction permit applicants provide justification for each exception and provide alternative design and construction features that achieve the same purpose and that afford a similar level of strength, durability, reliability, and public health protection.

(1) *Water Quality and Treatment: A Handbook of Community Water Supplies*, Fifth Edition, 1999, American Water Works Association. Published by McGraw-Hill, Post Office Box 182604, Columbus, OH 43218-2605.

(2) *Water Treatment Plant Design*, Third Edition, 1997, American Society of Civil Engineers and American Water Works Association. Published by McGraw-Hill, Post Office Box 182604, Columbus, OH 43218-2605.

(3) *Recommended Standards for Water Works*, 1997 Edition, Great Lakes – Upper Mississippi River Board of State Public Health and Environmental Managers. Published by Health Research, Inc., Health Education Services Division, P. O. Box 7126, Albany, NY 12224.

(4) Standards of the American Water Works Association (AWWA) in effect on January 1, 2003. Published by the AWWA, 6666 W. Quincy Avenue, Denver, CO 80235.

(5) *Water Fluoridation: A Manual for Engineers and Technicians*, September 1986, Thomas G. Reeves, P.E. Published by the U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control, Dental Disease Prevention Activity, Atlanta, GA 30333.

(6) *Recommended Practice for Backflow Prevention and Cross-Connection Control: AWWA Manual M14*, Third Edition, 2004, American Water Works Association (AWWA). Published by the AWWA, 6666 W. Quincy Avenue, Denver, CO 80235, www.awwa.org.

(7) *Ultraviolet Disinfection Guidelines for Drinking Water and Water Reuse*, December 2000, National Water Research Institute (NWRI) and American Water Works Association Research Foundation. Published by the NWRI, P. O. Box 20865, Fountain Valley, CA 92728-0865.

(8) *Water Distribution Systems Handbook*, 1999, Larry W. Mays, Editor in Chief. Published by McGraw-Hill, Post Office Box 182604, Columbus, OH 43218-2605.

Rulemaking Authority 403.861(9) FS. Law Implemented 403.861(7) FS. History–New 11-19-87, Formerly 17-22.630, Amended 1-18-89, 1-3-91, 1-1-93, Formerly 17-555.330, Amended 9-22-99, 8-28-03, 5-5-14.

62-555.335 Guidance Documents for Public Water Systems.

The following publications are adopted as financial, managerial, and technical guidance to assist suppliers of water in achieving compliance with Chapters 62-550, 62-555, and 62-560, F.A.C. Each of these publications is available from the publisher or source listed for the publication. Specific portions of these publications may be referenced as enforceable requirements in Chapters 62-550, 62-555, and 62-560, F.A.C. But otherwise, these publications are to be used only as guidance, and the specific requirements contained in Chapters 62-550, 62-555, and 62-560, F.A.C., shall supersede the guidance in these publications.

(1) *Guidance Manual for Compliance with the Filtration and Disinfection Requirements for Public Water Systems Using Surface Water Sources*, March 1991 Edition, U.S. Environmental Protection Agency (USEPA). Available from the following sources:

(a) USEPA, Office of Ground Water and Drinking Water (4601), Ariel Rios Building, 1200 Pennsylvania Avenue, NW, Washington, DC 20460-0003.

(b) Educational Resources Information Center, Clearinghouse for Sciences, Mathematics, and Environmental Education, 1929 Kenny Road, Columbus, OH 43210-1080.

(c) U.S. Department of Commerce, National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161.

(2) *Lead and Copper Rule Guidance Manual, Volume I: Monitoring*, September 1991, U.S. Environmental Protection Agency. Available from the U.S. Department of Commerce, National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161.

(3) *Lead and Copper Rule Guidance Manual, Volume II: Corrosion Control Treatment*, September 1992, U.S. Environmental Protection Agency. Available from the U.S. Department of Commerce, National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161.

(4) *Lead and Copper Monitoring and Reporting Guidance for Public Water Systems*, February 2002, U.S. Environmental Protection Agency (USEPA). Available from the following sources:

(a) USEPA, Office of Ground Water and Drinking Water (4601), Ariel Rios Building, 1200 Pennsylvania Avenue, NW, Washington, DC 20460-0003.

(b) U.S. Department of Commerce, National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161.

(5) *Alternative Disinfectants and Oxidants Guidance Manual*, April 1999, U.S. Environmental Protection Agency (USEPA). Available from the following sources:

(a) USEPA, Office of Ground Water and Drinking Water (4601), Ariel Rios Building, 1200 Pennsylvania Avenue, NW, Washington, DC 20460-0003.

(b) Educational Resources Information Center, Clearinghouse for Sciences, Mathematics, and Environmental Education, 1929 Kenny Road, Columbus, OH 43210-1080.

(c) U.S. Department of Commerce, National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161.

(6) *Guidance Manual for Compliance with the Interim Enhanced Surface Water Treatment Rule: Turbidity Provisions*, April 1999, U.S. Environmental Protection Agency (USEPA). Available from the following sources:

(a) USEPA, Office of Ground Water and Drinking Water (4601), Ariel Rios Building, 1200 Pennsylvania Avenue, NW, Washington, DC 20460-0003.

(b) Educational Resources Information Center, Clearinghouse for Sciences, Mathematics, and Environmental Education, 1929 Kenny Road, Columbus, OH 43210-1080.

(c) U.S. Department of Commerce, National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161.

(7) *Enhanced Coagulation and Enhanced Precipitative Softening Guidance Manual*, May 1999, U.S. Environmental Protection Agency (USEPA). Available from the following sources:

(a) USEPA, Office of Ground Water and Drinking Water (4601), Ariel Rios Building, 1200 Pennsylvania Avenue, NW, Washington, DC 20460-0003.

(b) Educational Resources Information Center, Clearinghouse for Sciences, Mathematics, and Environmental Education, 1929 Kenny Road, Columbus, OH 43210-1080.

(c) U.S. Department of Commerce, National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161.

(8) *Disinfection Profiling and Benchmarking Guidance Manual*, August 1999, U.S. Environmental Protection Agency (USEPA). Available from the following sources:

(a) USEPA, Office of Ground Water and Drinking Water (4601), Ariel Rios Building, 1200 Pennsylvania Avenue, NW, Washington, DC 20460-0003.

(b) Educational Resources Information Center, Clearinghouse for Sciences, Mathematics, and Environmental Education, 1929 Kenny Road, Columbus, OH 43210-1080.

(c) U.S. Department of Commerce, National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161.

(9) *Microbial and Disinfection Byproduct Rules Simultaneous Compliance Manual*, August 1999, U.S. Environmental Protection Agency (USEPA). Available from the following sources:

(a) USEPA, Office of Ground Water and Drinking Water (4601), Ariel Rios Building, 1200 Pennsylvania Avenue, NW, Washington, DC 20460-0003.

(b) Educational Resources Information Center, Clearinghouse for Sciences, Mathematics, and Environmental Education, 1929

Kenny Road, Columbus, OH 43210-1080.

(c) U.S. Department of Commerce, National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161.

(10) NSF International (NSF) Standard 14-2003, Plastics Piping System Components and Related Materials; NSF Standard 42-2002, Drinking Water Treatment Units – Aesthetic Effects; NSF Standard 44-2002, Residential Cation Exchange Water Softeners; NSF Standard 53-2002, Drinking Water Treatment Units – Health Effects; NSF Standard 55-2002, Ultraviolet Microbiological Water Treatment Systems; NSF Standard 58-2002, Reverse Osmosis Drinking Water Treatment Systems; NSF Standard 60-2002, Drinking Water Treatment Chemicals – Health Effects; NSF Standard 61-2002, Drinking Water System Components – Health Effects; and NSF Standard 62-1999, Drinking Water Distillation Systems. Available from Techstreet, 1327 Jones Drive, Ann Arbor, MI 48105.

(11) *Water Chemicals Codex*, 1982, National Research Council. Published by the National Academies Press, 500 Fifth Street, NW, Lockbox 285, Washington, DC 20055.

(12) *Food Chemicals Codex*; Fourth Edition, 1996; First Supplement to the Fourth Edition, 1997; Second Supplement to the Fourth Edition, 2000; and Third Supplement to the Fourth Edition, 2001; Institute of Medicine. Published by the National Academies Press, 500 Fifth Street, NW, Lockbox 285, Washington, DC 20055.

(13) *Standard Methods for the Examination of Water and Wastewater*, 20th Edition, 1998, American Public Health Association (APHA), American Water Works Association, and Water Environment Federation. Published by the APHA, 800 I Street, NW, Washington, DC 20001.

(14) *Emergency Planning for Water Utilities*, AWWA Manual M19, Fourth Edition, 2001, American Water Works Association (AWWA). Published by the AWWA, 6666 W. Quincy Avenue, Denver, CO 80235.

(15) *Manual of Small Public Water Supply Systems*, May 1991, U.S. Environmental Protection Agency. Available from the U.S. Department of Commerce, National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161.

(16) *Design and Construction of Small Water Systems*, An AWWA Small Systems Resource Book, Second Edition, 1999, American Water Works Association (AWWA). Published by the AWWA, 6666 W. Quincy Avenue, Denver, CO 80235.

(17) *Design of Small Water Systems*; Engineer Manual 1110-2-503; February 27, 1999; U.S. Army Corps of Engineers. Available from the U.S. Department of Commerce, National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161.

(18) "Guidelines for the Issuance of Precautionary Boil Water Notices;" August 26, 1999; Florida Department of Health (FDOH). Available from the FDOH, Bureau of Water Programs, 4052 Bald Cypress Way, Bin A08, Tallahassee, Florida 32399-1709.

(19) *Sources of Technical and Financial Assistance for Small Drinking Water Systems*, July 2002, U.S. Environmental Protection Agency (USEPA). Available from the USEPA, Office of Ground Water and Drinking Water (4601), Ariel Rios Building, 1200 Pennsylvania Avenue, NW, Washington, DC 20460-0003.

(20) *System Partnership Solutions to Improve Public Health Protection*, September 2002, U.S. Environmental Protection Agency (USEPA). Available from the USEPA, Office of Ground Water and Drinking Water (4601), Ariel Rios Building, 1200 Pennsylvania Avenue, NW, Washington, DC 20460-0003.

(21) *New Water System Capacity Development Planning Manual*, April 2003, Florida Department of Environmental Protection (FDEP). Available from the FDEP, Drinking Water Section, 2600 Blair Stone Road, M.S. 3520, Tallahassee, Florida 32399-2400.

(22) *Uniform System of Accounts for Class A Water Utilities,* 1996; *Uniform System of Accounts for Class B Water Utilities,* 1996; *Uniform System of Accounts for Class C Water Utilities*, 1996; National Association of Regulatory and Utility Commissioners (NARUC). Published by the NARUC, 1101 Vermont Avenue, NW, Suite 200, Washington, DC 20005.

Rulemaking Authority 403.861(9) FS. Law Implemented 403.861(7), 403.8615 FS. History–New 1-3-91, Amended 1-1-93, Formerly 17-555.335, Amended 9-22-99, 8-28-03.

62-555.340 Disinfection and Bacteriological Evaluation of Public Water System Components.

This section addresses disinfection and bacteriological evaluation of the following public water system (PWS) components: treatment or storage facilities and water mains. These PWS components shall be disinfected to inactivate any microbiological contaminant that might have been introduced into the facilities or mains during construction, alteration, repair, or maintenance. For the purpose of this section, the phrase "water mains" shall mean mains, including treatment plant process piping, conveying either raw, partially treated, or finished drinking water; fire hydrant leads; and service lines that are under the control of a PWS and that

have an inside diameter of three inches or greater. Disinfection of public water system wells and bacteriological surveys and evaluations of such wells are addressed in subsection 62-555.315(6), F.A.C.

(1) Before new or altered treatment or storage facilities, new or altered water mains, and treatment or storage facilities and water mains taken out of operation for repair or maintenance that might lead to contamination of water are placed into, or returned to, operation, they shall be properly disinfected in accordance with the applicable American Water Works Association (AWWA) standard (i.e., AWWA Standard C651, C652, or C653) as incorporated into Rule 62-555.330, F.A.C., except that bacteriological evaluations to verify proper disinfection shall be conducted in accordance with subsection (2) below. This subsection does not apply to, and disinfection and bacteriological evaluations are not required for, the following treatment or storage facilities and water mains:

(a) Treatment or storage facilities and water mains that normally are treating, storing, or conveying surface water, or ground water under the direct influence of surface water, and that are located upstream of all filtration and disinfection treatment facilities;

(b) Disinfectant storage, feed, or application facilities;

(c) Treatment facilities handling residuals that are not recycled to the drinking water treatment train; and

(d) Water mains that are repaired with clamping devices while remaining full of pressurized water.

(2) Bacteriological evaluations to verify proper disinfection of treatment or storage facilities and water mains shall be conducted as set forth in paragraphs (a) through (c) below. The total residual chlorine measurements required under paragraph (a) may be performed by any authorized representative of the supplier of water or person constructing or altering the treatment or storage facilities or water mains but shall be performed following the appropriate procedures in the Department of Environmental Protection Standard Operating Procedures for Field Activities, DEP-SOP-001/01, as incorporated into Rule 62-160.800, F.A.C. The total coliform analyses required under paragraph (a) shall be performed by a laboratory of the Department of Health (DOH) or a laboratory certified by the DOH to perform bacteriological analyses of drinking water and shall be performed using an appropriate method referenced in subsection 62-550.550(1), F.A.C.

(a) After reducing the total chlorine residual in the facilities or mains to no more than four milligrams per liter, a total of at least two samples – each taken on a separate day and taken at least six hours apart from the other sample(s) – shall be collected at each of the locations indicated in the applicable AWWA standard referenced in subsection (1) above, and the samples shall be analyzed for total residual chlorine and for the presence of total coliform.

(b) If any sample contains more than four milligrams per liter of total chlorine, the sample shall be considered invalid. If any sample shows the presence of total coliform, the facilities or mains shall be redisinfected as necessary in accordance with subsection (1) above and resampled in accordance with paragraph (a) above until two consecutive samples at each sampling location show the absence of total coliform.

(c) Bacteriological test results shall be considered unacceptable if the tests were completed more than 60 days before the Department received the results.

(3) Except as allowed under subsections (4) and (5) below and except as allowed under special construction permit conditions established in accordance with paragraph 62-555.533(2)(f), F.A.C., no disinfected treatment or storage facilities or water mains shall be placed into, or returned to, operation until a bacteriological evaluation has been satisfactorily completed in accordance with subsection (2) above, results of the evaluation have been submitted to the appropriate Department of Environmental Protection (DEP) District Office or Approved County Health Department (ACHD), and said DEP District Office or ACHD has approved the facilities or mains for operation.

(4) When constructing or altering treatment or storage facilities, or water mains, for which a public water system construction permit is not required per subsection 62-555.520(1), F.A.C., and when taking treatment or storage facilities or water mains out of operation for repair or maintenance that might lead to contamination of water, the facilities or mains may be placed into, or returned to, operation without the Department's approval after disinfection and satisfactory completion of a bacteriological evaluation in accordance with subsection (2) above. The results of the bacteriological evaluation shall be submitted to the appropriate Department of Environmental Protection District Office or Approved County Health Department along with the next monthly operation report(s) required under paragraph 62-555.350(12)(b), F.A.C., or if no monthly operation report is required under paragraph 62-555.350(12)(b), F.A.C., within ten days after the end of the month during which the bacteriological evaluation was completed.

(5) When taking water mains out of operation for repair or rehabilitation that might lead to contamination of water, the mains may be returned to operation without the Department's approval after disinfection and before completion of a bacteriological evaluation in order to minimize the time customers are without water. An advisory or a precautionary "boil water" notice shall be issued if deemed necessary by the supplier of water or if recommended in the Department of Health's "Guidelines for the Issuance

of Precautionary Boil Water Notices" as adopted in Rule 62-555.335, F.A.C. A bacteriological evaluation still must be satisfactorily completed in accordance with subsection (2) above after the mains are returned to operation. If any bacteriological sample shows the presence of total coliform, the supplier of water shall telephone, and speak directly to a person at, the appropriate Department of Environmental Protection (DEP) District Office or Approved County Health Department (ACHD) as soon as possible, but never later than noon of the next business day. Otherwise, the results of the bacteriological evaluation shall be submitted to the appropriate DEP District Office or ACHD along with the next monthly operation report(s) required under paragraph 62-555.350(12)(b), F.A.C., or if no monthly operation report is required under paragraph 62-555.350(12)(b), F.A.C., within ten days after the end of the month during which the bacteriological evaluation was completed.

Rulemaking Authority 403.861(9) FS. Law Implemented 403.852(12), (13), 403.853(1), (3) FS. History–New 11-19-87, Formerly 17-22.640, Amended 1-18-89, Formerly 17-555.340, Amended 8-28-03.

62-555.345 Certification of Construction Completion and Clearance for Public Water System Components. Except as allowed under subsection 62-555.340(5), F.A.C., or by special permit condition established in accordance with paragraph 62-555.533(2)(f), F.A.C., no public water system (PWS) components constructed or altered under a permit granted by the Department shall be placed into permanent operation without prior Department approval, or clearance, as described below.

(1) Upon completing, or substantially completing, the construction of new or altered PWS components, and before placing the components into operation for any purpose other than disinfection, testing for leaks, or testing equipment operation, the permittee shall submit to the appropriate Department of Environmental Protection (DEP) District Office or Approved County Health Department one copy of a completed certification of construction completion using Form 62-555.900(9), Certification of Construction Completion and Request for Clearance to Place Permitted PWS Components into Operation, hereby adopted and incorporated by reference, effective August 28, 2003. Copies of this form are available from the Department of Environmental Protection, Drinking Water Section, M.S. 3520, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. This certification shall be accompanied by one copy of the following information:

(a) The portion of record drawings showing deviations from the DEP construction permit, including the approved preliminary design report or drawings and specifications, if there are any deviations from said permit. (Note that it is necessary to submit a copy of only the portion of record drawings showing deviations and not a complete set of record drawings.)

(b) Bacteriological test results, including a sketch or description of all bacteriological sampling locations, demonstrating compliance with subsection 62-555.315(6), F.A.C., or Rule 62-555.340, F.A.C., if any of the new or altered PWS components must be disinfected and bacteriologically surveyed or evaluated per said subsection or said rule.

(c) Analytical test results demonstrating compliance with Part III of Chapter 62-550, F.A.C., or subsection 62-524.650(2), F.A.C., if any of the new or altered PWS components are necessary to achieve, or affect, compliance with said part or said subsection.

(d) A completed Form 62-555.900(20), New Water System Capacity Development Financial and Managerial Operations Plan, as incorporated into Rule 62-555.357, F.A.C., if the new or altered PWS components were constructed under a permit issued by the Department before the effective date of Rule 62-555.525, F.A.C., (9-22-99) and create a "new system" as described under subsection 62-555.525(1), F.A.C.

(e) Any other information required by conditions in the DEP construction permit.

(2) Within 14 days after receiving a certification of construction completion for PWS components constructed or altered under a general permit, the Department shall review the certification. If the Department finds anything that will prevent the new or altered components from functioning in compliance with Chapters 62-550 and 62-555, F.A.C., or if the Department finds that the new or altered components will cause, or contribute to, a PWS's noncompliance with Chapter 62-550 or 62-555, F.A.C., the Department shall issue to the permittee, within the aforementioned 14-day review period, a written request for corrective action and for resubmittal of the certification after the corrective action is completed.

(3) Within 30 days after receiving a certification of construction completion for PWS components constructed or altered under a specific permit, the Department shall review the certification and, if the new or altered components create a "new system" as described under subsection 62-555.525(1), F.A.C., shall inspect the "new system." If the Department finds anything that will prevent the new or altered components from functioning in compliance with Chapters 62-550 and 62-555, F.A.C., if the Department finds anything that will prevent a "new system" from functioning in compliance with Chapters 62-550, 62-555, 62-560, and 62-699, F.A.C., or if the Department finds that the new or altered components will cause, or contribute to, an existing PWS's noncompliance

with Chapter 62-550 or 62-555, F.A.C., the Department shall issue to the permittee, within the aforementioned 30-day review/inspection period, a written request for corrective action and for resubmittal of the certification after the corrective action is completed.

(4) Within 14 days after receiving a satisfactory certification of construction completion for PWS components constructed or altered under a general permit and within 30 days after receiving a satisfactory certification of construction completion for PWS components constructed or altered under a specific permit, the Department shall issue written approval, or clearance, to place the new or altered components into permanent operation. The Department shall issue the clearance to the permittee and shall provide a copy of the clearance to the PWS supplying water to the new or altered components if said PWS is not the permittee.

(5) Suppliers of water shall ensure that permittees have obtained written clearance from the Department before suppliers of water turn on water service to permittees.

Rulemaking Authority 403.853(3), 403.861(9) FS. Law Implemented 403.0877, 403.853(1), (3), 403.861(10), 403.8615 FS. History–New 11-19-87, Formerly 17-22.645, Amended 1-18-89, 5-7-90, 1-3-91, 1-1-93, Formerly 17-555.345, Amended 9-22-99, 8-28-03.

62-555.348 Planning for Expansion of Public Water System Source, Treatment, or Storage Facilities.

This section applies to all community water systems serving, or designed to serve, 350 or more persons or 150 or more service connections.

(1) Suppliers of water shall provide for the timely planning, design, permitting, and construction of necessary public water system source, treatment, or storage facilities.

(2) Suppliers of water shall routinely compare the total net quantity of finished drinking water produced each day by their treatment plant(s) with the total permitted maximum-day operating capacity of their plant(s). The permitted maximum-day operating capacity of each plant shall be as specified in the latest Department of Environmental Protection (DEP) construction permit concerning source water or treatment facilities for the plant. In cases where no permitted maximum-day operating capacity has been specified in the latest DEP construction permit concerning source water or treatment facilities for a plant, the Department shall establish the permitted maximum-day operating capacity of the plant based upon information that is included in or with pertinent permit applications or that is provided by the supplier of water and based upon design requirements in Part III of this chapter, including design requirements in the engineering references listed in Rule 62-555.330, F.A.C.

(3) When the total maximum-day quantity of finished water produced by all treatment plants connected to a water system, including water produced to meet any fire-flow demand but excluding water produced to meet any demand that the supplier of water documents to be highly unusual and nonrecurring, exceeds 75 percent of the total permitted maximum-day operating capacity of the plants, the supplier of water shall submit source/treatment/storage capacity analysis reports to the Department according to the schedule described in paragraphs (a) and (b) below; however, in no case shall it be necessary to submit more than one report annually. The reports shall be submitted to the appropriate Department of Environmental Protection District Office or Approved County Health Department.

(a) The initial report shall be submitted within six months after the month in which the total maximum-day quantity of finished water produced by the treatment plant(s) first exceeds 75 percent of the total permitted maximum-day operating capacity of the plant(s) or by August 28, 2004, whichever occurs later.

(b) Updated reports shall be submitted as follows:

1. If the initial report or the latest updated report indicates that maximum-day water demand (including fire-flow demand if fire protection is being provided) at build-out will not exceed the total permitted maximum-day operating capacity of the treatment plant(s) and that finished-water storage need (including fire storage if fire protection is being provided) at build-out will not exceed the existing total useful finished-water storage capacity, no additional report is required.

2. If the initial report or the latest updated report indicates that maximum-day water demand (including fire-flow demand if fire protection is being provided) will not exceed the total permitted maximum-day operating capacity of the treatment plant(s) for at least ten years and that finished-water storage need (including fire storage if fire protection is being provided) will not exceed the existing total useful finished-water storage capacity for at least ten years, the next updated report shall be submitted within five years after submittal of the previous report.

3. If the initial report or the latest updated report indicates that maximum-day water demand (including fire-flow demand if fire protection is being provided) will exceed the total permitted maximum-day operating capacity of the treatment plant(s) in less than ten years but greater than or equal to five years or that finished-water storage need (including fire storage if fire protection is being

provided) will exceed the existing total useful finished-water storage capacity in less than ten years but greater than or equal to five years, the next updated report shall be submitted within two years after submittal of the previous report.

4. If the initial report or the latest updated report indicates that maximum-day water demand (including fire-flow demand if fire protection is being provided) will exceed the total permitted maximum-day operating capacity of the treatment plant(s) in less than five years or that finished-water storage need (including fire storage if fire protection is being provided) will exceed the existing total useful finished-water storage capacity in less than five years, the next updated report shall be submitted within one year after submittal of the previous report.

(4) Each initial or updated source/treatment/storage capacity analysis report shall evaluate the capacity of all source, treatment, or storage facilities connected to a water system and shall contain the following information:

(a) The capacity of each water treatment plant's source water facilities and treatment facilities; the permitted maximum-day operating capacity and, if applicable, permitted peak operating capacity of each plant; and the useful capacity of each finished-water storage facility;

(b) The maximum-day and annual average daily quantities of finished water produced by each plant during each of the past ten years or during each of the years the plant has been in operation, whichever is less;

(c) Projected total water demands – total annual average daily demand and total maximum-day demand (including fire-flow demand if fire protection is being provided) – for at least the next ten years and projected total finished-water storage need (including fire storage if fire protection is being provided) for at least the next ten years;

(d) An estimate of the time required for maximum-day water demand (including fire-flow demand if fire protection is being provided) to exceed the total permitted maximum-day operating capacity of the plant(s) and an estimate of the time required for finished-water storage need (including fire storage if fire protection is being provided) to exceed the existing total useful finished-water storage capacity;

(e) Recommendations for new or expanded source, treatment, or storage facilities; and

(f) A recommended schedule showing dates for design, permitting, and construction of recommended new or expanded source, treatment, or storage facilities.

(5) Each initial or updated source/treatment/storage capacity analysis report shall be prepared under the responsible charge of one or more professional engineers licensed in Florida and shall be signed, sealed, and dated by the professional engineer(s) in responsible charge.

(6) If an initial or updated source/treatment/storage capacity analysis report indicates that maximum-day water demand (including fire-flow demand if fire protection is being provided) will exceed the total permitted maximum-day operating capacity of the water treatment plant(s) in less than five years or that finished-water storage need (including fire storage if fire protection is being provided) will exceed the existing total useful finished-water storage capacity in less than five years, documentation of timely design, permitting, and construction of recommended new or expanded source, treatment, or storage facilities shall be submitted with the report. The documentation shall consist of a written statement that is signed by an authorized representative of the supplier of water and that certifies the supplier is meeting, and intends to meet, the report's recommended schedule for design, permitting, and construction of recommended new or expanded source, treatment, or storage facilities.

Rulemaking Authority 403.861(9) FS. Law Implemented 403.861(17) FS. History–New 8-28-03.

62-555.350 Operation and Maintenance of Public Water Systems.

(1) Suppliers of water shall operate and maintain their public water systems so as to comply with applicable standards in Chapter 62-550, F.A.C., and requirements in this chapter.

(2) Suppliers of water shall keep all necessary public water system components in operation and shall maintain such components in good operating condition so the components function as intended. Preventive maintenance on electrical or mechanical equipment – including exercising of auxiliary power sources, checking the calibration of finished-drinking-water meters at treatment plants, testing of air or pressure relief valves for hydropneumatic tanks, and exercising of isolation valves – shall be performed in accordance with the equipment manufacturer's recommendations or in accordance with a written preventive maintenance program established by the supplier of water; however, in no case shall auxiliary power sources be run under load less frequently than monthly. Accumulated sludge and biogrowths shall be cleaned routinely (i.e., at least annually) from all treatment facilities that are in contact with raw, partially treated, or finished drinking water and that are not specifically designed to collect sludge or support a biogrowth; and blistering, chipped, or cracked coatings and linings on treatment or storage facilities in contact

with raw, partially treated, or finished drinking water shall be rehabilitated or repaired. Finished-drinking-water storage tanks, including conventional hydropneumatic tanks with an access manhole but excluding bladder- or diaphragm-type hydropneumatic tanks without an access manhole, shall be checked at least annually to ensure that hatches are closed and screens are in place; shall be cleaned at least once every five years to remove biogrowths, calcium or iron/manganese deposits, and sludge from inside the tanks; and shall be inspected for structural and coating integrity at least once every five years by personnel under the responsible charge of a professional engineer licensed in Florida. Dead-end water mains conveying finished drinking water shall be flushed quarterly or in accordance with a written flushing program established by the supplier of water; additionally, dead-end or other water mains conveying finished water shall be flushed as necessary whenever legitimate water quality complaints are received.

(3) Suppliers of water shall ensure that drinking water treatment chemicals conform to the standards referenced in paragraph 62-555.320(3)(a), F.A.C., and shall have their lead/chief water treatment plant operators certify in writing on the monthly operation reports required under subsection (12) below that drinking water treatment chemicals conform to the standards referenced in paragraph 62-555.320(3)(a), F.A.C. Lead/chief water treatment plant operators may base their certifications upon evaluations conducted by the supplier of water or upon third-party or manufacturer certifications.

(4) No supplier of water shall operate any drinking water treatment plant at a capacity greater than the plant's permitted operating capacity except with the Department's prior approval, which shall be given when such operation will not cause a violation of a maximum contaminant level, a treatment technique requirement, or other operating requirements and is for no more than three months, or under circumstances that the supplier of water documents as highly unusual and nonrecurring. The permitted operating capacity of each plant shall be as specified in the latest Department of Environmental Protection (DEP) construction permit concerning source water or treatment facilities for the plant. In cases where no permitted operating capacity has been specified in the latest DEP construction permit concerning source water or treatment facilities for a plant, the Department shall establish the permitted maximum-day operating capacity of the plant and, if the plant is designed to meet peak water demand or to supplement finished-water storage facilities in meeting peak water demand, the permitted peak operating capacity of the plant based upon information that is included in or with pertinent permit applications or that is provided by the supplier of water and based upon design requirements in Part III of this chapter, including design requirements in the engineering references listed in Rule 62-555.330, F.A.C. Each day that a supplier of water is required under Chapter 62-699, F.A.C., to have a licensed operator staff or visit a plant, the supplier of water shall measure and record in the logs and reports required under subsection (12) below the net quantity of finished drinking water, excluding any filter backwash water, produced by the plant.

(5) Suppliers of water who are using ground water not under the direct influence of surface water and who are required to provide treatment to reliably achieve at least four-log inactivation or removal of viruses in accordance with paragraph 62-555.320(12)(b), F.A.C., shall monitor, record, and maintain the effectiveness and reliability of disinfection treatment as described in paragraphs (a) through (c) below. The residual disinfectant, temperature, or pH measurements required under paragraph (a) or (b) may be performed by any authorized representative of the supplier of water; but field measurements of residual chlorine, temperature, and pH shall be performed following the appropriate procedures in the Department of Environmental Protection Standard Operating Procedures for Field Activities, DEP-SOP-001/01, as incorporated into Rule 62-160.800, F.A.C., and all other measurements shall be performed using an appropriate method referenced in subsection 62-550.550(1), F.A.C., or in *Standard Methods for the Examination of Water and Wastewater* as adopted in Rule 62-555.335, F.A.C.

(a) For each day a supplier of water serving 3,300 or more persons serves water to the public from a drinking water treatment plant that includes chemical disinfection for virus inactivation, the supplier of water shall continuously monitor the residual disinfectant concentration (C) before or at the first customer and shall record in the logs and reports required under subsection (12) below the lowest C measured before or at the first customer during peak flow, the corresponding disinfectant contact time (T) at the C monitoring point during peak flow, and the resulting lowest CT provided before or at the first customer during peak flow. In addition, at least once for each day the supplier of water serves water to the public from the plant, the supplier of water shall measure and record the temperature of the water at the point where C is monitored; shall measure and record the pH of the water at the point where C is monitored if free chlorine is being used for virus inactivation; and with this temperature and pH information, shall determine and record the minimum CT required to comply with paragraph 62-555.320(12)(b), F.A.C. If there is a failure of equipment used to continuously monitor C, the supplier of water may temporarily monitor C by taking grab samples every four hours but may do so for no more than one week following the equipment failure. If at any time the "CT provided" falls below the minimum CT required, the supplier of water shall increase the disinfectant dose until the "CT provided" is at least equal to the minimum CT required and shall notify the Department in accordance with subsection (10) below.

(b) For each day a supplier of water serving less than 3,300 persons serves water to the public from a drinking water treatment plant that includes chemical disinfection for virus inactivation, the supplier of water shall monitor the residual disinfectant concentration (C) before or at the first customer by taking at least one grab sample during peak flow and shall record in the logs and reports required under subsection (12) below the lowest C measured before or at the first customer during peak flow, the corresponding disinfectant contact time (T) at the C monitoring point during peak flow, and the resulting CT provided before or at the first customer during peak flow. In addition, at least once for each day the supplier of water serves water to the public from the plant, the supplier of water shall measure and record the temperature of the water at the point where C is monitored; shall measure and record the pH of the water at the point where C is monitored if free chlorine is being used for virus inactivation; and with this temperature and pH information, shall determine and record the minimum CT required to comply with paragraph 62-555.320(12)(b), F.A.C. If any measurement of the "CT provided" falls below the minimum CT required, the supplier of water shall increase the disinfectant dose and take follow-up grab samples at least every four hours until the "CT provided" is at least equal to the minimum CT required and shall notify the Department in accordance with subsection (10) below.

(c) For each day a supplier of water serves water to the public from a drinking water treatment plant that includes ultraviolet (UV) disinfection for virus inactivation, the supplier of water shall continuously monitor the operating UV dose and shall record in the logs and reports required under subsection (12) below the lowest operating UV dose measured. If at any time the operating UV dose falls below the minimum UV dose required to comply with paragraph 62-555.320(12)(b), F.A.C., the supplier of water shall clean the UV lamp sleeves or replace the UV lamps to restore the operating UV dose to a level at least equal to the required minimum UV dose and shall notify the Department in accordance with subsection (10) below.

(6) Suppliers of water shall maintain a minimum free chlorine residual of 0.2 milligram per liter, or a minimum combined chlorine residual of 0.6 milligram per liter or an equivalent chlorine dioxide residual, throughout their drinking water distribution system at all times. If at any time the residual disinfectant concentration in any portion of a distribution system falls below the required minimum level, the supplier of water shall increase the disinfectant dose as necessary and flush said portion of the distribution system until the residual disinfectant concentration is restored to the required minimum level. Suppliers of water shall monitor and record the residual disinfectant concentration in their distribution system as described in paragraphs (a) and (b) below. The residual disinfectant measurements required under paragraph (a) or (b) may be performed by any authorized representative of the supplier of water; but field measurements of chlorine residual shall be performed following the appropriate procedures in the Department of Environmental Protection Standard Operating Procedures for Field Activities, DEP-SOP-001/01, as incorporated into Rule 62-160.800, F.A.C., and all other measurements shall be performed using an appropriate method referenced in subsection 62-550.550(1), F.A.C.

(a) Each supplier of water serving 3,300 or more persons shall take at least one grab sample each day the supplier serves water to the public or at least five days per week, whichever is less, at a point in the water supplier's distribution system reflecting maximum residence time after disinfectant addition, shall measure the residual disinfectant concentration, and shall record the residual disinfectant concentration in the logs and reports required under subsection (12) below.

(b) Each supplier of water serving less than 3,300 persons shall take at least one grab sample each day the supplier serves water to the public or at least two days per week, whichever is less, at a point in the water supplier's distribution system reflecting maximum residence time after disinfectant addition, shall measure the residual disinfectant concentration, and shall record the residual disinfectant concentration in the logs and reports required under subsection (12) below.

(7) Except when a water main breaks or treatment or pumping equipment fails and except under circumstances that the supplier of water documents to be highly unusual and nonrecurring, suppliers of water shall maintain a minimum gauge pressure of 20 pounds per square inch throughout their drinking water distribution system up to each customer's point of connection to the water supplier's distribution system.

(8) Suppliers of water shall employ licensed operation personnel in accordance with Chapters 62-602 and 62-699, F.A.C., for all public water systems except transient non-community water systems using only ground water and serving only businesses other than public food service establishments as defined in, and regulated under, Chapter 381, 500, or 509, F.S.

(9) No supplier of water shall alter or replace underground portions of, or abandon, any public water system well without first obtaining a permit from the appropriate water management district or delegated permitting authority if such a permit is required under Chapter 62-532, F.A.C. In addition, no supplier of water shall introduce a new source of water into any public water system; alter, or discontinue use of, any public water system components other than wells (but including well pumping equipment and appurtenances); or alter the type of chemicals being used to treat drinking water without first obtaining a construction permit or

written approval from the Department if such a permit or such approval is required under subsection 62-555.520(1), F.A.C., or first submitting written notification to the Department if such notification is required under subsection 62-555.520(1), F.A.C.

(10) Suppliers of water shall notify the State Warning Point (SWP), the appropriate Department of Environmental Protection (DEP) District Office or Approved County Health Department (ACHD), and water customers in accordance with the following procedures in the event of the following circumstances.

(a) Suppliers of water shall telephone the SWP at 1(800)320-0519 immediately (i.e., within two hours) after discovery of any actual or suspected sabotage or security breach, or any suspicious incident, involving a public water system.

(b) Suppliers of water shall telephone, and speak directly to a person at, the appropriate DEP District Office or ACHD as soon as possible, but never later than noon of the next business day, in the event of any of the following emergency or abnormal operating conditions:

1. The occurrence of any abnormal color, odor, or taste in a public water system's raw or finished water;

2. The failure of a public water system to comply with applicable disinfection requirements; or

3. The breakdown of any water treatment or pumping facilities, or the break of any water main, in a public water system if the breakdown or break is expected to adversely affect finished-water quality, interrupt water service to 150 or more service connections or 350 or more people, interrupt water service to any one service connection for more than eight hours, or necessitate the issuance of a precautionary "boil water" notice in accordance with the Department of Health's "Guidelines for the Issuance of Precautionary Boil Water Notices" as adopted in Rule 62-555.335, F.A.C.

(c) Suppliers of water shall notify the appropriate DEP District Office or ACHD and affected water customers by no later than the previous business day before initiating any planned permanent or temporary conversion from free chlorine to chloramines or vice versa for disinfection. Notices to the appropriate DEP District Office or ACHD shall be delivered by telephoning, and speaking directly to a person at, the DEP District Office or ACHD, and notices to affected water customers shall be delivered in writing or via telephone, newspaper, radio, or television. A single notice may be provided to cover both a planned temporary conversion from chloramines to free chlorine and the planned subsequent conversion back to chloramines. Notification is not required before unplanned temporary conversions from chloramines to free chlorine to protect public health during emergency operating conditions caused by circumstances such as source water contamination, water main breaks, or backflow incidents.

(d) Suppliers of water shall notify affected water customers in writing or via telephone, newspaper, radio, or television by no later than the previous business day before taking public water system (PWS) components out of operation for planned maintenance or repair work if the work is expected to adversely affect finished-water quality or interrupt water service to any service connection. Additionally, suppliers of water shall telephone, and speak directly to a person at, the appropriate DEP District Office or ACHD by no later than the previous business day before taking PWS components out of operation for planned maintenance or repair work if the work is expected to adversely affect finished-water quality, interrupt water service to 150 or more service connections or 350 or more people, interrupt water service to any one service connection for more than eight hours, or necessitate the issuance of a precautionary "boil water" notice in accordance with the Department of Health's "Guidelines for the Issuance of Precautionary Boil Water Notices" as adopted in Rule 62-555.335, F.A.C.

(e) Suppliers of water shall describe in the monthly operation reports required under subsection (12) below all emergency or abnormal operating conditions and all maintenance or repair work that involves taking out of operation public water system components other than water service lines.

(11) Suppliers of water shall issue precautionary "boil water" notices as required or recommended in the Department of Health's "Guidelines for the Issuance of Precautionary Boil Water Notices" as adopted in Rule 62-555.335, F.A.C.

(12) Suppliers of water shall keep and submit operation and maintenance logs, reports, and records as described below.

(a) All suppliers of water shall keep operation and maintenance logs at their drinking water treatment plants. For plants that are part of a transient non-community water system using only ground water and serving only businesses other than public food service establishments, the operation and maintenance logs shall contain a minimum of three months of data at all times and shall contain the date and type of all maintenance performed and the date and results of all sampling and analyses performed unless the sampling or analyses are documented on a laboratory sheet. For all other plants, the operation and maintenance logs shall contain the information listed in, and shall be maintained as described in, subsection 62-602.650(4), F.A.C.

(b) For all public water systems except transient non-community water systems using only ground water and serving only businesses other than public food service establishments, suppliers of water shall submit monthly operation reports to the appropriate Department of Environmental Protection District Office or Approved County Health Department within ten days after

each month of operation per paragraph 62-550.730(1)(d), F.A.C., and shall do so using the following forms as applicable: Form 62-555.900(2), Monthly Operation Report for Subpart H Systems as incorporated into paragraph 62-550.817(11)(a), F.A.C.; Form 62-555.900(3), Monthly Operation Report for PWSs Treating Raw Ground Water or Purchased Finished Water, hereby adopted and incorporated by reference, effective August 28, 2003; Form 62-555.900(4), Monthly Operation Report for Consecutive Systems that Do Not Treat Water, hereby adopted and incorporated by reference, effective August 28, 2003; Form 62-555.900(6), Monthly Operation Report for Consecutive Systems that Receive Purchased Finished Water from a Subpart H System as incorporated into paragraph 62-550.817(11)(b), F.A.C.; Form 62-555.900(11), Monthly Operation Report for Summation of Finished-Water Production by CWSs that Have Multiple Treatment Plants, hereby adopted and incorporated by reference, effective August 28, 2003. Copies of these forms are available from the Department of Environmental Protection Drinking Water Section, M.S. 3520, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Suppliers of water shall keep copies of monthly operation reports, together with any additional operation records required by the monthly operation reports, for at least ten years in accordance with subsection 62-550.720(5), F.A.C.

(c) All suppliers of water shall keep records documenting that their finished-drinking-water storage tanks, including conventional hydropneumatic tanks with an access manhole but excluding bladder- or diaphragm-type hydropneumatic tanks without an access manhole, have been cleaned and inspected during the past five years in accordance with subsection 62-555.350(2), F.A.C. In addition, all suppliers of water shall keep records documenting that their isolation valves are being exercised, and their water mains conveying finished drinking water are being flushed, in accordance with subsection 62-555.350(2), F.A.C.

(13) Suppliers of water shall provide an operation and maintenance manual for each of their drinking water treatment plants by no later than December 31, 2005, and shall update the manual thereafter as necessary to reflect plant alterations and additions. The manual shall contain operation and control procedures, and preventive maintenance and repair procedures, for all plant equipment and shall be made available for reference at the plant or at a convenient location near the plant. Bound and indexed equipment manufacturer manuals shall be considered sufficient to meet the requirements of this subsection.

(14) By December 31, 2005, suppliers of water who own or operate a community water system serving, or designed to serve, 350 or more persons or 150 or more service connections shall have, and thereafter maintain, an up-to-date map of their drinking water distribution system. Such a map shall show the location and size of water mains if known; the location of valves and fire hydrants; and the location of any pressure zone boundaries, pumping facilities, storage tanks, and interconnections with other public water systems.

(15) Suppliers of water who own or operate a community water system serving, or designed to serve, 350 or more persons or 150 or more service connections shall develop a written emergency preparedness/response plan in accordance with *Emergency Planning for Water Utilities,* AWWA Manual M19, as adopted in Rule 62-555.335, F.A.C., by no later than December 31, 2004, and shall update and implement the plan as necessary thereafter. Said suppliers of water shall coordinate with their Local Emergency Planning Committee and their Florida Department of Law Enforcement Regional Security Task Force when developing their emergency plan and shall include in their plan all of the information in paragraphs (a) through (e) below.

(a) A communication chart as described in Chapter 5 of AWWA Manual M19.

(b) Written agreements with other agencies, utilities, or response organizations.

(c) A disaster-specific preparedness/response plan as described in Chapter 5 of AWWA Manual M19 for each of the following disasters: vandalism or sabotage; a drought; a hurricane; a structure fire; and if applicable, a flood, a forest or brush fire, and a hazardous material release. Each disaster-specific preparedness/response plan shall incorporate the results of a vulnerability assessment; shall include actions and procedures, and identify equipment, that can obviate or lessen the impact of such a disaster; and shall include plans and procedures that can be implemented, and identify equipment that can be utilized, in the event of such a disaster.

(d) Details about how the water system meets the standby power requirements under subsection 62-555.320(14), F.A.C., and, if applicable, recommendations regarding the amount of fuel to maintain on site, and the amount of fuel to hold in reserve under contracts with fuel suppliers, for operation of auxiliary power sources.

(e) If applicable, recommendations regarding the amount of drinking water treatment chemicals, including chemicals used for regeneration of ion-exchange resins or for onsite generation of disinfectants, to maintain in inventory at treatment plants.

Rulemaking Authority 403.861(9) FS. Law Implemented 403.852(12), 403.853(6), 403.861(17) FS. History–New 11-19-87, Formerly 17-22.650, Amended 1-18-89, 1-1-93, Formerly 17-555.350, Amended 8-28-03.

62-555.357 New Water System Capacity Development Financial and Managerial Operations Plans.
A New Water System Capacity Development Financial and Managerial Operations Plan consists of a completed Form 62-555.900(20), hereby adopted and incorporated by reference, effective August 28, 2003, including all supporting attachments. Copies of this form are available from the Department of Environmental Protection, Drinking Water Section, M.S. 3520, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

(1) For each water system that is considered a "new system" per subsection 62-555.525(1), F.A.C., but for which a construction permit is not required, the supplier of water shall submit a New Water System Capacity Development Financial and Managerial Operations Plan to the Department within 90 days after commencing operations as a community or non-transient non-community water system. The plan shall be submitted to the appropriate Department of Environmental Protection District Office or Approved County Health Department.

(2) For each water system that is considered a "new system" per subsection 62-555.525(1), F.A.C., the supplier of water shall submit an updated New Water System Capacity Development Financial and Managerial Operations Plan to the Department within 90 days after the third anniversary of the system commencing operations as a community or non-transient non-community water system. The updated plan shall be submitted to the appropriate Department of Environmental Protection District Office or Approved County Health Department.

(3) For each water system that is considered a "new system" per subsection 62-555.525(1), F.A.C., and that changes ownership on or after August 28, 2003, the supplier of water acquiring ownership of the system shall submit an updated New Water System Capacity Development Financial and Managerial Operations Plan to the Department within 90 days after acquiring ownership of the system. The updated plan shall be submitted to the appropriate Department of Environmental Protection District Office or Approved County Health Department.

(4) Within 30 days after the Department receives a New Water System Capacity Development Financial and Managerial Operations Plan required under subsection (1), (2), or (3) above, the Department shall review the plan. If the Department finds anything that will prevent the "new system" from functioning in compliance with Chapters 62- 550, 62-555, 62-560, and 62-699, F.A.C., the Department shall issue to the supplier of water, within the aforementioned 30-day review period, a written request for changes to the plan and for resubmittal of the plan after the changes are made. Within 30 days after receiving a satisfactory plan (i.e., a plan that is complete and that indicates the "new system" has the capacity to function in compliance with Chapters 62-550, 62-555, 62-560, and 62-699, F.A.C.), the Department shall issue to the supplier of water written approval of the plan.

Rulemaking Authority 403.861(9), 403.8615(1) FS. Law Implemented 403.8615 FS. History–New 9-22-99, Amended 8-28-03.

62-555.360 Cross-Connection Control for Public Water Systems.

(1) Cross-connections, as defined in Rule 62-550.200, F.A.C., are prohibited unless appropriate backflow protection is provided to prevent backflow through the cross-connection into the public water system. This does not prohibit a public water system from being interconnected to another public water system of the same type without backflow protection (i.e., a community water system [CWS] may be interconnected to another CWS without backflow protection, a non-transient non-community water system [NTNCWS] may be interconnected to another NTNCWS without backflow protection, and a transient non-community water system [TWS] may be interconnected to another TWS without backflow protection).

(a) Appropriate backflow protection for various applications is described in *Recommended Practice for Backflow Prevention and Cross-Connection Control: AWWA Manual M14*, Third Edition, as clarified and modified in paragraphs (b) and (c) below and in Table 62-555.360-2, which appears at the end of this section. The third edition of *AWWA Manual M14* is incorporated herein by reference; is available from the American Water Works Association, 6666 West Quincy Avenue, Denver, CO 80235, www.awwa.org; and is available for review at the Department of Environmental Protection, Source and Drinking Water Program, MS 3520, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, at the Department of Environmental Protection district offices, and at the Approved County Health Departments.

(b) Except for the temporary cross-connections described in paragraph (c) below, cross-connections between a public water system and a wastewater system or reclaimed water system are prohibited (i.e., an air gap shall be maintained between any public water system and any wastewater system or reclaimed water system). The Department shall allow an exception to this requirement if the supplier of water provides justification for the exception and provides alternative backflow protection that achieves a level of reliability and public health protection similar to that achieved by an air gap (e.g., two biannually-tested reduced-pressure principle assemblies installed in series); however, in no case shall the Department allow a single, annually-tested mechanical backflow

preventer to be used as the only protection against backflow of wastewater or reclaimed water into a public water system.

(c) Temporary cross-connections may be made between a public water system and a wastewater system or reclaimed water system for either of the following purposes:

1. To supply water for flushing or testing a new wastewater force main or new reclaimed water main, in which case a double check valve assembly or reduced-pressure principle assembly shall be provided at the cross-connection.

2. To supply water for temporarily operating a new reclaimed water main that has not yet been connected to a reclaimed water supply, in which case a reduced-pressure principle assembly shall be provided at the cross-connection.

(2) Each community water system (CWS) shall establish and implement a cross-connection control program utilizing backflow protection at or for service connections from the CWS in order to protect the CWS from contamination caused by cross-connections on customers' premises. This program shall include a written plan that is developed using recommended practices of the American Water Works Association set forth in *Recommended Practice for Backflow Prevention and Cross-Connection Control: AWWA Manual M14*, Third Edition, as clarified and modified in paragraph (a) below. The third edition of *AWWA Manual M14* is incorporated herein by reference and is available as indicated in paragraph 62-555.360(1)(a), F.A.C.

(a) The minimum components that each CWS shall include in its written cross-connection control plan are listed and described in Table 62-555.360-1, which appears at the end of this section. The categories of customers for which each CWS shall ensure backflow protection is provided at or for the service connection from the CWS to the customer are listed in Table 62-555.360-2, which appears at the end of this section.

(b) Each CWS serving more than 10,000 persons shall prepare and submit cross-connection control program annual reports. The first annual report shall cover calendar year 2016, and subsequent annual reports shall cover each calendar year thereafter. These reports shall be prepared using Form 62-555.900(13), Cross-Connection Control Program Annual Report, effective 5-5-14, which is incorporated herein by reference and which is available as described in Rule 62-555.900, F.A.C., and at http://www.flrules.org/Gateway/reference.asp?No=Ref-04104. These reports shall be submitted to the appropriate Department of Environmental Protection district office or Approved County Health Department within three months after the end of the calendar year covered by the report.

(3) Upon discovery of a prohibited or inappropriately protected cross-connection, public water systems either shall ensure that the cross-connection is eliminated, shall ensure that appropriate backflow protection is installed to prevent backflow into the public water system, or shall discontinue water service. If the discovered cross-connection is on the premises of a customer of a community water system (CWS) and if the customer's premises is in a category described in Table 62-555.360-2, which appears at the end of this section, the CWS shall ensure that appropriate backflow protection is provided at or for the water service connection to the customer regardless of whether the cross-connection is eliminated or whether internal backflow protection is installed at the cross-connection to the customer's plumbing system.

Table 62-555.360-1: Minimum Components that Each Community Water System (CWS) Shall Include in Its Written Cross-Connection Control (CCC) Plan (Effective 5-5-14)

Component Number and Description
I. Legal authority for the CWS's CCC program – i.e., an ordinance, a bylaw or resolution, or water service rules and regulations. The legal authority shall include or reference Components 2 and 3 below.
II. The CWS's policy establishing where backflow protection at or for service connections from the CWS is mandatory. A. This policy shall identify categories of customers for which the CWS is requiring backflow protection at or for the service connection to the customer and shall specify the minimum backflow protection that the CWS is requiring for each such category of customers. B. This policy shall be no less stringent than Table 62-555.360-2, which appears at the end of Rule 62-555.360, F.A.C.

Component Number and Description
III. The CWS's policy regarding ownership, installation, inspection/testing, and maintenance of backflow protection that the CWS is requiring at or for service connections from the CWS. A. This policy shall specify whether the CWS or customer is responsible for installation, inspection/testing, and maintenance of backflow protection being required at or for service connections. B. This policy shall specify design and performance standards, and shall specify installation criteria, for new backflow protection being required at or for service connections. Installation criteria shall be consistent with installation criteria in *AWWA Manual M14* as incorporated into subsection 62-555.360(2), F.A.C., and shall assure the backflow protection is installed as close as practical to the CWS's meter or customer's property line but, in all cases, before the first distribution line off of the customer's water service line. C. This policy shall specify the frequency for inspecting air gaps (AGs) being required at or for service connections and shall specify qualifications for persons inspecting such AGs. All AGs being required at or for service connections pursuant to Table 62-555.360-2, which appears at the end of Rule 62-555.360, F.A.C., shall be inspected at least annually. D. This policy shall specify the frequency for testing backflow preventer assemblies[1] being required at or for service connections, shall specify qualifications for persons testing such assemblies, and shall specify test procedures for such assemblies. Assemblies being required at or for non-residential service connections[2] pursuant to Table 62-555.360-2, which appears at the end of Rule 62-555.360, F.A.C., shall be tested after installation or repair and at least annually thereafter and shall be repaired if they fail to meet performance standards. Assemblies being required at or for residential service connections[2] pursuant to Table 62-555.360-2 shall be tested after installation or repair and at least biennially thereafter and shall be repaired if they fail to meet performance standards. E. This policy shall specify the frequency for refurbishing or replacing dual check devices (DuCs) being required at or for service connections. DuCs being required at or for service connections pursuant to Table 62-555.360-2, which appears at the end of Rule 62-555.360, F.A.C., shall be refurbished or replaced at least once every 5 to 10 years or at a lesser frequency determined by the CWS if the CWS documents that the lesser frequency is appropriate based on data from spot-testing DuCs in its system or based on data from backflow sensing meters in its system.
IV. The CWS's procedures for evaluating customers' premises to establish the category of customer and the backflow protection being required at or for the service connection(s) from the CWS to the customer.[3] A. The CWS shall evaluate the customer's premises at a newly constructed service connection before the CWS begins supplying water to the service connection. B. The CWS shall evaluate the customer's premises at an existing – i.e., previously constructed – service connection whenever the customer connects to a reclaimed water distribution system, whenever an auxiliary water system is discovered on the customer's premises, whenever a prohibited or inappropriately protected cross-connection is discovered on the customer's premises, and whenever the customer's premises is altered under a building permit in a manner that could change the backflow protection required at or for a service connection to the customer.
V. The CWS's procedures for maintaining CCC program records.[4] A. The CWS shall maintain a current inventory of backflow protection being required at or for service connections from the CWS. B. The CWS shall maintain records of the installation, inspection/testing, and repair of backflow protection being required at or for service connections from the CWS.

[1] Backflow preventer assemblies include the following: double check valve assemblies (DCs) and double check detector assemblies (DCDAs); pressure vacuum breaker assemblies (PVBs); and reduced-pressure principle assemblies (RPs) and reduced-pressure principle detector assemblies (RPDAs).

[2] For the purpose of this table, "residential service connection" means any service connection, including any dedicated irrigation or fire service connection, that is two inches or less in diameter and that supplies water to a building, or premises, containing only dwelling units; and "non-residential service connection" means any other service connection.

[3] CWSs may evaluate customers' premises using questionnaires, reviews of construction plans or pertinent records, on-site inspections, or any combination thereof.

[4] CWSs may maintain all records in either electronic or paper format.

Table 62-555.360-2: Categories of Customers for Which Each Community Water System (CWS) Shall Ensure Minimum Backflow Protection Is Provided at or for the Service Connection from the CWS to the Customer (Effective 5-5-14)

Category of Customer	Minimum Backflow Protection[1] to Be Provided at or for the Service Connection from the CWS to the Customer
Beverage processing plant, including any brewery	DC if the plant presents a low hazard[2]; or RP if the plant presents a high hazard[2]
Cannery, packing house, rendering plant, or any facility where fruit, vegetable, or animal matter is processed, excluding any premises where there is only restaurant or food service facility	RP
Car wash	RP
Chemical plant or facility using water in the manufacturing, processing, compounding, or treatment of chemicals, including any facility where a chemical that does not meet the requirements in paragraph 62-555.320(3)(a), F.A.C., is used as an additive to the water	RP
Dairy, creamery, ice cream plant, cold-storage plant, or ice manufacturing plant	RP[3]
Dye plant	RP
Film laboratory or processing facility or film manufacturing plant, excluding any small, noncommercial darkroom facility	RP
Hospital; medical research center; sanitarium; autopsy facility; medical, dental, or veterinary clinic where surgery is performed; or plasma center	RP
Laboratory, excluding any laboratory at an elementary, middle, or high school	RP
Laundry (commercial), excluding any self-service laundry or Laundromat	RP
Marine repair facility, marine cargo handling facility, or boat moorage	RP
Metal manufacturing, cleaning, processing, or fabricating facility using water in any of its operations or processes, including any aircraft or automotive manufacturing plant	DC if the facility presents a low hazard[2]; or RP if the facility presents a high hazard[2]
Mortuary	RP
Premises where oil or gas is produced, developed, processed, blended, stored, refined, or transmitted in a pipeline or where oil or gas tanks are repaired or tested, excluding any premises where there is only a fuel dispensing facility	RP
Premises where there is an auxiliary or reclaimed water system[4,5]	A. At or for a residential service connection[6]: DuC[7] B. At or for a non-residential service connection[6]: DC if the auxiliary or reclaimed water is a low hazard[8,9]; or RP if the auxiliary or reclaimed water is a high hazard[8,9]
Premises where there is a cooling tower	RP
Premises where there is an irrigation system that is using potable water and that… I. Is connected directly to the CWS's distribution system via a dedicated irrigation service connection II. Is connected internally to the customer's plumbing system	I. At or for a residential or non-residential dedicated irrigation service connection[6]: PVB if backpressure cannot develop in the downstream piping[10]; or RP if backpressure could develop in the downstream piping[10] II. None[11]

Category of Customer	Minimum Backflow Protection[1] to Be Provided at or for the Service Connection from the CWS to the Customer
Premises where there is a wet-pipe sprinkler, or wet standpipe, fire protection system that is using potable water and that…	
I. Is connected directly to the CWS's distribution system via a dedicated fire service connection[12]	I.A. At or for a residential dedicated fire service connection[6]: DuC if the fire protection system contains no chemical additives and is not connected to an auxiliary water system[4]; or RP or RPDA if the fire protection system contains chemical additives or is connected to an auxiliary water system[4,13] I.B. At or for a non-residential dedicated fire service connection[6]: DC or DCDA if the fire protection system contains no chemical additives and is not connected to an auxiliary water system[4]; or RP or RPDA if the fire protection system contains chemical additives or is connected to an auxiliary water system[4,13]
II. Is connected internally to the customer's plumbing system	II. None[11]
Radioactive material processing or handling facility or nuclear reactor	RP
Paper products plant using a wet process	RP
Plating facility, including any aircraft or automotive manufacturing plant	RP
Restricted-access facility	RP
Steam boiler plant	RP
Tall building – i.e., a building with five or more floors at or above ground level	DC if the customer has no potable water distribution lines connected to the suction side of a booster pump; or RP if the customer has one or more potable water distribution lines connected to the suction side of a booster pump
Wastewater treatment plant or wastewater pumping station	RP
Customer supplied with potable water via a temporary or permanent service connection from a CWS fire hydrant	Varies[14]

[1] Means of backflow protection, listed in an increasing level of protection, include the following: a dual check device (DuC); a double check valve assembly (DC) or double check detector assembly (DCDA); a pressure vacuum breaker assembly (PVB); a reduced-pressure principle assembly (RP) or reduced-pressure principle detector assembly (RPDA); and an air gap. A PVB may not be used if backpressure could develop in the downstream piping.

[2] The CWS shall determine the degree of hazard. "Low hazard" or "non-health hazard" and "high hazard" or "health hazard" are defined in *AWWA Manual M14* as incorporated in paragraph 62-555.360(1)(a), F.A.C., and subsection 62-555.360(2), F.A.C.

[3] A DC may be provided if it was installed before 5-5-14; and if such a DC is replaced on or after 5-5-14, it may be replaced with another DC.

[4] For the purpose of this table, "auxiliary water system" means a pressurized system of piping and appurtenances using auxiliary water, which is water other than the potable water being supplied by the CWS and which includes water from any natural source such as a well, pond, lake, spring, stream, river, etc., includes reclaimed water, and includes other used water or industrial fluids described in *AWWA Manual M14* as incorporated in paragraph 62-555.360(1)(a), F.A.C., and subsection 62-555.360(2), F.A.C.; however, "auxiliary water system" specifically excludes any water recirculation or treatment system for a swimming pool, hot tub,

or spa. (Note that reclaimed water is a specific type of auxiliary water and a reclaimed water system is a specific type of auxiliary water system.)

[5] The Department shall allow an exception to the requirement for backflow protection at or for a residential or non-residential service connection from a CWS to premises where there is an auxiliary or reclaimed water system if all of the following conditions are met:

- The CWS is distributing water only to land owned by the owner of the CWS.
- The owner of the CWS is also the owner of the entire auxiliary or reclaimed water system up to the points of auxiliary or reclaimed water use.
- The CWS conducts at least biennial inspections of the CWS and the entire auxiliary or reclaimed water system to detect and eliminate any cross-connections between the two systems.

[6] For the purpose of this table, "residential service connection" means any service connection, including any dedicated irrigation or fire service connection, that is two inches or less in diameter and that supplies water to a building, or premises, containing only dwelling units; and "non-residential service connection" means any other service connection.

[7] A DuC may be provided only if there is no known cross-connection between the plumbing system and the auxiliary or reclaimed water system on the customer's premises. Upon discovery of any cross-connection between the plumbing system and any reclaimed water system on the customer's premises, the CWS shall ensure that the cross-connection is eliminated. Upon discovery of any cross-connection between the plumbing system and any auxiliary water system other than a reclaimed water system on the customer's premises, the CWS shall ensure that the cross-connection is eliminated or shall ensure that the backflow protection provided at or for the service connection is equal to that required at or for a non-residential service connection.

[8] Reclaimed water regulated under Part III of Chapter 62-610, F.A.C., is a low hazard unless it is stored with surface water in a pond that is part of a stormwater management system, in which case it is a high hazard; well water is a low hazard unless determined otherwise by the CWS; industrial fluids and used water other than reclaimed water are high hazards unless determined otherwise by the CWS; reclaimed water not regulated under Part III of Chapter 62-610, F.A.C., and surface water are high hazards.

[9] Upon discovery of any cross-connection between the plumbing system and any reclaimed water system on the customer's premises, the CWS shall ensure that the cross-connection is eliminated.

[10] A DC may be provided if both of the following conditions are met:

- The dedicated irrigation service connection initially was constructed before 5-5-14.
- No chemicals are fed into the irrigation system.

[11] The CWS may rely on the internal backflow protection required under the *Florida Building Code* or the predecessor State plumbing code. The CWS may, but is not required to, ensure that such internal backflow protection is inspected/tested and maintained the same as backflow protection provided at or for service connections from the CWS.

[12] The Department shall allow an exception to the requirement for backflow protection at or for a residential or non-residential dedicated fire service connection from a CWS to a wet-pipe sprinkler, or wet standpipe, fire protection system if both of the following conditions are met:

- The fire protection system was installed and last altered before 5-5-14.
- The fire protection system contains no chemical additives and is not connected to an auxiliary water system as defined in Footnote 4.

[13] Upon discovery of any cross-connection between the fire protection system and any reclaimed water system on the customer's premises, the CWS shall ensure that the cross-connection is eliminated.

[14] The CWS shall ensure that backflow protection commensurate with the degree of hazard is provided at or for the service connection from its fire hydrant.

Rulemaking Authority 403.086(8), 403.853(3), 403.861(9) FS. Law Implemented 403.086(8), 403.852(12), 403.853(1), 403.855(3), 403.861(17) FS. History–New 11-19-87, Formerly 17-22.660, Amended 1-18-89, 1-3-91, 1-1-93, Formerly 17-555.360, Amended 8-28-03, 5-5-14.

62-555.365 Changes in Ownership of Public Water Systems.

At least 30 days before the proposed sale, or legal transfer of ownership, of a public water system, the current owner of the system and the proposed owner of the system shall jointly notify the Department in writing of the proposed change in ownership of the system. The notification shall be submitted to the appropriate Department of Environmental Protection District Office or Approved County Health Department and shall include the following information: the public water system name and identification number; the name of the current owner of the system; the name of the proposed owner of the system and the name, title, mailing address,

telephone number, fax number, and e-mail address of a designated responsible official of the proposed owner; and the proposed date for the change in ownership of the system.

Rulemaking Authority 403.861(9) FS. Law Implemented 403.861(14) FS. History–New 8-28-03.

62-555.401 General Permit for Construction of Lead or Copper Corrosion Control, or Iron or Manganese Sequestration, Treatment Facilities for Small or Medium Public Water Systems.

(1) A general permit is hereby granted to any small or medium system, as defined in Rule 62-550.200, F.A.C., for the construction of lead or copper corrosion control treatment facilities, provided that the facilities are designed in accordance with Part III of this chapter and provided that:

(a) Per subsections 62-4.530(1) and 62-555.520(2), F.A.C., the system notifies the Department at least 30 days before beginning construction using Form 62-555.900(18), Notice of Intent to Use the General Permit for Construction of Lead or Copper Corrosion Control, or Iron or Manganese Sequestration, Treatment Facilities for Small or Medium PWSs, as incorporated into subsection 62-555.520(2), F.A.C. The completed notice form shall be submitted to the appropriate Department of Environmental Protection District Office or Approved County Health Department and shall be accompanied by the permit processing fee described in subsection 62-555.520(6), F.A.C., and listed in paragraph 62-4.050(4)(p), F.A.C.

(b) The selected lead or copper corrosion control treatment is consistent with the guidance and recommendations in the *Lead and Copper Guidance Manual, Volume II: Corrosion Control Treatment* as adopted in Rule 62-555.335, F.A.C.

(2) A general permit is hereby granted to any small or medium system, as defined in Rule 62-550.200, F.A.C., for the construction of iron or manganese sequestration treatment facilities, provided that the facilities are designed in accordance with Part III of this chapter and provided that, per subsections 62-4.530(1) and 62-555.520(2), F.A.C., the system notifies the Department at least 30 days before beginning construction using Form 62-555.900(18), Notice of Intent to Use the General Permit for Construction of Lead or Copper Corrosion Control, or Iron or Manganese Sequestration, Treatment Facilities for Small or Medium PWSs, as incorporated into subsection 62-555.520(2), F.A.C. The completed notice form shall be submitted to the appropriate Department of Environmental Protection District Office or Approved County Health Department and shall be accompanied by the permit processing fee described in subsection 62-555.520(6), F.A.C., and listed in paragraph 62-4.050(4)(p), F.A.C.

(3) This general permit is subject to the general conditions in Rule 62-4.540, F.A.C., and the following specific conditions:

(a) If the treatment facilities being constructed under this general permit were designed under the responsible charge of a professional engineer, the permittee shall retain a Florida-licensed professional engineer in accordance with subsection 62-555.530(3), F.A.C., to take responsible charge of inspecting construction of the facilities for the purpose of determining in general if the construction proceeds in compliance with this general permit, including the approved preliminary design report for the facilities.

(b) In accordance with subsection 62-555.530(4), F.A.C., the permittee shall have complete record drawings produced for the treatment facilities being constructed under this general permit.

(c) To fulfill the requirements under subsection 62-555.350(13), F.A.C., the permittee shall provide an operation and maintenance manual for the treatment facilities constructed under this general permit.

(d) Per Rule 62-555.345, F.A.C., the permittee shall submit a certification of construction completion to the Department and obtain approval, or clearance, from the Department before placing any treatment facilities constructed under this general permit into operation for any purpose other than disinfection, testing for leaks, or testing equipment operation. This specific condition does not prohibit the permittee from cutting into existing water mains and returning the water mains to operation in accordance with subsection 62-555.340(5), F.A.C., without the Department's approval.

Rulemaking Authority 403.814(1), 403.861(9) FS. Law Implemented 403.0877, 403.814(1), (4), 403.861(7), (10) FS. History–New 12-10-96, Amended 8-28-03.

62-555.405 General Permit for Construction of Water Main Extensions for Public Water Systems.

(1) A general permit is hereby granted to any person for the construction of an extension to public water system mains conveying finished drinking water, provided that the extension is designed in accordance with Part III of this chapter and provided that:

(a) Per subsections 62-4.530(1) and 62-555.520(2), F.A.C., the person notifies the Department at least 30 days before beginning construction using Form 62-555.900(7), Notice of Intent to Use the General Permit for Construction of Water Main Extensions for PWSs, as incorporated into subsection 62-555.520(2), F.A.C. The completed notice form shall be submitted to the appropriate

Department of Environmental Protection District Office or Approved County Health Department and shall be accompanied by the permit processing fee described in subsection 62-555.520(6), F.A.C., and listed in paragraph 62-4.050(4)(p), F.A.C.

(b) The public water system to which the water main extension will be connected has the capacity necessary to meet the design water demands of all customers to be served by the water main extension, and said public water system is in compliance with applicable planning requirements under Rule 62-555.348, F.A.C.; applicable cross-connection control requirements under Rule 62-555.360, F.A.C.; and all other applicable rules in Chapters 62-550, 62-555, and 62-699, F.A.C.

(c) Construction of the water main extension will not include construction of any drinking water treatment, pumping, or storage facilities or any conflict manholes.

(d) The water main extension will not be installed in areas contaminated by low-molecular-weight petroleum products or organic solvents.

(e) The water main extension will not interconnect previously separate public water systems or create a "new system" as described under subsection 62-555.525(1), F.A.C.

(f) No portion of the water main extension will remain dry following completion of construction.

(2) This general permit is subject to the general conditions in Rule 62-4.540, F.A.C., and the following specific conditions:

(a) If the water main extension being constructed under this general permit was designed under the responsible charge of a professional engineer, the permittee shall retain a Florida-licensed professional engineer in accordance with subsection 62-555.530(3), F.A.C., to take responsible charge of inspecting construction of the water main extension for the purpose of determining in general if the construction proceeds in compliance with this general permit, including the approved preliminary design report for the water main extension.

(b) In accordance with subsection 62-555.530(4), F.A.C., the permittee shall have complete record drawings produced for the water main extension being constructed under this general permit.

(c) Per Rule 62-555.345, F.A.C., the permittee shall submit a certification of construction completion to the Department and obtain approval, or clearance, from the Department before placing any water main extension constructed under this general permit into operation for any purpose other than disinfection or testing for leaks. This specific condition does not prohibit the permittee from cutting into existing water mains and returning the water mains to operation in accordance with subsection 62-555.340(5), F.A.C., without the Department's approval.

Rulemaking Authority 403.814(1), 403.861(9) FS. Law Implemented 403.0877, 403.814(1), (4), 403.861(7), (9), (10) FS. History–New 7-8-82, Formerly 17-4.63, 17-4.630, 17-22.801, Amended 1-18-89, 1-1-93, Formerly 17-555.540, Amended 12-19-94, 12-10-96, 8-28-03.

62-555.500 General.

Rulemaking Authority 403.861(2), (6), (9) FS. Law Implemented 403.861(2), (6), (7), (10) FS. History–New 11-19-87, Formerly 17-22.710, Amended 1-18-89, Formerly 17-555.500, Amended 8-28-03, Repealed 11-26-15.

62-555.520 Applying for Public Water System Construction Permits.

(1) Except as noted in paragraphs (a) through (d) below, a construction permit is required for construction or alteration of any public water system component.

(a) No construction permit is required for use of point-of-entry (POE) or point-of-use (POU) treatment devices in lieu of centralized treatment to comply with a maximum contaminant level as allowed under subsection 62-550.340(2), F.A.C. However, suppliers of water shall submit a written request to, and obtain written approval from, the Department in accordance with subsection 62-550.340(2), F.A.C., before installing such POE or POU treatment devices. Additionally, suppliers of water are responsible for ensuring that such POE or POU treatment devices comply with the requirements in subsection 62-550.340(2), F.A.C.

(b) No construction permit is required for the types work or alterations listed in subparagraphs 1. through 5. below. However, suppliers of water shall obtain written approval from the Department before beginning such work or alterations. Each request for approval shall be submitted in writing to the appropriate Department of Environmental Protection District Office or Approved County Health Department and shall include the following: a description of the scope, purpose, and location of the work or alterations; and assurance that the work or alterations will comply with applicable requirements in Part III of this chapter, including applicable requirements in the engineering references listed in Rule 62-555.330, F.A.C. Additionally, each request for approval to discontinue use of existing drinking water treatment facilities, each request for approval to change drinking water treatment chemicals, and each request for approval to add tracer chemicals shall include assurance of continuing compliance with applicable

primary or secondary drinking water standards; and each request for approval to conduct demonstration testing of existing drinking water treatment facilities that will discharge directly to downstream treatment, storage, or distribution facilities and each request for approval to construct or install a temporary pilot plant that will discharge to a public water system shall include the following: technical and reliability information, third-party technology verifications or historical study data, and jar test results to provide assurance of continuing compliance with applicable primary or secondary drinking water standards during times of demonstration testing or pilot plant operation; a plan to monitor at least daily for applicable process control parameters and acute contaminants and at least weekly for applicable chronic contaminants during times of demonstration testing or pilot plant operation; a plan for start-up, normal operation, and emergency shutdown of the demonstration testing or pilot plant and for emergency flushing of storage and distribution facilities; and a plan to properly train operators and to staff the affected drinking water treatment plant with a licensed operator during all times of demonstration testing or pilot plant operation. Within 30 days after the Department receives a request for approval, the Department shall issue written approval of the work or alterations described in the request, shall issue written comments asking for resubmittal of the request with all information and assurances required under this paragraph, or shall issue a written determination that a construction permit is required because the work/alterations described in the request is/are not of a type listed under this paragraph. The Department shall approve work or alterations described in a request for approval if the work/alterations is/are of a type listed under this paragraph and if the request includes all information and assurances required under this paragraph.

1. Discontinuing use of any existing drinking water treatment, pumping, or storage facilities.

2. Changing any type of drinking water treatment chemicals other than temporarily converting from chloramines to free chlorine (to protect public health during emergency operating conditions or to eliminate excess ammonia, oxidize nitrite and nitrifying bacteria, and control biofilm in a water distribution system), provided the change in chemicals will be made without construction or alteration of any chemical application facilities or other drinking water treatment facilities.

3. Temporarily adding any chemical to raw, partially treated, or finished drinking water for the purpose of conducting a tracer study.

4. Demonstration testing of any existing drinking water treatment facilities if the water from the facilities being tested will be discharged directly to downstream treatment, storage, or distribution facilities (instead of being discharged to waste or to upstream treatment facilities for full treatment at no greater than the maximum permitted rate).

5. Construction or installation of any pilot plant that will discharge water to a public water system (instead of discharging water to waste), provided the plant will discharge to the water system for no more than three months.

(c) No construction permit is required for the types of work or alterations listed in subparagraphs 1 through 5 below. However, suppliers of water shall submit written notification to the Department before beginning such work or alterations. Each notification shall be submitted to the appropriate Department of Environmental Protection District Office or Approved County Health Department and shall include the following: a description of the scope, purpose, and location of the work or alterations; and assurance that the work or alterations will comply with applicable requirements in Part III of this chapter, including applicable requirements in the engineering references listed in Rule 62-555.330, F.A.C. Suppliers of water may begin such work or alterations 14 days after providing notification to the Department unless they are advised by the Department that the notification is incomplete or that a construction permit is required because the work/alterations is/are not of a type listed under this paragraph.

1. Replacement of any existing drinking water pumping, storage, or treatment facilities, including chemical application facilities and residuals handling facilities, with new facilities of the same design and capacity, and at the same general location, as the existing facilities.

2. Replacement of any existing water main with a new main at the same location as the existing main, provided the new main will be either the same size as the existing main, no more than two sizes larger than the existing main, or no larger than the minimum size required or recommended in *Recommended Standards for Water Works* as incorporated into Rule 62-555.330, F.A.C.

3. Relocation of any existing water main to accommodate other utilities, provided the length of main being moved at each location will be no more than 100 linear feet.

4. Alteration, excluding maintenance or repair, of any structures that are not used to treat, store, or handle drinking water, drinking water treatment chemicals, or drinking water treatment residuals but that are used to house drinking water pumping or treatment facilities, including chemical application facilities and residuals handling facilities.

5. Installation or alteration, excluding maintenance or repair, of any alarm equipment required under Part III of this chapter.

(d) No construction permit is required for the types of work or alterations listed in subparagraphs 1. through 13. below.

However, suppliers of water are responsible for ensuring that such work/alterations complies/comply with applicable requirements in Part III of this chapter, including applicable requirements in the engineering references listed in Rule 62-555.330, F.A.C. Additionally, suppliers of water are responsible for notifying others about emergency or abnormal operating conditions, planned conversions from free chlorine to chloramines or vice versa, and planned maintenance or repair work as required under subsection 62-555.350(10), F.A.C.

1. Discontinuing use of any existing water main.

2. Temporarily converting from chloramines to free chlorine to protect public health during emergency operating conditions or to eliminate excess ammonia, oxidize nitrite and nitrifying bacteria, and control biofilm in a water distribution system.

3. Demonstration testing of any existing drinking water treatment facilities if the water from the facilities being tested will be discharged to waste or to upstream treatment facilities for full treatment at no greater than the maximum permitted rate (instead of being discharged directly to downstream treatment, storage, or distribution facilities).

4. Construction or installation of any pilot plant that will discharge water to waste (instead of discharging water to a public water system).

5. Any maintenance or repair work.

6. Construction or alteration of any roads, landscaping, or fencing.

7. Construction or alteration of any structures that are not used to treat, store, or handle drinking water, drinking water treatment chemicals, or drinking water treatment residuals and that are not used to house drinking water pumping or treatment facilities, including chemical application facilities and residuals handling facilities.

8. Installation or alteration of any well vent.

9. Any electrical work that does not affect compliance with Part III of this chapter, including installation or alteration of auxiliary power sources for water systems not subject to the standby power requirements in Part III of this chapter.

10. Any instrumentation work that does not affect compliance with Part III of this chapter, including installation or alteration of chlorination or hypochlorination alarm equipment where such equipment is not required under Part III of this chapter and including installation or alteration of power failure alarm equipment for water systems not subject to the standby power requirements in Part III of this chapter.

11. Installation or alteration of any valve, flow meter, or backflow preventer.

12. Installation or alteration of any fire hydrant or hydrant lead.

13. Installation or alteration of any water service line to a single building, including any water service line dedicated exclusively to a fire protection or irrigation system serving a single building or its premises.

(2) Before commencing work or alterations for which a construction permit is required per subsection (1) above, the supplier of water or person who will perform such work or alterations shall submit a construction permit application to the Department using Form 62-555.900(1), Application for a Specific Permit to Construct PWS Components, effective August 28, 2003; or for a water main extension to be constructed under the general permit provision of Rule 62-555.405, F.A.C., shall notify the Department using Form 62-555.900(7), Notice of Intent to Use the General Permit for Construction of Water Main Extensions for PWSs, effective August 28, 2003; or for lead or copper corrosion control, or iron or manganese sequestration, treatment facilities to be constructed under the general permit provision of Rule 62-555.401, F.A.C., shall notify the Department using Form 62-555.900(18), Notice of Intent to Use the General Permit for Construction of Lead or Copper Corrosion Control, or Iron or Manganese Sequestration, Treatment Facilities for Small or Medium PWSs, effective August 28, 2003. The above Forms 62-555.900(1), 62-555.900(7), and 62-555.900(18) are hereby adopted and incorporated by reference into this subsection. Copies of these forms are available from the Department of Environmental Protection, Drinking Water Section, M.S. 3520, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. One copy of the appropriate application or notice form shall be executed in full and submitted to the appropriate Department of Environmental Protection District Office or Approved County Health Department. A separate application or notice shall be submitted for each non-contiguous project; non-contiguous projects are projects that are neither interconnected nor located nearby one another (i.e., on the same site, on adjacent streets, or in the same neighborhood). Suppliers of water or persons applying for a permit to construct public water system components that will create a “new system” as described in subsection 62-555.525(1), F.A.C., shall also complete and submit, with their permit application, Form 62-555.900(20), New Water System Capacity Development Financial and Managerial Operations Plan, as incorporated into Rule 62-555.357, F.A.C. No supplier of water or person shall begin work for which a construction permit is required until obtaining a specific permit from the Department or until the Department determines that the work qualifies for use of a general permit.

(3) Per Section 471.003, F.S., projects involving construction or alteration of public water system components shall be designed under the responsible charge of one or more professional engineers licensed in Florida except as noted in paragraphs (a) and (b) below. The professional engineer(s) in responsible charge of designing a project shall certify on the construction permit application or notice that the design of the project provides assurance of compliance with Chapter 62-550, F.A.C., if applicable, and complies with this chapter.

(a) Any person acting as a public officer employed by any state, county, municipal, or other governmental unit of Florida may design any project that has a total estimated cost of $10,000 or less.

(b) Any plumbing contractor licensed in Florida may design any project that he or she will install if the project has a value of $50,000 or less and involves a plumbing system, which includes any public water system serving a single property, with fewer than 250 fixture units.

(4) Each "Application for a Specific Permit to Construct PWS Components" shall be accompanied by one copy of either a preliminary design report as described in paragraph (a) below or drawings, specifications, and design data as described in paragraph (b) below. (When completed, Part II of the "Notice of Intent to Use the General Permit for Construction of Water Main Extensions for PWSs" or Part II of the "Notice of Intent to Use the General Permit for Construction of Lead or Copper Corrosion Control, or Iron or Manganese Sequestration, Treatment Facilities for Small or Medium PWSs" serves as a preliminary design report, and thus, it is unnecessary to submit a separate preliminary design report or drawings, specifications, and design data with a notice of intent to use a general permit.) Additional information may be required by the Department to clarify any construction permit application or notice; to clarify any preliminary design report or drawings, specifications, and design data; or to demonstrate that new or altered public water system components will comply with requirements in this chapter and provide drinking water meeting all applicable standards in Chapter 62-550, F.A.C

(a) Preliminary Design Reports. Preliminary design reports prepared under the responsible charge of one or more Florida-licensed professional engineers in accordance with subsection (3) above shall be signed, sealed, and dated by the professional engineer(s) in responsible charge. Preliminary design reports shall contain the following information where pertinent:

1. A brief description of the project and its purpose and an estimate of the cost to construct the project.

2. If the project will connect to, or become part of, an existing public water system, a description of the existing water system and discussion of the impact that the project will have on the existing water system. The description of the existing water system shall include the information in sub-subparagraphs a. through c. below if the project involves new or altered drinking water source facilities, drinking water treatment facilities, or finished-drinking-water pumping or storage facilities.

a. The name/location of existing water sources and the number and capacity of existing wells and raw surface water pumps.

b. The name/location of existing water treatment plants, the existing design capacity of each plant's source water facilities and each plant's treatment facilities and the permitted operating capacity of each plant, the existing type of treatment provided at each plant, and the number and capacity of existing finished-water pumps.

c. The name/location, type, and useful capacity of existing finished-water storage tanks.

3. The water service area, water use, and water service pressure information in sub-subparagraphs a. through d. below for the water system's service area or for the project's service area if the project involves only new or altered water mains or new or altered, finished-drinking-water booster pumping facilities.

a. A description of the nature and extent of both the present and the design water service area, including both the present and the design number of water service connections; an appraisal of both present and design commercial, institutional, and industrial water needs and fire fighting requirements; and discussion of both existing and proposed interconnections with other public water systems, including regulated consecutive systems.

b. Discussion of historical water use trends in the present water service area.

c. Both the present and the design water demands-average daily demand; maximum-day demand (including fire-flow demand, i.e., fire-flow rate times fire-flow duration, if fire protection is being provided); peak-hour demand (and if fire protection is being provided, fire-flow rate plus a background water demand equivalent to maximum-day demand other than fire-flow demand); and for small water systems that use hydropneumatic tanks or that are not designed to provide fire protection, peak instantaneous demand.

d. Both the present and the design water service pressure range.

4. If the project involves new or altered drinking water source facilities, the information in sub-subparagraphs a. through d. below.

a. The name/location of new water sources and documentation that new water sources are the best available sources as required

under subsection 62-555.310(1), F.A.C.

b. Documentation that new wells meet applicable construction requirements in Chapter 62-532, F.A.C.

c. Discussion of sanitary hazards located within 500 feet of new wells or located less than 500 feet upstream of new surface water intakes; and for each well being connected to a community water system, documentation of continuing protection of the well from sanitary hazards as required under subsection 62-555.312(4), F.A.C.

d. A description of new or altered surface water intake structures, impoundments, and reservoirs.

5. If the project involves new or altered source water or treatment facilities for a drinking water treatment plant, the information in sub-subparagraphs a. through d. below.

a. The design capacity of the plant's source water facilities and the plant's treatment facilities. Refer to subsection 62-555.320(6), F.A.C.

b. Water quality data assessing applicable microbiological, physical, chemical, and radiological characteristics of raw water from all new, altered, or existing water sources for the plant. For new or altered wells, the water quality data shall include the sulfide-related measurements required under subsection 62-555.315(5), F.A.C., if applicable, and the results of the bacteriological survey required under paragraph 62-555.315(6)(b), F.A.C.

c. Discussion of applicable primary or secondary drinking water standards, including treatment technique requirements, in Part III of Chapter 62-550, F.A.C.; applicable sulfide treatment requirements in subsection 62-555.315(5), F.A.C.; and applicable disinfection requirements in subsection 62-555.320(12), F.A.C.

d. An evaluation of the adequacy of new, altered, or existing treatment facilities to meet applicable standards and requirements given the quality of raw water from all new, altered, or existing water sources for the plant. If the sulfide treatment requirements in subsection 62-555.315(5), F.A.C., are applicable, the water quality and treatment evaluation shall include the affirmative demonstration required under paragraph 62-555.315(5)(b), F.A.C.

6. If the project involves new or altered drinking water treatment facilities, the information in sub-subparagraphs a. through l. below.

a. The design daily operating period for the treatment facilities.

b. A flow diagram showing all new, altered, or existing water treatment operations and processes (including residuals handling operations), chemical application points, water pumping facilities, bypass arrangements, and recycle flows.

c. A hydraulic profile establishing operating water elevations through new, altered, or existing water treatment facilities at design flow rates.

d. For new or altered disinfection facilities, the design level of *Cryptosporidium*, *Giardia lamblia*, or virus inactivation to be achieved, if applicable, and the design minimum CT or ultraviolet dose if chemical or ultraviolet disinfection will be used to achieve *Cryptosporidium*, *Giardia lamblia*, or virus inactivation. Refer to subsection 62-555.320(12), F.A.C.

e. The design dose of water treatment chemicals.

f. An evaluation of the types, quantities, and characteristics of residuals generated by existing, altered, or new water treatment facilities.

g. Sizes, capacities, retention times, loading rates, schematic diagrams, and other design parameters and details sufficient to demonstrate that new or altered water treatment facilities (including chemical application facilities and residuals handling facilities) and water pumping facilities will comply with applicable requirements in Part III of this chapter, including applicable requirements in the engineering references listed in Rule 62-555.330, F.A.C. The schematic diagrams of water treatment facilities, including chemical application facilities, shall show proper air gaps between drains or overflows from such facilities and sanitary or storm sewers.

h. For innovative or alternative processes and equipment, the supporting information required under subsection 62-555.320(2), F.A.C.

i. Assurance of compliance with the odor control requirements referenced under subsection 62-555.320(9), F.A.C.

j. For new or altered storage tank systems subject to regulation under Chapter 62-761, F.A.C., assurance that the storage tank systems will meet applicable performance standards in Chapter 62-761, F.A.C.

k. Discussion of housing and safety or protective equipment for new or altered chemical application facilities.

l. For new or altered fluoridation facilities, discussion of how the analytical equipment required under paragraph 62-555.325(2)(f), F.A.C., will be provided.

7. If the project involves new or altered, raw-water or finished-drinking-water pumping facilities, including well pumping

facilities, the number and capacity of pumps and the basis therefor, schematic diagrams, and other design parameters and details sufficient to demonstrate compliance with applicable requirements in Part III of this chapter, including applicable requirements in the engineering references listed in Rule 62-555.330, F.A.C.

8. If the project involves new or altered, finished-drinking-water storage facilities, the name/location and type of storage tanks, the useful capacity of storage tanks and the basis therefor, schematic diagrams, and other design parameters and details sufficient to demonstrate compliance with applicable requirements in Part III of this chapter, including applicable requirements in the engineering references listed in Rule 62-555.330, F.A.C.

9. If the project involves new or altered water mains, including treatment plant process piping, conveying either raw, partially treated, or finished drinking water, the information in sub-subparagraphs a. through g. below.

a. Hydraulic analyses or other justification for the size of new or altered water mains.

b. Discussion of color coding or marking of new or relocated water main pipe that will convey finished water. Refer to subparagraph 62-555.320(21)(b)3., F.A.C.

c. Discussion of installation procedures for new or altered water mains, including bedding and cover for underground mains; thrust restraint at new or altered tees, bends, plugs, and hydrants; pressure and leakage testing of new or altered mains; support, anchorage, and protection for new or altered mains crossing above surface water; and special construction of flexible, restrained, or welded watertight joints for new or altered mains crossing under surface water.

d. Discussion of separation distances between new or relocated, underground water mains, including hydrant drains, and existing or proposed sanitary or storm sewers, wastewater force mains, reclaimed water pipelines, and on-site sewage treatment and disposal systems. The Department shall allow exceptions to the separation distances required under subsections 62-555.314(1) and (2), F.A.C., only if justification and alternative construction features are provided in accordance with subsection 62-555.314(5), F.A.C.

e. Justification for each conflict manhole, identification of the party responsible for maintaining each conflict manhole, and assurance of compliance with design and construction requirements relative to conflict manholes. Refer to paragraph 62-555.314(3)(b), F.A.C.

f. Discussion of how proper backflow protection will be provided at those new or altered service connections where backflow protection is required or recommended under Rule 62-555.360, F.A.C., or in *Recommended Practice for Backflow Prevention and Cross-Connection Control*, AWWA Manual M14, as incorporated into Rule 62-555.330, F.A.C.

g. Schematic diagrams and other design parameters and details sufficient to demonstrate that new or altered hydrants and hydrant leads; air relief valves; valve, meter, or blow-off chambers; and backflow preventer installations will comply with applicable requirements in Part III of this chapter, including applicable requirements in the engineering references listed in Rule 62-555.330, F.A.C.

10. The project site information in sub-subparagraphs a. through f. below.

a. A site plan showing the approximate location of new or altered public water system wells; new or altered structures used to treat, store, or handle drinking water, drinking water treatment chemicals, or drinking water treatment residuals; structures housing new or altered drinking water pumping or treatment facilities, including chemical application facilities and residuals handling facilities; and new or altered water mains, including treatment plant process piping, conveying either raw, partially treated, or finished drinking water. The site plan shall indicate sizes of new or altered water mains and approximate locations of meters, valves, hydrants, blow-offs, and backflow preventers; approximate locations of new or altered interconnections between public water systems; approximate dimensions and elevations of structures; and both the 100-year and the 10- to 25-year flood elevation and wave-action elevation.

b. If applicable, discussion of how the permit applicant is avoiding locating a new public water system, or an expansion of an existing public water system, at any site subject to significant risk from contamination or significant risk from floods, fires, or other disasters. Refer to subsection 62-555.310(2), F.A.C.

c. Discussion of how community water system structures, and electrical or mechanical equipment, used to treat, pump, or store drinking water, apply drinking water treatment chemicals, or handle drinking water treatment residuals will be protected from physical damage by the 100-year flood and the 100-year wave action and will remain fully operational and accessible during the 25-year flood and the 25-year wave action. The Department shall allow use of less than the 25-year flood or wave action, but not less than the 10-year flood or wave action, only if justification is provided in accordance with subsection 62-555.320(4), F.A.C.

d. Discussion of approximate ground water elevations in relation to subsurface structures.

e. A description of security features for new or altered drinking water wells and new or altered drinking water treatment, pumping, or storage facilities.

f. A description of areas where new or altered water mains, including treatment plant process piping, conveying either raw, partially treated, or finished drinking water will be installed above or under surface water, in aggressive soil, or in areas contaminated by low-molecular-weight petroleum products or organic solvents.

11. A description of materials that will be used for new or altered public water system components and documentation that the materials and components will comply with the following standards, regulations, or requirements:

a. The American Water Works Association standards as incorporated into Rule 62-555.330, F.A.C., if applicable. The Department shall allow use of pipe and appurtenances that do not conform to these standards only if documentation is provided in accordance with paragraph 62-555.320(21)(c), F.A.C.

b. NSF International Standard 61 as adopted in Rule 62-555.335, F.A.C., or other standards, regulations, or requirements referenced under paragraph 62-555.320(3)(b), F.A.C., if applicable. The Department shall allow exceptions to conformance with these standards, regulations, or requirements only if documentation and assurance are provided in accordance with paragraph 62-555.320(3)(d), F.A.C.

c. The lead use prohibition in Rule 62-555.322, F.A.C., if applicable.

12. Discussion of color coding of new or altered, aboveground piping at drinking water treatment plants.

13. A description of electrical systems and provisions for standby power at new or altered drinking water treatment or pumping facilities. Refer to subsection 62-555.320(14), F.A.C.

14. A description of operation and control strategies and instrumentation and control systems, including monitoring or alarm systems, at new or altered drinking water treatment, pumping, or storage facilities. Refer to subparagraph 62-555.320(8)(a)3., F.A.C.; subsection 62-555.320(11), F.A.C.; subparagraph 62-555.320(13)(a)9., F.A.C.; sub-subparagraph 62-555.320(13)(a)10.c., F.A.C.; subparagraph 62-555.320(13)(b)12., F.A.C.; and paragraph 62-555.320(14)(f), F.A.C., for required alarm systems.

15. A description of provisions for metering and sampling finished drinking water at new or altered drinking water treatment plants. Refer to subsections 62-555.320(16) and (17), F.A.C.

16. A schematic diagram of the entire finished-water supply (i.e., plumbing) system at new or altered drinking water treatment plants and pumping stations. The diagram shall show proper air gaps or mechanical backflow preventers where appropriate.

17. Discussion of procedures for disinfecting, and conducting bacteriological surveys or evaluations of, new or altered public water system (PWS) wells; new or altered drinking water treatment or storage facilities; and new or altered water mains conveying either raw, partially treated, or finished drinking water, including treatment plant process piping, fire hydrant leads, and service lines that are under the control of the PWS and that have an inside diameter of three inches or greater. Refer to subsection 62-555.315(6), F.A.C., and Rule 62-555.340, F.A.C.

18. Discussion of procedures for keeping existing public water system components in operation, or for minimizing interruptions in the operation of the existing components, during construction of the project.

19. A description of drinking water additives and treatment chemicals that will be used or obtained under the construction project and documentation that the additives and chemicals will conform to NSF International Standard 60 as adopted in Rule 62-555.335, F.A.C., or other standards referenced under paragraph 62-555.320(3)(a), F.A.C.

(b) Drawings, Specifications, and Design Data. Drawings, specifications, and design data prepared under the responsible charge of one or more Florida-licensed professional engineers in accordance with subsection (3) above shall be signed, sealed, and dated by the professional engineer(s) in responsible charge. Drawings and specifications shall be sufficiently complete and detailed to allow the Department to determine whether the design of a project provides assurance of compliance with Chapter 62-550, F.A.C., if applicable, and complies with this chapter. Drawings shall be at least 18 inches by 24 inches and not larger than 36 inches by 42 inches, but photographically reproduced drawings with a reduced size as small as 11 inches by 17 inches are acceptable if the original drawings are drawn to a scale that will permit all necessary information to be plainly seen on the reduced-size reproductions. Design data shall include pertinent information described in subparagraphs 62-555.520(4)(a)1. through 19., F.A.C., if such information is not provided on the drawings or in the specifications.

(5) Each application for a specific permit to construct a new public water system subject to the jurisdiction of the Florida Public Service Commission (FPSC) shall be accompanied by one copy of the FPSC certificate authorizing the permit applicant to provide water service.

(6) Each construction permit application or notice shall be accompanied by the proper processing fee made payable to the

Department of Environmental Protection or the appropriate Approved County Health Department. Processing fees for specific permits are listed in paragraph 62-4.050(4)(n), F.A.C. In cases where these fees vary depending upon drinking water treatment plant capacity, the capacity to be used in determining the proper fee is the design maximum-day capacity of the entire new or altered plant after construction. Processing fees for general permits are listed in paragraph 62-4.050(4)(p), F.A.C.

(7) If required by the Department, permit applicants shall publish a notice of permit application and furnish proof of publication in accordance with subsections 62-110.106(5), (6) and (9), F.A.C.

Rulemaking Authority 403.087(2), 403.814(1), 403.861(2), (6), (9) FS. Law Implemented 367.031, 403.087(6)(a), 403.0877, 403.815, 403.861(2), (6), (7), 403.8615, 471.003 FS. History–New 11-19-87, Formerly 17-22.720, Amended 1-18-89, Formerly 17-555.520, Amended 12-10-96, 9-22-99, 8-28-03.

62-555.525 Capacity Development Provisions of Public Water System Permitting.

(1) This section applies to the following types of systems only. These are defined as "new systems" for the purposes of capacity development and referred to as "new systems" in this section.

(a) Entirely new community or non-transient non-community water systems constructed, or commencing operations, on or after October 1, 1999.

(b) 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.

(2) Construction permit applications for infrastructure creating a "new system" as described in subsection (1) above shall include a demonstration that the "new system" will have financial, managerial, and technical capacity to function in compliance with Chapters 62-550, 62-555, 62-560, and 62-699, F.A.C. Construction permit applicants who fail to demonstrate that a "new system" will have financial, managerial, and technical capacity to function in compliance with Chapters 62-550, 62-555, 62-560, and 62-699, F.A.C., shall not receive a construction permit.

(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 as described in subparagraph 1. or 2. below.

1. "New systems" that will not be regulated by the Florida Public Service Commission shall demonstrate financial and managerial capacity using Form 62-555.900(20), New Water System Capacity Development Financial and Managerial Operations Plan, as incorporated into Rule 62-555.357, F.A.C. The completed Form 62-555.900(20) shall be sent to the appropriate Department of Environmental Protection District Office or Approved County Health Department.

2. "New systems" that will be regulated by the Florida Public Service Commission shall demonstrate financial and managerial capacity using Form 62-555.900(20), New Water System Capacity Development Financial and Managerial Operations Plan, as incorporated into Rule 62-555.357, F.A.C., except that such systems need not complete Parts II and III of the form (financial capacity). "New systems" in counties under the jurisdiction of the Florida Public Service Commission but not subject to its regulations are not exempt from completing Parts II and III of the form. The completed Form 62-555.900(20) shall be sent to the appropriate Department of Environmental Protection District Office or Approved County Health Department.

Rulemaking Authority 403.861(9), 403.8615 FS. Law Implemented 403.8615 FS. History–New 9-22-99, Amended 8-28-03.

62-555.528 Applying for Reratings of Public Water System Treatment Plants.
This section addresses procedures for obtaining a rerating (i.e., increase) of the permitted operating capacity of a drinking water treatment plant when no construction is necessary for the rerating.

(1) A construction permit is required to document any rerating of the permitted operating capacity of any water treatment plant.

(2) Suppliers of water seeking to have the permitted operating capacity of a water treatment plant rerated shall submit to the appropriate Department of Environmental Protection District Office or Approved County Health Department a construction permit application using Form 62-555.900(1), Application for a Specific Permit to Construct PWS Components, as incorporated into subsection 62-555.520(2), F.A.C.

(3) Each construction permit application shall be accompanied by one copy of a rerating report as described in this subsection. Additional information may be required by the Department to clarify any construction permit application; to clarify any rerating report; or to demonstrate that any rerated water treatment plant will provide drinking water meeting all applicable standards in Chapter 62-550, F.A.C. The rerating report shall be prepared under the responsible charge of one or more professional engineers licensed in Florida and shall be signed, sealed, and dated by the professional engineer(s) in responsible charge, and the rerating report shall contain the following information:

(a) A brief description of the water treatment plant for which a rerating of the permitted operating capacity is being sought. The description of the plant shall include the information in subparagraphs 1. and 2. below.

1. The name/location of water sources for the plant and the number and capacity of wells and raw surface water pumps supplying water to the plant.

2. The name/location of the plant, the existing permitted operating capacity of the plant, the type of treatment provided at the plant, and the number and capacity of finished-water pumps.

(b) The proposed new design capacity of the water treatment plant's source water facilities and the plant's treatment facilities. Refer to subsection 62-555.320(6), F.A.C.

(c) The daily operating period for the water treatment plant's source water and treatment facilities.

(d) Water quality data assessing applicable microbiological, physical, chemical, and radiological characteristics of raw water from all water sources for the plant.

(e) Discussion of applicable primary or secondary drinking water standards, including treatment technique requirements, in Part III of Chapter 62-550, F.A.C.; applicable sulfide treatment requirements in subsection 62-555.315(5), F.A.C.; and applicable disinfection requirements in subsection 62-555.320(12), F.A.C.

(f) A flow diagram showing all water treatment operations and processes (including residuals handling operations), chemical application points, water pumping facilities, bypass arrangements, and recycle flows at the water treatment plant.

(g) An evaluation of the hydraulic capacity of the water treatment plant, including all water pumping facilities, showing that the plant will be hydraulically capable of operating at the proposed new design capacity. The evaluation shall include a hydraulic profile establishing operating water elevations through the plant.

(h) An evaluation of the quantities and characteristics of residuals generated when the water treatment facilities are operating at the proposed new design capacity.

(i) An evaluation of all water treatment facilities (including chemical application facilities and residuals handling facilities), water pumping facilities, and ancillary equipment at the drinking water treatment plant showing one of the following:

1. The facilities and equipment will meet pertinent design requirements in Part III of this chapter, including pertinent design requirements in the engineering references listed in Rule 62-555.330, F.A.C., when operating at the proposed new design capacity and, given the quality of raw water from all water sources for the plant, the facilities and equipment will meet applicable primary or secondary drinking water standards, sulfide treatment requirements, and disinfection requirements when operating at the proposed new design capacity; or

2. Based upon data from at least one full-scale or pilot-plant installation treating water of comparable quality during comparable seasonal fluctuations or based upon data from demonstration testing of the facilities and equipment, the facilities and equipment will meet applicable primary or secondary drinking water standards, sulfide treatment requirements, and disinfection requirements under all anticipated water quality conditions when operating at the proposed new design capacity.

(j) Assurance of compliance with the odor control requirements referenced under subsection 62-555.320(9), F.A.C., when the water treatment plant is operating at the proposed new design capacity.

(4) Each construction permit application shall be accompanied by the proper processing fee made payable to the Department of

Environmental Protection or the appropriate Approved County Health Department. The proper processing fee for any rerating of the permitted operating capacity of a drinking water treatment plant shall be determined using the fee schedule in subparagraph 62-4.050(4)(n)1., 2., or 3., F.A.C., as applicable, and using the proposed new design maximum-day capacity of the plant.

Rulemaking Authority 403.861(9) FS. Law Implemented 403.0877, 403.815, 403.861(2), (6), (7) FS. History–New 8-28-03.

62-555.530 Processing Applications or Notices for, and Issuing or Denying, Public Water System Construction Permits.

(1) Specific Construction Permits.

(a) The Department shall process each application for a specific permit in accordance with Rule 62-4.055, F.A.C.

(b) The Department shall review each specific permit application, including the preliminary design report or drawings, specifications, and design data accompanying the application, for the following:

1. Assurance of compliance with applicable primary or secondary drinking water standards, including treatment technique requirements, in Part III of Chapter 62-550, F.A.C. The construction permit applicant shall have the raw water from each new or altered drinking water source sampled and analyzed for applicable contaminants in accordance with Rule 62-550.550, F.A.C.

2. Assurance of compliance with subsection 62-524.650(2), F.A.C., if applicable. The construction permit applicant shall have the raw water from each new or altered drinking water source in a delineated area sampled and analyzed in accordance with Rule 62-524.600, F.A.C.

3. Compliance with applicable design and construction requirements in Part III of this chapter. The construction permit applicant shall have the raw water from new or altered public water system wells sampled and analyzed in accordance with subsection 62-555.315(5), F.A.C., if applicable, and paragraph 62-555.315(6)(b), F.A.C.

4. Compliance with applicable permitting requirements, including capacity development requirements, in Part V of this chapter.

(c) If the Department determines that a construction permit applicant has complied, or provided assurance of compliance, with applicable rules, the Department shall give the applicant a notice of permit issuance or a notice of intent to issue a permit in accordance with subsection 62-110.106(7), F.A.C. If the Department determines that a construction permit applicant has not complied, or provided assurance of compliance, with applicable rules, the Department shall give the applicant a notice of permit denial in accordance with subsection 62-110.106(7), F.A.C. All notices of permit denial shall contain the reasons for the denial.

(d) Under the circumstances described in paragraph 62-110.106(7)(a), F.A.C., the Department shall require the construction permit applicant to publish a notice of the Department's proposed action on an application for a specific permit and furnish proof of publication in accordance with subsections 62-110.106(5) and (9), F.A.C.

(2) General Construction Permits.

(a) The Department shall review each general permit notice for the following:

1. Assurance of compliance with applicable primary or secondary drinking water standards, including treatment technique requirements, in Part III of Chapter 62-550, F.A.C.

2. Compliance with applicable design and construction requirements in Part III of this chapter.

3. Compliance with applicable permitting requirements in Parts IV and V of this chapter.

(b) If the Department determines that a project qualifies for use of the noticed general permit, the Department need not take any action on the notice, and the permittee may use the general permit 30 days after giving notice to the Department. If the Department determines that a project does not qualify for use of the noticed general permit, the Department shall deny use of the general permit by notifying the proposed permittee in accordance with subsection 62-110.106(7), F.A.C. All notices denying use of a general permit shall contain the reasons for the denial.

(3) Whenever a project is designed under the responsible charge of one or more professional engineers licensed in Florida and is permitted by the Department under this chapter, construction of the project shall be inspected, for the purpose of determining in general if the construction proceeds in compliance with the Department permit and approved preliminary design report or drawings and specifications, under the responsible charge of a professional engineer licensed in Florida. The professional engineer in responsible charge of inspecting construction of a project shall certify on the certification of construction completion required under Rule 62-555.345, F.A.C., that construction of the project has been completed in accordance with the Department permit, including the approved preliminary design report or drawings and specifications, or in substantial conformance with Chapter 62-550, F.A.C., if applicable, and this chapter.

(4) Whenever a project is permitted by the Department under this chapter, complete record drawings shall be prepared for the project.

Rulemaking Authority 403.861(9) FS. Law Implemented 373.309, 403.0877, 403.815, 403.861(7), (10) FS. History–New 11-19-87, Formerly 17-22.725, Amended 1-18-89, 1-1-93, Formerly 17-555.530, Amended 8-28-03.

62-555.533 Conditions for Specific Construction Permits for Public Water Systems.

(1) Each specific construction permit issued by the Department shall include the general conditions listed in Rule 62-4.160, F.A.C.

(2) Each specific construction permit issued by the Department shall contain the following specific conditions as applicable:

(a) Each permit shall specify the effective date of the permit and the expiration date of the permit. No permit shall be issued for a term of more than five years.

(b) Each permit for a project involving new or altered source water or treatment facilities for a drinking water treatment plant shall specify the permitted maximum-day operating capacity of the plant and, if applicable, the permitted peak operating capacity of the plant in accordance with subsection 62-555.320(6), F.A.C.

(c) Each permit for a project designed under the responsible charge of one or more professional engineers licensed in Florida shall contain a specific condition requiring the permittee to retain a Florida-licensed professional engineer in accordance with subsection 62-555.530(3), F.A.C., to take responsible charge of inspecting construction of the project for the purpose of determining in general if the construction proceeds are in compliance with the permit, including the approved preliminary design report or drawings and specifications, for the project.

(d) Each permit shall contain a specific condition requiring the permittee to have complete record drawings produced for the project in accordance with subsection 62-555.530(4), F.A.C.

(e) Each permit for a project involving new or altered drinking water treatment facilities shall contain a specific condition requiring the permittee to provide an operation and maintenance manual for the new or altered treatment facilities to fulfill the requirements under subsection 62-555.350(13), F.A.C.

(f) Each permit shall contain a specific condition requiring the permittee to submit a certification of construction completion to the Department and obtain approval, or clearance, from the Department per Rule 62-555.345, F.A.C., before placing any public water system components constructed or altered under the permit into operation for any purpose other than disinfection, testing for leaks, or testing equipment operation. This specific condition shall not prohibit the permittee from cutting into existing water mains and returning the water mains to operation in accordance with subsection 62-555.340(5), F.A.C., without the Department's approval. Additionally, the Department shall allow exceptions to this specific condition if construction permit applicants provide in the preliminary design report or drawings, specifications, and design data accompanying their permit application justification for each exception and assurance of public health protection.

(g) Each permit shall contain other specific conditions, including schedules for completing construction, to ensure that Department rules are met.

Rulemaking Authority 403.861(9) FS. Law Implemented 403.087(4), 403.0877, 403.861(7), (10) FS. History–New 8-28-03.

62-555.536 Modification, Transfer, or Revocation of Public Water System Construction Permits.

(1) Except as noted in paragraphs (a) and (b) below, a construction permit modification is required for changes to a permitted project, including any project noticed for use of a general construction permit.

(a) No construction permit modification is required for the types of project changes listed in subparagraphs 1. through 5. below. However, permittees shall submit written notification to the Department before making such changes. Each notification shall be submitted to the appropriate Department of Environmental Protection District Office or Approved County Health Department and shall include the following: a description of the scope, purpose, and location of the change; and assurance that the change will comply with applicable requirements in Part III of this chapter, including applicable requirements in the engineering references listed in Rule 62-555.330, F.A.C. Permittees may begin such changes seven days after providing notification to the Department unless they are advised by the Department that the notification is incomplete or that a construction permit modification is required because the changes are not of a type listed under this paragraph.

1. Addition of, or changes to, work or alterations of the type described in paragraph 62-555.520(1)(c), F.A.C.

2. Addition of up to five percent more water main or 100 linear feet more water main, whichever is greater, at new locations within the same rights-of-way, easements, or sites, provided the additional water main will not pass through any conflict manholes, will not be installed in areas contaminated by low-molecular-weight petroleum products or organic solvents, will not connect

previously separate public water systems or create a "new system" as described under subsection 62-555.525(1), F.A.C., and will not remain dry following completion of construction.

3. Addition of, or changes to, alternative construction features in accordance with subsection 62-555.314(5), F.A.C., due to unforeseen situations where it is not practicable to comply with the utility separation requirements in subsections 62-555.314(1) and (2), F.A.C.

4. Relocation of public water system components within the width of the same right-of-way or easement or within the same site. (Permittees may realign water mains to maintain required separation distances between the water mains and other utilities without submitting written notification to the Department.)

5. Changes in materials that will come into contact with drinking water or drinking water treatment chemicals and addition of, or changes in, drinking water additives or treatment chemicals that will be used or obtained under a construction project.

(b) No construction permit modification is required for the types of project changes listed in subparagraphs 1. through 4. below. However, permittees are responsible for ensuring that such changes comply with applicable requirements in Part III of this chapter, including applicable requirements in the engineering references listed in Rule 62-555.330, F.A.C.

1. Addition of, or changes to, work or alterations of the type described in paragraph 62-555.520(1)(d), F.A.C.

2. Realignment of water mains within the width of the same right-of-way or easement, or within the same site, to maintain required separation distances between the water mains and other utilities.

3. Changes in materials that will not come into contact with drinking water or drinking water treatment chemicals.

4. Changes in the construction method for water mains (e.g., changes from open-trench construction to tunneling and vice versa).

(2) Before commencing work on project changes for which a construction permit modification is required per subsection (1) above, the permittee shall submit to the appropriate Department of Environmental Protection District Office or Approved County Health Department a written request for a permit modification. Each such request shall be accompanied by one copy of a revised construction permit application or notice as described in subsection 62-555.520(2), F.A.C., if appropriate, and each request for modification of a specific construction permit shall be accompanied by one copy of either a revised preliminary design report or revised drawings, specifications, and design data as described in subsection 62-555.520(4), F.A.C., if appropriate. Additionally, each such request also shall be accompanied by the proper processing fee made payable to the Department of Environmental Protection or the appropriate Approved County Health Department. Processing fees for construction permit modifications involving substantial project changes (i.e., changes altering capacity, adding new treatment, causing additional or different drinking water standards to apply, or causing significantly greater or different environmental impacts) shall be the same as fees for a new construction permit (refer to subsection 62-555.520(6), F.A.C.). Processing fees for construction permit modifications involving other project changes, both major and minor, are listed in subparagraphs 62-4.050(4)(n)6. and 7., F.A.C., and paragraph 62-4.050(4)(s), F.A.C.

(3) Each request for a construction permit modification involving project changes shall be processed in accordance with Rule 62-555.530, F.A.C.

(4) Each request for extension of a specific construction permit shall be made and processed in accordance with subsection 62-4.080(3), F.A.C. Each such request shall be accompanied by the proper processing fee made payable to the Department of Environmental Protection or the appropriate Approved County Health Department. The processing fee for a construction permit extension is listed in paragraph 62-4.050(4)(s), F.A.C. No specific construction permit shall be extended so as to remain in effect longer than five years.

(5) Each request for transfer of a specific construction permit and each request for transfer of a permittee's use of a general construction permit shall be made and processed in accordance with Rule 62-4.120, F.A.C., except that the current permittee and the proposed permittee shall jointly submit Form 62-555.900(8), Application for Transfer of a PWS Construction Permit, hereby adopted and incorporated by reference, effective August 28, 2003. Copies of this form are available from the Department of Environmental Protection, Drinking Water Section, M.S. 3520, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Each application for transfer of a construction permit shall be accompanied by the proper processing fee made payable to the Department of Environmental Protection or the appropriate Approved County Health Department. The processing fee for transfer of a construction permit is listed in paragraph 62-4.050(4)(s), F.A.C.

(6) Each suspension or revocation of a specific construction permit and each suspension or revocation of a permittee's use of a general construction permit shall be rendered in accordance with Rule 62-4.100, F.A.C.

Rulemaking Authority 403.861(9) FS. Law Implemented 403.087(6)(a), 403.815, 403.861(7) FS. History–New 8-28-03

62-555.900 Forms and Instructions.

The forms used by the Department in the Public Water System Supervision Program are listed below by form number and name. Each form has been incorporated into the rule that references it. Copies of these forms may be obtained by writing to the Department of Environmental Protection, Source and Drinking Water Program, M.S. 3520, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. In addition, these forms are available at the Department of Environmental Protection's district offices, at the Approved County Health Departments, and on the Department of Environmental Protection's web site at www.dep.state.fl.us. Persons and public water systems shall report to the Department using the forms listed below or using computer-generated versions of the forms listed below provided such versions are identical to the forms listed below in every respect other than font type and style, font size, and character spacing.

(1) Application for a Specific Permit to Construct PWS Components, effective August 28, 2003.

(2) Monthly Operation Report for Subpart H Systems, effective October 14, 2004.

(3) Monthly Operation Report for PWSs Treating Raw Ground Water or Purchased Finished Water, effective August 28, 2003.

(4) Monthly Operation Report for Consecutive Systems that Do Not Treat Water, effective August 28, 2003.

(5) Monthly Operation Report for PWSs Fluoridating Water, effective August 28, 2003.

(6) Monthly Operation Report for Consecutive Systems that Receive Purchased Finished Water from a Subpart H System, effective April 3, 2003.

(7) Notice of Intent to Use the General Permit for Construction of Water Main Extensions for PWSs, effective August 28, 2003.

(8) Application for Transfer of a PWS Construction Permit, effective August 28, 2003.

(9) Certification of Construction Completion and Request for Clearance to Place Permitted PWS Components into Operation, effective August 28, 2003.

(10) Asbestos-Free Certification or Asbestos Sampling Plan for PWSs, effective August 28, 2003.

(11) Monthly Operation Report for Summation of Finished-Water Production by CWSs that Have Multiple Treatment Plants, effective August 28, 2003.

(12) PWS Sampling Plan for Lead and Copper Tap Samples and Water Quality Parameters, effective August 28, 2003.

(13) Form 62-555.900(13), Cross-Connection Control Program Annual Report, effective 5-5-14, incorporated by reference in paragraph 62-555.360(2)(b), F.A.C.

(14) Deleted.

(15) Deleted.

(16) PWS Certification of Notification of Lead and Copper Tap Sample Results, effective October 1, 2010.

(17) Lead Public Education Program Report for PWSs, effective October 1, 2010.

(18) Notice of Intent to Use the General Permit for Construction of Lead or Copper Corrosion Control, or Iron or Manganese Sequestration, Treatment Facilities for Small or Medium PWSs, effective August 28, 2003.

(19) Form number 62-555.900(19), Certification of Delivery of Consumer Confidence Report, effective April 10, 2003.

(20) New Water System Capacity Development Financial and Managerial Operations Plan, effective August 28, 2003.

(21) Form number 62-555.900(21), Certification of Delivery of Consumer Confidence Information to Supplied Systems, effective April 10, 2003.

(22) Form number 62-555.900(22), Certification of Delivery of Public Notice, effective 1-17-05.

Rulemaking Authority 403.8055, 403.861, 403.861(9) FS. Law Implemented 367.031, 403.0877, 403.861, 403.8615 FS. History–New 1-18-89, Amended 1-3-91, Formerly 17-555.900, Amended 12-10-96, 9-22-99, 4-3-03, 4-10-03, 8-28-03, 10-14-04, 1-17-05, 10-1-10, 5-5-14.

South Florida Water Management District

Part – C

Water Use Management Rules

Water Use Chapter Rules

- 40E-0, F.A.C. - Exception To The Uniform Rules Of Procedure
- 40E-1, F.A.C. - General And Procedural
- 40E-2, F.A.C. - Consumptive Use
- 40E-3, F.A.C. - Water Wells
- 40E-5, F.A.C. - Artificial Recharge
- 40E-8, F.A.C. - Minimum Flows And Levels
- 40E-10, F.A.C. - Water Reservations
- 40E-20, F.A.C. - General Water Use Permits
- 40E-21, F.A.C. - Water Shortage Plan
- 40E-22, F.A.C. - Regional Water Shortage Plans
- 40E-23, F.A.C. - Critical Water Supply Problem Areas
- 40E-24, F.A.C. - Mandatory Year-Round Landscape Irrigation Conservation Measures
- 40E-30, F.A.C. - General Permits For Water Wells

Florida Department of State, Division of Library and Information Services
FAW & FAC webpage link: https://www.flrules.org/Default.asp

Rules of the
South Florida Water Management District

EXCEPTIONS TO THE UNIFORM RULES OF PROCEDURE CHAPTER 40E-0, F.A.C.

Effective:October 1, 2013

CHAPTER 40E-0
EXCEPTIONS TO THE UNIFORM RULES OF PROCEDURE

40E-0.101 Scope
40E-0.102 Time for Consideration of Emergency Petition for Variance or Waiver
40E-0.103 Procedures for Processing Permit Applications (Repealed)
40E-0.105 Consideration of Intended Agency Decision on Permit Applications (Repealed)
40E-0.107 Emergency Action
40E-0.108 Emergency Authorization
40E-0.109 Point of Entry Into Proceedings and Mediation
40E-0.111 Exemptions and Variances for Well Construction Permits
40E-0.113 Variances from Specified Review Criteria for Environmental Resource Permits (Repealed)
40E-0.115 Variances from Water Use Restrictions

40E-0.101 Scope.
This chapter contains rules for which the South Florida Water Management District has been granted specific exceptions to Title 28, F.A.C., Uniform Rules of Procedure, by the Administration Commission pursuant to Section 120.54(5), F.S. Each rule listed in this chapter is also listed within its corresponding, substantive rule chapter within Title 40E, F.A.C.

Rulemaking Authority 120.54(5) FS. Law Implemented 120.54(5) FS. History–New 7-2-98.

40E-0.102 Time for Consideration of Emergency Petition for Variance or Waiver.
Notwithstanding Rule 28-104.005, F.A.C., when a petition for an emergency variance or waiver requires action by the District, the District shall grant or deny a petition for emergency variance or waiver within 30 days of its receipt or at the next regularly scheduled meeting for which notice may be properly given.

Rulemaking Authority 120.54(5) FS. Law Implemented 120.54(5), 373.079, 373.083 FS. History–New 7-2-98, Amended 10-23-12.

40E-0.103 Procedures for Processing Permit Applications.

Rulemaking Authority 120.54(5), 120.60 FS. Law Implemented 120.54(5), 120.60 FS. History–New 7-2-98, Amended 6-12-00, Repealed by Section 3, Chapter 2012-31, Laws of Florida, 5-27-12.

40E-0.105 Consideration of Intended Agency Decision on Permit Applications.

Rulemaking Authority 120.54(5), 120.60, 668.003, 668.004, 668.50 FS. Law Implemented 120.54(5), 120.60, 668.003, 668.004, 668.50 FS. History–New 7-2-98, Amended 3-22-09, Repealed by Section 3, Chapter 2012-31, Laws of Florida, 5-27-12.

40E-0.107 Emergency Action.

(1) An emergency exists when immediate action is necessary to protect public health, safety or welfare; the health of animals, fish or aquatic life; the works of the District; a public water supply, or recreational, commercial, industrial, agricultural or other reasonable uses of land and water resources.

(2) The Executive Director may employ the resources of the District to take whatever remedial action necessary to alleviate the emergency condition without the issuance of an emergency order, or in the event an emergency order has been issued, after the expiration of the requisite time for compliance with that order.

(3) The procedures under this rule are provided in addition to the procedures set forth in Rule 28-106.501, F.A.C.

Rulemaking Authority 120.54(5), 120.60, 373.439 FS. Law Implemented 120.54(5), 120.60, 373.439 FS. History–New 7-2-98.

40E-0.108 Emergency Authorization.

(1) Permission to initiate activities regulated under Chapter 373, F.S., prior to the issuance of a permit or authorization of use may be applied for, in writing, when emergency conditions justify. However, no such permission shall be granted unless the proposed use is already under consideration for a permit under District rules. Mere carelessness or lack of planning on the part of the applicant shall not be sufficient grounds to warrant the granting of an emergency authorization.

(2) The Executive Director may grant an emergency authorization pursuant to Section 373.119(2), F.S. The emergency authorization shall be presented to the Governing Board for concurrence at its next regularly scheduled meeting. Failure to receive the Governing Board's concurrence shall automatically invalidate the emergency authorization.

Rulemaking Authority 120.54(5), 120.60, 373.439 FS. Law Implemented 120.54(5), 120.60, 373.439 FS. History–New 7-2-98, 6-12-00.

40E-0.109 Point of Entry Into Proceedings and Mediation.

Point of entry into proceedings determining substantial interests are governed by Rule 28-106.111, F.A.C., and this section.

(1)(a) "Receipt of written notice of agency decision" as set forth in Rule 28-106.111, F.A.C., means receipt of either written notice through regular United States mail, or electronic mail, or posting that the District has or intends to take final agency action, or publication of notice that the District has or intends to take final agency action.

(b) If notice is published pursuant to this chapter, publication shall constitute constructive notice to all persons. Until notice is published, the point of entry to request a formal or informal administrative proceeding shall remain open unless actual notice is received.

(2) If the District takes action which substantially differs from the notice of intended agency decision, the applicant or persons who may be substantially affected shall have an additional point of entry pursuant to Rule 28-106.111, F.A.C., unless otherwise provided by law. The District action is considered to substantially differ from the notice of intended agency decision when the potential impact on water resources has changed.

(3) Notwithstanding Rule 28-106.111, F.A.C., intended agency decisions or agency decisions regarding consolidated applications for Environmental Resource Permits and Use of Sovereign Submerged Lands pursuant to Section 373.427, F.S., shall provide a 14 day point of entry to file

petitions for administrative hearing under Rule 28-106.111, F.A.C.

Rulemaking Authority 120.54(5), 373.044, 373.113 FS. Law Implemented 120.54(5), 120.569, 120.57, 120.60, 373.079, 373.083, 373.146, 373.413, 373.427, 668.003, 668.004, 668.50 FS. History–New 7-2-98, Amended 6-12-00, 3-22-09, 10-23-12.

40E-0.111 Exemptions and Variances for Well Construction Permits.

(1) The board finds that compliance with all the requirements of Part I of Chapter 40E-3, F.A.C., may result in an undue hardship for the construction, repair or abandonment of certain wells.

(2) Any affected person may request an exemption from any or all of these rules for an individual well by making written request which must include those specific requirements for which an exemption is requested, any alternate or substitute methods or conditions considered appropriate, and reasons why the exemption is considered necessary.

(3) The District shall grant the exemption by way of a variance if the proposal is in accordance with accepted public health and sanitary engineering principles and practices and will not adversely affect the water resource. The variance shall be the minimum necessary to ameliorate the hardship.

(4) If the request is for a variance from the requirement of obtaining a water use permit, the applicant must demonstrate that an application has been filed and a compelling necessity exists to commence the construction, repair or modification of a well while an application for a water use permit is pending. Issuance of the variance will not be evidence of any entitlement to the water use permit.

(5) Upon issuance of a variance the District shall impose such special conditions as may be necessary to protect the intent and purpose of Part III, Chapter 373, F.S., and this chapter.

(6) The variance under this rule is provided in addition to the variance and waiver procedures set forth in Rule 28-104, F.A.C., which implements Section 120.542, F.S.

Rulemaking Authority 120.54(5), 373.044, 373.113, 373.171 FS. Law Implemented 120.54(5), 373.303, 373.308, 373.313, 373.316, 373.326 FS. History–New 9-2-98, Amended 6-12-00.

40E-0.113 Variances from Specified Review Criteria for Environmental Resource Permits.

Rulemaking Authority 373.044, 373.113, 373.171, 373.414(17) FS. Law Implemented 403.201 FS. History–New 9-2-98, Amended 6-12-00, 6-26-02, 10-23-12, Repealed 10-1-13.

40E-0.115 Variances from Water Use Restrictions.

(1) All users requesting relief from the provisions of Chapter 40E-21, F.A.C., shall file an application for variance but must conform to water use restrictions until the Executive Director grants a temporary variance or the Board grants the variance.

(2) Criteria for Issuance – No application for variance shall be granted unless the applicant provides reasonable assurances that the variance will not otherwise be harmful to the water resources of the District and affirmatively demonstrates that one or more of the following circumstances exists:

(a) The variance is essential to protect health or safety, or

(b) Compliance with the particular rule or order from which a variance is sought will require measures which, because of their extent or cost, cannot be accomplished within the anticipated duration of the shortage, or

(c) Alternative restrictions which achieve the same level of demand reduction as the

restrictions from which a variance is sought are available and are binding and enforceable, or

(d) The applicant is a public or private utility that demonstrates that special circumstances exist which necessitate the issuance of a variance, or

(e) The applicant's source of water includes an approved aquifer storage and recovery installation or a water reclamation project.

(3) Limiting Conditions – Variances granted shall be subject to the following conditions:

(a) The variance granted shall be the minimum necessary to alleviate the circumstance for which the variance was requested under subsection (2).

(b) All variances shall expire upon a declaration by the Board that a water shortage no longer exists or when a more restrictive water shortage declaration is made, unless the Board specifies that the variance shall be in effect for a longer period of time, provided however that variance conditions which require the applicant to modify water use facilities shall remain in full force and effect until such modifications have been completed. However, when a new application for variance is filed within seven working days of the effective date of a more restrictive water shortage declaration, the existing variance shall remain in effect until final agency action on the application.

(c) Variances granted under paragraph (2)(b) may prescribe a timetable for compliance with the restrictions from which a variance was sought.

(4) Applications for Variance – The application shall contain the following:

(a) The applicant's name, address, telephone number and location of the property for which relief is requested.

(b) The specific rule, order, water shortage phase or restriction from which the applicant is requesting relief.

(c) A detailed statement of the facts which the applicant believes demonstrate that the request qualifies for a variance under subsection (2), including reports by qualified technical experts.

(d) A description of the relief desired.

(e) The period of time for which the variance is sought, including the reasons and facts in support thereof.

(f) The damage or harm resulting or which may result to the applicant from compliance with the rule or order.

(g) If the variance is sought under paragraph (2)(b), information identifying the restrictions which currently can be met, a description of the measures which would be necessary to meet all restrictions and the date when these measures could be completed.

(h) If the applicant is the owner or operator of a golf course whose need for a variance arises from the operational inability of its irrigation system or works to meet the front nine-back nine requirement in Chapter 40E-21, Part V, F.A.C., the applicant shall submit a map showing the proposed alternative division of the course in-half and an explanation of the applicant's proposed irrigation scheme.

(i) For applications for variance from restrictions on irrigation, a general description of the irrigation system, including pump or water system output and irrigated area, and

(j) Any other information, the applicant believes is material.

(5) Procedures.

(a) Within ten working days after receipt of a complete application for variance, which contains the information listed in subsection 40E-21.275(4), F.A.C., the staff shall recommend to the Executive Director whether the application complies with the provisions of subsections (2) through (4). The recommendation shall be in writing and shall constitute proposed agency action.

The District shall set forth in writing the grounds or basis for denial of the variance and inform the applicant of the right to a hearing on the denial of the application by filing a petition. A copy of the recommendation shall be forwarded to the applicant. Any petition for hearing on an application for variance shall be considered a petition for informal proceedings in accordance with subsection 40E-1.571(2), F.A.C.

(b) The Executive Director or his designee shall review the application and the staff recommendation. Applications which do not require immediate action or which do not comply with the provisions of subsections (2) through (4) may be deferred for Board action. Applications which require immediate action and which comply with the provisions of subsections (2) through (4) may be temporarily granted by the Executive Director or his designee. Temporary variances granted by the Executive Director or his designee shall be presented to the Board for concurrence, rejection or modification.

(c) The Board shall consider all deferred applications as well as those temporarily granted by the Executive Director or his designee, at its next regularly scheduled meeting. The Board may grant, or deny the deferred applications and may concur in, reject or modify those variances temporarily granted by the Executive Director or his designee. All Board action denying applications for variances shall be by written order and copies shall be furnished to the applicant and the appropriate law enforcement officials. An applicant whose variance has been granted shall be furnished an appropriate notice of water shortage variance and any attachments which shall be prominently displayed at the applicant's place of use.

(d) The Board may revoke or modify a variance when it determines that the continued utilization of the variance is inconsistent with the objectives of the District.

(6) The variance under this rule is provided in addition to the variance and waiver procedures set forth in Rule 28-104, F.A.C., which implements Section 120.542, F.S.

Rulemaking Authority 120.54(5), 373.044, 373.113 FS. Law Implemented 120.54(5), 373.175, 373.246 FS. History–New 9-2-98, Amended 6-12-00.

Rules of the
South Florida Water Management District

General & Procedural
(Formerly 16CA-1; 16K-1)
CHAPTER 40E-1, F.A.C.

Effective : August 7, 2016

CHAPTER 40E-1
GENERAL AND PROCEDURAL

40E-1.021	Definitions
40E-1.100	Uniform Rules of Procedure and Statement of District Organization and Operation (Repealed)
40E-1.106	Post-Employment Restrictions
40E-1.1065	Misuse of Public Position (Repealed)
40E-1.125	Public Information and Inspection of Records (Repealed)
40E-1.139	Complaints under the Americans with Disabilities Act
40E-1.200	Procedures for Agendas and Scheduling of Meetings and Workshops (Repealed)
40E-1.208	Procedure for Abstaining from Voting Conflicts of Interest (Repealed)
40E-1.300	Rulemaking Procedures (Repealed)
40E-1.400	Procedures Regarding Declaratory Statements (Repealed)
40E-1.500	Procedures for Proceedings which Determine Substantial Interests and Associated Mediation (Repealed)
40E-1.5095	Publication of Notice of Agency Decision or Intended Agency Decision (Repealed)
40E-1.511	Point of Entry Into Proceedings (Repealed)
40E-1.520	Procedures Concerning Formal Proceedings (Repealed)
40E-1.521	Initiation of Formal Proceedings (Repealed)
40E-1.564	Exceptions to Recommended Order (Repealed)
40E-1.570	Procedures Concerning Informal Proceedings (Repealed)
40E-1.601	General (Repealed)
40E-1.602	Permits Required
40E-1.603	Application Procedures for Processing Permit Applications or Notices of Intent
40E-1.604	Bond
40E-1.6058	Posting, Publication and Requests for Notification of Permit Applications or Notices of Intent
40E-1.6065	Consideration of Intended Agency Decision on Permit Applications
40E-1.607	Permit Application Processing Fees
40E-1.608	Denial of Permits (Repealed)
40E-1.609	Suspension, Revocation and Modification of Permits
40E-1.610	Permit Renewal
40E-1.6105	Notification of Transfer of Interest in Real Property
40E-1.6107	Transfer of Environmental Resource, Surface Water Management, or Water Use, or Wetland Resource Permit
40E-1.611	Emergency Action (Repealed)
40E-1.6115	Emergency Authorization (Repealed)
40E-1.615	Coordinated Agency Review Procedures for the Florida Keys Area of Critical State Concern
40E-1.659	Forms and Instructions
40E-1.702	Environmental Resource, Surface Water Management Permit and Consumptive Use Enforcement Guidelines
40E-1.711	Orders of Corrective Action and Consent Orders
40E-1.715	Civil Penalty Calculation
40E-1.721	Complaints, District Investigations, Probable Cause Determinations and Notices of Violations
40E-1.800	Lobbyist Registration

40E-1.021 Definitions.

When used in this chapter, Chapters 40E-0, 40E-2, 40E-3, 40E-4, 40E-5, 40E-41, 40E-61 and 40E-63, F.A.C.:

(1) “e-Permitting website” means the District’s website address for e-Permitting at http://www.sfwmd.gov/ePermitting.

(2) “Electronic filing” means filing or submission of an Environmental Resource, Surface Water Management Permit or Consumptive Use Permit Application; Response to Request for Additional Information; or Request for Permit Transfer at the District’s e-Permitting website. Electronic filing is governed by the provisions of Chapter 668, F.S. If the applicant or sender of electronic data inhibits the ability of the District to store or print the electronic data, it shall not be considered filed with or received by the District. Filings received by the District after 5:00 p.m. shall be deemed filed on the next regular business day.

(3) “Electronic mail” means an electronic or computer file that is transmitted between two or more telecommunications devices; computers; computer networks, regardless of whether the network is a local, regional, or global network; or electronic devices capable of receiving electronic messages, regardless of whether the message is converted to hard copy format after receipt, viewed upon transmission, or stored for later retrieval. Electronic mail received after 5:00 p.m. shall be deemed received on the next regular business day.

(4) “Electronic Posting” means placing notice through a link on the home page of the District’s website.

Rulemaking Authority 373.044, 373.113, 373.171 FS. Law Implemented 668.50 FS. History–New 10-1-06, Amended 10-23-12, 1-19-14, 7-14-14, 8-7-16.

40E-1.100 Uniform Rules of Procedure and Statement of District Organization and Operation.

Rulemaking Authority 120.54(5) FS. Law Implemented 120.54(5) FS. History–New 7-2-98, Repealed by Section 3, Chapter 2012-31, Laws of Florida, 5-27-12.

40E-1.106 Post-Employment Restrictions.

(1) For a period of two years following separation of employment, or expiration of term of office, no former specified employee or official shall personally represent another person or entity for compensation before the District in connection with any matter where the person participated personally and substantially, within their last two years of employment or service on the board, and where the person has actual knowledge of the matter.

(2) Such representation is prohibited unless the Executive Director consents to such representation.

(3) This section shall apply to all specified employees hired after November 1, 1997; all employees promoted to a position which is included in the definition of specified employee after November 1, 1997; and all officials appointed after November 1, 1997.

(4) This section does not apply to former specified employees or officials working for another government agency.

(5) For the purposes of this rule, the following definitions shall apply:

(a) “Matter” shall include any judicial or other proceeding, application, request for ruling or other determination, contract, claim, controversy or investigation.

(b) “Official” shall mean any member of the Basin Board(s) or Governing Board of the South Florida Water Management District.

(c) “Represent” or “Representation” shall mean actual physical attendance on behalf of an individual or entity, for compensation, at a proceeding before the South Florida Water Management District or personal communications made with any officials, employees, or advisory board members of the South Florida Water Management District in their official capacity, on behalf of an individual or entity, including the filing of documents or the writing of letters on behalf of said individual or entity.

(d) “Specified employee” shall mean any management position within the Executive Council of the District.

Rulemaking Authority 112.311, 112.313(13), 373.044 FS. Law Implemented 112.311, 112.313(13) FS. History–New 10-22-97.

40E-1.1065 Misuse of Public Position.

Rulemaking Authority 112.311, 112.313(6), 373.044 FS. Law Implemented 112.311, 112.313(6) FS. History–New 10-22-97, Repealed by Section 3, Chapter 2012-31, Laws of Florida, 5-27-12.

40E-1.125 Public Information and Inspection of Records.

Rulemaking Authority 119.01, 119.085, 120.53, 282.303(1), 286.011, 373.044, 373.113 FS. Law Implemented 119.01, 119.07, 119.021, 119.085, 120.53, 286.011, 373.044, 373.113 FS. History–New 9-3-81, Formerly 16K-1.16(4), (7), Amended 5-11-93, 9-19-95, Repealed by Section 3, Chapter 2012-31, Laws of Florida, 5-27-12.

40E-1.139 Complaints under the Americans with Disabilities Act.

(1) It is the policy of the District to provide an equal opportunity for access to District services, programs, activities, and facilities which are held open to the public by handicapped and disabled persons in keeping with Title III of the Americans With Disabilities Act of 1990, 42 USC 12101, et seq., and the regulations which implement the Act, 28 CFR 35.

(2) Interested persons may obtain information concerning handicapped and disabled accessibility to the District's services, activities, programs, and facilities which are held open to the public by contacting the facilities manager.

(3) Any affected person may file a complaint alleging discrimination on the basis of handicapped or disabled inaccessibility of District services programs, activities and facilities which are held open to the public.

(a) Complaints shall be filed with the facilities manager and shall specify to the best of the complainant's knowledge, the location and nature of the conduct or circumstances complained of;

(b) The complaint must be signed by the complainant or authorized representative and contain an address or telephone number where the complainant can be reached;

(c) The District shall promptly investigate the complaint and may require the complainant to furnish any additional information reasonably necessary to aid investigating the complaint;

(d) The District shall promptly provide to the Complainant a written decision which documents why the decision is consistent with the provisions of the Americans With Disabilities Act and the regulations which implement the Act.

(4) The complaint procedure established by this subsection is intended to provide a prompt informal method of dispute resolution. Failure to file a complaint pursuant to this subsection will not preclude an affected person from following other remedies which may be available under state and federal law. A District decision regarding a complaint shall not be considered an agency action pursuant to Chapter 120, F.S.

Rulemaking Authority 120.53(1), 373.044, 373.113 FS., 28 CFR 35.106, 35.107 Law Implemented 120.53, 286.26, 373.083 FS. CFR 35.106, 35.107 FS. History–New 5-11-93.

40E-1.200 Procedures for Agendas and Scheduling of Meetings and Workshops.

Rulemaking Authority 120.54(5) FS. Law Implemented 120.54(5) FS. History–New 7-2-98, Repealed by Section 3, Chapter 2012-31, Laws of Florida, 5-27-12.

40E-1.208 Procedure for Abstaining from Voting Conflicts of Interest.

Rulemaking Authority 112.3143, 120.53(1), 373.044, 373.113 FS. Law Implemented 120.53, 373.079 FS. History–New 5-11-93, Repealed by Section 3, Chapter 2012-31, Laws of Florida, 5-27-12.

40E-1.300 Rulemaking Procedures.

Rulemaking Authority 120.54(5) FS. Law Implemented 120.54(5) FS. History–New 7-2-98, Repealed by Section 3, Chapter 2012-31, Laws of Florida, 5-27-12.

40E-1.400 Procedures Regarding Declaratory Statements.

Rulemaking Authority 120.54(5) FS. Law Implemented 120.54(5) FS. History–New 7-2-98, Repealed by Section 3, Chapter 2012-31, Laws of Florida, 5-27-12.

40E-1.500 Procedures for Proceedings which Determine Substantial Interests and Associated Mediation.

Rulemaking Authority 120.54(5) FS. Law Implemented 120.54(5) FS. History–New 7-2-98, Repealed by Section 3, Chapter 2012-31, Laws of Florida, 5-27-12.

40E-1.5095 Publication of Notice of Agency Decision or Intended Agency Decision.

Rulemaking Authority 120.54(5), 373.044, 373.113, 668.003, 668.004, 668.50 FS. Law Implemented 120.54(5), 120.569, 120.57, 373.146, 373.413, 668.003, 668.004, 668.50 FS. History–New 7-2-98, Amended 6-12-00, 10-1-06, Repealed 12-1-11.

40E-1.511 Point of Entry Into Proceedings.

Rulemaking Authority 120.54(5), 373.044, 373.113, 668.003, 668.004, 668.50 FS. Law Implemented 120.54(5), 120.569, 120.57, 120.60, 373.146, 373.413, 373.427, 668.003, 668.004, 668.50 FS. History–New 9-3-81, Amended 7-26-87, 5-11-93, 10-3-95, 7-2-98, 6-12-00, 10-1-06, Repealed by Section 3, Chapter 2012-31, Laws of Florida, 5-27-12.

40E-1.520 Procedures Concerning Formal Proceedings.

Rulemaking Authority 120.54(5) FS. Law Implemented 120.54(5) FS. History–New 7-2-98, Repealed by Section 3, Chapter 2012-31, Laws of Florida, 5-27-12.

40E-1.521 Initiation of Formal Proceedings.

Rulemaking Authority 120.53, 373.044, 373.113 FS. Law Implemented 120.53(1), 120.57, 373.113 FS. History–New 9-3-81, Formerly 16K-1.09(1), 16K-1.112(1)-(3), 16K-1.12, Amended 5-11-93, 7-2-98, 6-12-00, Repealed by Section 3, Chapter 2012-31, Laws of Florida, 5-27-12.

40E-1.564 Exceptions to Recommended Order.

Rulemaking Authority 120.53, 373.044, 373.113 FS. Law Implemented 120.53(1), 120.57, 373.113 FS. History–New 9-3-81, Formerly 16K-1.11(10), Amended 5-11-93, 7-2-98, 6-12-00, Repealed by Section 3, Chapter 2012-31, Laws of Florida, 5-27-12.

40E-1.570 Procedures Concerning Informal Proceedings.

Rulemaking Authority 120.54(5) FS. Law Implemented 120.54(5) FS. History–New 7-2-98, Repealed by Section 3, Chapter 2012-31, Laws of Florida, 5-27-12.

40E-1.601 General.

Rulemaking Authority 120.53, 373.044, 373.113 FS. Law Implemented 120.53(1), 120.57, 120.60, 373.085, 373.116, 373.119, 373.175, 373.229, 373.239, 373.243, 373.246, 373.413, 373.416, 373.429, 373.433, 373.436, 373.439 FS. History–New 9-3-81, Amended 5-11-93, 7-2-98, Repealed by Section 3, Chapter 2012-31, Laws of Florida, 5-27-12.

40E-1.602 Permits Required.

Unless expressly exempt by statute or District rule, permits must be obtained from the District prior to commencement of the following activities:

(1) A water use individual or general permit pursuant to Chapter 40E-2, F.A.C., must be obtained prior to use or withdrawal of water or dewatering activities;

(2) A water well construction permit pursuant to Chapter 40E-3, F.A.C., must be obtained prior to the construction, repair or abandonment of any well within the District;

(3) A water well contractor's license, pursuant to Chapter 40E-3, F.A.C., must be obtained by contractors engaged in the business of construction, repair, or abandonment of water wells.

(4) An environmental resource permit pursuant to Chapter 62-330 or 40E-4, F.A.C., or, an individual or general surface water management or wetland resource permit grandfathered pursuant to Sections 373.414(11)-(16), F.S., must be obtained prior to:

(a) Construction, alteration, operation, maintenance, repair or abandonment of any stormwater management system, dam, impoundment, reservoir, appurtenant work or works including dredging or filling as prescribed by District rule,

(b) Establishment and operation of a mitigation bank.

(5) A conceptual environmental resource permit may be obtained for proposed surface water management systems or mitigation banks. However, a conceptual permit does not authorize construction or operation. A conceptual mitigation bank permit can be utilized to estimate the legal and financial requirements for the mitigation bank, information required for evaluation of the mitigation bank permit application, and potential mitigation credits that would be awarded to the specific project proposal.

(6) A proprietary authorization pursuant to Chapters 253 and 258, F.S., is required and shall be reviewed by the District for all activities which require a permit under Chapter 62-330 or 40E-4, F.A.C., or a permit under Sections 373.414(11)-(16), F.S., and which are located on submerged lands owned by the Board of Trustees of the Internal Improvement Trust Fund pursuant to Section

373.427, F.S., Chapter 18-21, F.A.C. and Rules 18-18.014 and 62-343.075, F.A.C.

(7) An artificial recharge permit pursuant to Chapter 40E-5, F.A.C., must be obtained prior to construction of any project involving artificial recharge or the intentional introduction of water into any underground formation;

(8) A Works or Lands of the District permit pursuant to Chapter 40E-6, F.A.C., must be obtained prior to connecting with, placing structures in or across, discharging into or making use of works of the District and any additional lands or real property interests owned by the District.

(9) A Use of Works of the District within the Lake Okeechobee Basin General or Individual Permit must be obtained pursuant to Chapter 40E-61, F.A.C., by any owner of a parcel of land within the Lake Okeechobee Basin.

(10) An Occupancy or Use of the C-18 Right of Way general or individual permit pursuant to Chapter 40E-62, F.A.C., must be obtained prior to constructing, planting, maintaining, pruning, mooring boats, and placing other items on, across, under, or upon District lands and works along the C-18 canal right of way.

(11) A Use of Works of the District within the Everglades general, individual or master permit pursuant to Chapter 40E-63, F.A.C., must be obtained by any owner of a parcel of land in the Everglades Agricultural Area.

Rulemaking Authority 373.044, 373.113, 373.4131, 373.4135 FS. Law Implemented 120.60, 373.085, 373.106, 373.116, 373.118, 373.119, 373.171, 373.216, 373.309, 373.323, 373.413, 373.414, 373.416 FS. History–New 9-3-81, Formerly 16K-1.06, Amended 7-26-87, 5-11-93, 10-3-95, 4-1-96, 10-1-13, 7-14-14.

40E-1.603 Application Procedures for Processing Permit Applications or Notices of Intent.

(1) Application procedures for environmental resource permits are set forth in Chapter 62-330, F.A.C. The following procedures for processing permit applications or notices of intent apply in addition to the requirements of Section 120.60, F.S. and Chapter 28-106, F.A.C.

(a) Within 30 days of receipt of an application or notice of intent, the District shall review the application to determine whether all information needed to evaluate the application has been submitted. The District shall notify the applicant of the date on which the application is declared complete.

(b) If the District determines that the application is incomplete, the District shall request the information needed to complete the application within 30 days of its receipt. The applicant shall have 90 days from receipt of a timely request for additional information to submit that information to the District.

(c) The District may request information needed to clarify any additional information submitted by the applicant, or to answer new questions raised by or related to the additional information within 30 days of its receipt. The applicant shall have 30 days from receipt of such a request in which to provide the necessary information. If the application is still incomplete after such information is submitted, the District shall notify the applicant within 30 days. The applicant shall have an additional 30 days to complete the application.

(d) Failure of an applicant to provide the timely requested information within these timeframes shall be considered grounds for denial of the application. Denial of an application for lack of completeness is without prejudice to the applicant's right to file a new application on the same subject matter. The District shall grant an extension upon a showing of a good faith effort by the applicant to comply with the timelines set forth herein. Unless an extension of time has been granted by the District, any application which remains incomplete 240 days after the original submittal date of an individual permit application or 90 days after the original submittal date of a notice of intent for general permit, shall be denied without prejudice.

(e) If the applicant submits information, either in response to or independent of a request by the District, which incorporates or results in a substantial modification in the proposed activity for which the applicant seeks a permit, the application will be considered an amended application. For purposes of this subsection, the term "substantial modification" shall mean a modification reasonably expected to result in water resource or environmental impacts which differ from those expected from the original application and require detailed review. Review timelines of the permit application or notice of intent will be reinitiated under this section.

(2) Upon a determination by the District that the activity requested in the notice of intent for any general permit requires an individual permit, the notice of intent shall be processed as an application for an individual permit, unless the permit applicant withdraws the application. If the application is processed as an individual permit, the permit applicant will be required to submit payment equal to the difference between the applicable fee for the individual permit and the fee previously submitted.

(3)(a) Agency action on all other individual permits and standard permits shall occur within 90 days of receipt of a complete

application, including receipt of all requested information and correction of any error or omission of which the applicant was timely notified.

(b) An authorization to proceed for noticed general water use permits in Chapter 40E-2, F.A.C., shall occur within 30 days of receipt of a complete notice of intent, unless a notice that the project does not qualify for the noticed general water use permit is sent by regular United States mail or electronic mail by the District within 30 days. If notice that the proposed project does not qualify for a noticed general water use permit is sent to the applicant, the review process under subsection (1) shall be initiated or the applicant shall be required to apply for the appropriate permit.

Rulemaking Authority 373.044, 373.113, 373.171, 373.4131 FS. Law Implemented 120.60, 373.085, 373.107, 373.109, 373.116, 373.118, 373.229, 373.309, 373.323, 373.4131, 373.4141, 373.417, 373.421, 373.422 FS. History–New 9-3-81, Formerly 16K-1.08(1)-(8), Amended 7-1-86, 7-26-87, 11-21-89, 5-11-93, 10-3-95, 4-1-96, 7-2-98, 6-12-00, 10-1-06, 12-1-11, 10-23-12, 10-1-13, 7-14-14.

40E-1.604 Bond.

(1) The Board may require the applicant for a permit to furnish a bond made payable to the District and its successors, with a reputable bonding corporation authorized to do business in this State as surety, conditioned upon full compliance with terms of the permit, including the proper construction, operation, and maintenance of the facility. The amount of the bond shall be determined by the Board.

(2) The Board may require liability insurance in such amount as the Board may determine endorsed in favor of the District or a hold harmless agreement satisfactory to the Board, in lieu of a bond under subsection (1).

(3) The Board may require that the bond or liability insurance be maintained as a condition of the continued validity of the permit.

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.085, 373.103, 373.219, 373.413, 373.416 FS. History–New 9-3-81, Formerly 16K-1.061.

40E-1.6058 Posting, Publication and Requests for Notification of Permit Applications or Notices of Intent.

(1) Notice of Receipt of Permit Application or Notice of Intent. Persons who wish to be notified in writing or by electronic mail of any permit application or notice of intent which affects a designated geographic area shall notify the District in writing or by electronic mail, and shall specify their area of interest by county. Requests must be renewed every 6 months. The District shall provide notice in writing or by electronic mail of receipt of application or notice of intent to all persons who have filed in the preceding 6 months a written or electronic request for notification of any application or notice of intent affecting the designated geographic area in which the proposed activity is to occur.

(2) Publication of Notice of Receipt of Permit Application or Notice of Intent.

(a) Within 45 days of receipt of a permit application, the District shall electronically post notice thereof through a link on the home page of the District's website. Within 45 days of receipt of an application for an individual water use permit; permit for construction or alteration of dams, impoundments, reservoirs, and appurtenant works under Chapter 373, Part IV, F.S.; and permit under Section 403.812, F.S., the District shall publish notice thereof in a newspaper having general circulation as defined in Chapter 50, F.S., in the county in which the activity will occur. Permit applications submitted under Chapter 40E-6, F.A.C., shall not be subject to the requirements of this paragraph.

(b) Within 14 days of filing notice of intent to use a general permit or application for a standard permit, persons qualifying for the use thereof are not required to, but may publish notice of such filing in a newspaper of general circulation, as defined in Chapter 50, F.S., in the area affected by the proposed project. Proof of publication shall be submitted to the District within 14 days of publication.

(c) Published Notice of Use for No Notice General Permits. Publication of notice of use of general permits for which no notice is required to be filed with the District may occur if desired by the permittee. The published notice must be published in a newspaper of general circulation, as defined in Chapter 50, F.S., in the area affected by the proposed project within 7 days of commencing work. If published, proof of publication must be submitted to the district within 14 days of publication.

(3) Interested persons shall have the opportunity to inspect a copy of the permit application at the appropriate District Service Center and submit written comments, which shall be considered by the District if received before the District issues proposed agency action concerning the application. Where appropriate, the District shall request that persons submitting comments furnish additional information reasonably necessary to ascertain the nature of the comments.

(4) Persons who wish to be advised of the proposed agency action regarding a particular permit application shall file a written or electronic request for further notice within 14 days of receipt of the notice of application.

(5) The governing board may charge a subscription fee for information requested in accordance with this section to any person who has filed a written or electronic request for notification of any pending applications, pursuant to Rule 40E-1.125, F.A.C.

Rulemaking Authority 373.044, 373.113, 373.116, 373.118 FS. Law Implemented 120.60(3), 373.116, 373.118, 668.50 FS. History–New 10-3-95, Amended 7-2-98, 6-12-00, 10-1-06, 12-15-11, 1-19-14.

40E-1.6065 Consideration of Intended Agency Decision on Permit Applications.

(1) After the application for a permit is declared by staff to be complete, the District shall prepare a Staff Review Summary, which shall contain its recommendations regarding the subject application and which shall constitute intended agency decision. A notice of intended agency decision together with the Staff Review Summary shall be furnished to the applicant and any persons requesting the same pursuant to Rule 40E-1.6058, F.A.C., as applicable. The notice shall state the District Staff's recommendation that the District approve, deny, or approve with conditions the permit application and the reasons therefore.

(2) The District shall consider the application for a standard right of way occupancy permit at its next regularly scheduled Governing Board meeting following the mailing or electronic mailing of notice of intended agency decision, unless an administrative hearing is requested and granted pursuant to Section 120.569, F.S. If staff's recommendation is for denial, the District shall consider the application at its next available regularly scheduled Governing Board meeting following the mailing or electronic mailing of notice of intended agency decision, unless an administrative hearing is requested and granted pursuant to Section 120.569, F.S.

(3) In no case shall agency action be taken later than 60 days after the application for a conceptual approval or individual environmental resource permit, or later than 90 days after an individual water use, water well, right of way occupancy, or works of the district permit is declared complete unless waived by the applicant or stayed by the filing of a petition for an administrative hearing. The permit applicant may voluntarily waive the timeline for governing action on the permit application in Section 120.60, F.S., in order to resolve any outstanding issues, including third party objections, regarding the project.

(4) Because the District may take a final agency action which materially differs from the noticed intended agency action, applicants and other interested persons should be prepared to defend their position regarding the permit application when it is considered by the District. If the District takes final agency action which materially differs from the intended agency decision, the District shall mail by regular United States mail or electronic mail a notice of the final agency action to all persons who were notified of the intended agency decision.

Rulemaking Authority 373.044, 373.113, 373.171 FS. Law Implemented 120.60, 373.079, 373.083, 373.4141 FS. History–New 7-2-98, Amended 6-12-00, 10-1-06, 10-23-12, 10-1-13, 7-14-14.

40E-1.607 Permit Application Processing Fees.

A permit application processing fee is required and shall be paid to the District when certain applications are filed pursuant to District rules. An application shall not be considered complete until the appropriate application fee is submitted. These fees are assessed in order to defray the cost of evaluating, processing, monitoring, and inspecting for compliance required in connection with consideration of such applications. Fees are non-refundable in whole or part unless the activity for which an application is filed is determined by the District to be exempt or the fee submitted is determined by the District to be incorrect. Failure of any person to pay the applicable fees established herein will result in denial of an application. Activities that do not require a permit and are exempt pursuant to Rule 40E-2.051 or 40E-3.051, F.A.C., are not subject to the following permit application fees. The District's permit application processing fees are as follows:

(1) Water Use Permit Application processing fees are in the following table:

TABLE 40E-1.607(1)
PERMIT APPLICATION PROCESSING FEES FOR
WATER USE PERMIT APPLICATIONS
REVIEWED PURSUANT TO CHAPTER 40E-2, F.A.C.

Fee amounts shall apply to applications for new permits, permit modifications, and permit renewals, except as noted.

Category	Amount

Individual Permit, except Mining/Dewatering (applies to all durations). Maximum monthly allocation:	
Up to 3 million gallons per month (mgm).	$350
Greater than 3 mgm through 15 mgm.	$1,000
Individual Public Water Supply with a duration less than 20 years.	
Maximum monthly allocation:	
Greater than 15 mgm through 30 mgm	$2,700
Greater than 30 mgm through 300 mgm	$5,500
Greater than 300 mgm	$7,000
Individual Public Water Supply with a duration of at least 20 years.	
Maximum monthly allocation:	
Greater than 15 mgm through 30 mgm.	$4,200
Greater than 30 mgm through 300 mgm.	$8,500
Greater than 300 mgm.	$11,500
Individual Irrigation with a duration less than 20 years.	
Maximum monthly allocation:	
Greater than 15 mgm.	$1,000
Individual Irrigation with a duration of at least 20 years.	
Maximum Monthly allocation:	
Greater than 15 mgm through 30 mgm.	$1,600
Greater than 30 mgm through 300 mgm.	$3,400
Greater than 300 mgm.	$5,600
Individual Mining/Dewatering.	
Standard Individual Permit with a total project duration of up to one year.	$500
Standard Individual Permit with a total project duration of greater than one year.	$1,800
Master Individual Permit.	$4,000
Individual Commercial/Industrial with a duration less than 20 years.	
Maximum monthly allocation:	
Greater than 15 mgm through 30 mgm.	$1,400
Greater than 30 mgm through 300 mgm.	$2,750
Greater than 300 mgm.	$3,500
Individual Commercial/Industrial with a duration of at least 20 years.	
Maximum monthly allocation:	
Greater than 15 mgm through 30 mgm.	$2,000
Greater than 30 mgm through 300 mgm.	$3,650
Greater than 300 mgm.	$5,600
Individual Diversion and Impoundment with a duration less than 20 years. Maximum monthly allocation:	
Greater than 15 mgm through 30 mgm.	$1,400
Greater than 30 mgm through 300 mgm.	$2,750
Greater than 300 mgm.	$3,500
Individual Diversion and Impoundment with a duration of at least 20 years. Maximum monthly allocation:	
Greater than 15 mgm through 30 mgm.	$2,000
Greater than 30 mgm through 300 mgm.	$3,950
Greater than 300 mgm.	$6,200
Independent Secondary User of a Diversion and Impoundment (applies to all durations).	
Maximum monthly allocation:	
Greater than 15 mgm through 30 mgm.	$1,000
Greater than 30 mgm through 300 mgm.	$2,000

Greater than 300 mgm.	$3,200
Noticed General Water Use Permit.	
Applications filed electronically at www.sfwmd.gov/ePermitting.	$100
Application filed by other means.	$350
Aquifer Storage and Recovery: cost added to the applicable use type listed above.	$1,000
Permit Transfer to Another Entity Pursuant to Rules 40E-0.107 and 40E-2.351, F.A.C.	$300
Letter Modification.	no fee
General Permit by Rule.	no fee

(2) Water Well Construction Permit Application processing fees are in the following table:

TABLE 40E-1.607(2)
PERMIT APPLICATION PROCESSING FEES FOR
WATER WELL CONSTRUCTION PERMIT APPLICATIONS
REVIEWED PURSUANT TO CHAPTER 40E-3, F.A.C.

Category	Amount
Water Well Construction.	$100
Water Well Abandonment.	no fee

(3)(a) Environmental Resource Permit Application processing fees are in the following table:

TABLE 40E-1.607(3)(a)
PERMIT APPLICATION PROCESSING FEES FOR
ENVIRONMENTAL RESOURCE PERMIT APPLICATIONS
REVIEWED PURSUANT TO CHAPTER 62-330, F.A.C.

For the purposes of determining the applicable processing fee, “project area” means the total area wherein works occur as part of an activity requiring a permit under Chapter 373, Part IV, F.S., including all portions of the stormwater management system serving the project area.

1. Use of the reviewing agency’s electronic self-certification system.	$0
2. Verification of exemption under Section 373.406 or 403.813(1), F.S. or under Rules 62-330.050 through 62-33.051, F.A.C.	$100
3. Verification of qualification to use a General Permit.	$250
4. Individual or Conceptual Approval Permits, excluding Permits for a Mitigation Bank.	
a. New applications – the processing fee for a new permit application shall be as determined from the categories below:	
(I) Total project area of less than 10 acres and no activities in, on or over wetlands or other surface waters, except where exempt under paragraphs 62-330.051(9)(a) through (c), F.A.C.	$2,000
(II) Project exceeds any of the thresholds in sub-sub-subparagraphs (3)(a)4.a.(I), above involves a total project area of less than 10 acres, less than 1 acre of works (i.e. dredging, filling, construction, or alteration) in, on or over wetlands and other surface waters, AND less than 10 new boat slips.	$3,500
(III) Project exceeds any of the thresholds in sub-sub-subparagraph (3)(a)4.a.(II), above, but involves a total project area of less and 40 acres, less than 3 acres of works in, on or over wetlands and other surface waters, AND less than 30 new boat slips.	$5,500
(IV) Project exceeds any of the thresholds in sub-sub-subparagraph (3)(a)4.a.(III), above, but involves a total project area of less than 100 acres, less than 10 acres of works in, on or over wetlands and other surface waters, AND less than 50 new boats ships.	$7,500
(V) Project exceeds any of the thresholds in sub-sub-subparagraph (3)(a)4.a.(IV), above, but involves a total project area of less than 640 acres, AND less than 50 acres of works in, on or over wetlands and other surface waters.	$13,125
(VI) Project exceeds any of the thresholds sub-sub-subparagraph (3)(a)4.a.(V), above.	$25,000

(VII) Projects that are exclusively for agriculture or silviculture, and that involve a total project area of less than 10 acres AND less than 1 acre of works (i.e. dredging, filling, construction, or alternatiion) in, on or over wetlands and other surface waters.	$859
(VIII) Projects that are exclusively for agriculture of silviculture, and that exceed any of the thresholds in sub-sub-subparagraph (3)(a)4.a.(VII), above, but involves a total project area of less than 40 acres AND less than 3 acres of works in, on or over wetlands and other surface waters.	$2,444
(IX) Projects that are exclusively for agriculture or silviculture, and that exceed any of the thresholds in sub-sub- subparagraph (3)(a)4.a.(VIII), above, but involve a total project area of less than 100 acres AND less than 10 acres of works in, on or over wetlands and other surface waters.	$4,029
(X) Projects that are exclusively for agriculture or silviculture, and that exceed any of the thresholds in sub-sub-subparagraph (3)(a)4.a.(IX), above, but involve a total project area of less than 640 acres AND less than 50 acres of works in, on or over wetlands and other surface waters.	$5,284
(XI) Projects that are exclusively for agriculture or silviculture, and that exceed any of the thresholds in sub-sub-subparagraph (3)(a)4.a.(X), above.	$6,605
(XII) Individual or Conceptual Permits solely for environmental restoration or enhancement activities, provided such activities are not associated with a mitigation bank and are not being implemented as mitigation for other activities that require a permit under Chapter 373, Part IV, F.S. For the purposes of this provision, the term “environmental restoration or enhancement” means an action or actions designed and implemented solely to convert degraded or altered uplands, wetlands, or other surface waters to intact communities typical of those historically present, or to improve the quality and condition of currently degraded wetlands or other surface waters to the more healthy, functional, and sustaining condition for fish, wildlife, and listed species.	$250
(XIII) Individual or Conceptual Permit solely to retrofit an existing stormwater management system or systems to add treatment to and reduce stormwater pollutant loadings from the system or systems.	$250
(XIV) An Individual Permit for a phase of construction that is consistent with an existing Conceptual Approval Permit.	$1,500
b. Major Modifications that exceed any of the thresholds in subsection 62-330.315(3), F.A.C.	
(I) Major Modification to an Individual or Conceptual Approval Permit that increase the project area.	60% of fee for new permit for the same activity
(II) All other Major Modification.	60% of fee for new permit for the same activity
c. Minor Modifications that do not exceed any of the thresholds in subsection 62-330.315(2), F.A.C.	
(I) Time Extensions of Permits, where not exempt from fees under Florida Statutes.	$500
(II) Minor Modifications to correct minor errors that do not involve technical review, to transfer ownership of a permit, or to transfer a permit from the construction to the operation phase.	$0
(III) All other Minor Modifications.	$250
5. Individual or Conceptual Permits for a Mitigation Bank.	
a. New applications.	
(I) For a Mitigation Bank with a permit area less than 100 acres.	$7,500
(II) For a Mitigation Bank with a permit area greater than 100 acres but less than 640 acres.	$13,125
(III) For a Mitigation Bank with a permit area of 640 acres or more.	
b. Major Modifications involving changes to one or more of the following components: service area; credit assessment; success or release criteria; hydrologic structures or alterations; constructions or mitigation design that does not increase the project area; elimination of lands; or monitoring or management plans:	$25,000
(I) Affecting one of the above components.	20% of the fee under 5.a.
(II) Affective to of the above components.	40% of the fee under 5.a.
(III) Affective three of the above components.	60% of the fee under 5.a.

(IV) Major modifications affecting four or more of the above components of the increase the project area.	100% of the fee under 5.a.
c. Major Modification that do not involve changes to the components listed in sub-subparagraph (3)(a)5.b. above, but that exceed any of the thresholds in subsection 62-330.315(2), F.A.C.	100% of the fee under 5.a.
d. Minor Modifications that do not exceed any of the thresholds in subsection 62-330.315(2), F.A.C.	
(I) Time Extensions of Permits, where not exempt from fees under Florida Statutes.	$500
(II) To correct minor errors that do not involve technical review, to transfer ownership of a permit, or to transfer a permit from the construction to the operation phase.	$0
(III) All other Minor Modifications.	$250
e. Mitigation Bank Credit Release.	$0
f. Mitigation Bank Credit Withdrawal.	$0
6. Informal Wetland Determination.	
a. Where total area included is less than 1 acre.	$250
b. Where total area included is greater than 1 acre.	$500
7. Variance or Waiver:	
a. Under Section 120.532, F.S.	$0
b. Under Section 373.414(17), F.S.	$1,125
8. Fee reductions.	
a. Applications by an entity qualifying under Section 218.075, F.S., when the fee exceeds $100.00.	$100.00
b. Applications submitted by the U.S. Department of Defense.	$0
c. For resubmittal, within 365 days, of an application for the same project that was previously withdrawn, under subsection 62-330.071(3), F.A.C., any fee paid as part of the previous application will be applied toward the fee required for the application under this rule.	Previously paid fee shall be applied

9. When used in Table paragraph 40E-1.607(3)(a), F.A.C., “Agriculture” shall be defined as set forth in Section 570.02, F.S.

10. For permit applications which involve a combination of fee categories, the highest fee that applies shall be charged.

11. Any individual permit application submitted concurrently with a conceptual approval application – where the individual permit application represents a phase of the conceptual approval application – is exempt from the above environmental resource permit fees.

12. For projects grandfathered pursuant to Section 373.414, F.S., the letter modification, conceptual approval, individual or general surface water management permit application fee shall be the same as listed in Table paragraph 40E-1.607(3)(a), F.A.C.

13. The District shall use the Consumer Price Index (CPI) adopted by the United States Department of Labor since the most recently revised fee increase for revising fees under Chapter 373, Part IV, F.S., pursuant to Section 373.109, F.S. The inflation index used is the price paid by all urban consumers for a market basket of consumer goods and services; specifically, the CPI figures for the “CPI-U, U.S. City Average. All Items” established for the previous five years by the Bureau of Labor Statistics (BLS) (www.bls.gov/cpi), computed as provided in the BLS publication Bureau of Labor Staticstics Handbook of Methods, Chapter 17 (www.bls.gov/opub/hom/pdf/homch17.pdf).

(b) Permit application processing fees for projects grandfathered pursuant to Section 373.414, F.S., wetland resource (dredge and fill) are in the following table:

TABLE 40E-1.607(3)(b)
PERMIT APPLICATION PROCESSING FEES FOR
PROJECTS GRANDFATHERED PURSUANT TO SECTION 373.414, F.S.
WETLAND RESOURCE (DREDGE AND FILL) PERMIT APPLICATIONS
REVIEWED PURSUANT TO CHAPTERS 40E-4, 40E-40, AND 40E-400, F.A.C.

Category	Amount
Construction projects up to and including 5 years.	
Standard form projects including dredge and fill activities that affect 10 or more acres of jurisdictional area, pursuant to subsection 62-312.070(2), F.A.C. (1993).	$7,500
Short form construction projects including dredging and filling activities that affect less than 10 acres of jurisdictional	$750

area, pursuant to subsection area, pursuant to subsection area, pursuant to subsection.	
Variance associated with a wetland resource permit application.	
From the prohibition of subsection 62-312.080(7), F.A.C.	$132
From other permitting standards, permit conditions, or water quality standards.	$661
General Permits.	$132
Minor modifications of permits that do not require substantial technical evaluation by the District, in conformance with subsections 62-4.050(6) and (7), F.A.C. (1993), do not require a new site inspection by the District, and will not lead to substantially different environmental impacts or will lessen the impacts of the original permit:	$66
Transfer of permits or time extensions. Minor technical changes.	
Existing permit fee is less than $300, except for modification to permits issued pursuant to Section 403.816, F.S.	$66
Existing permit fee is equal to or more than 300.	$330

1. For the purposes of determining the fee for wetland resource management permits, the term of duration for the permit shall be reduced by the period of time (in yearly increments) during which no dredging or filling activity occurs or no reclamation, restoration, or mitigation occurs and only minor monitoring and maintenance activities are required.The fee for the full term shall be submitted with the application. After the District determines the period of time that the term of the permit can be reduced, the excess fee shall be returned.

2. For permit applications which involve a combination of the project fee categories listed above, the highest fee that applies to the appropriate standard form or short form project, pursuant to Rule 62-312.070, F.A.C., shall be charged.

3. A single additional fee of $500 shall be required for projects in which monitoring and evaluation to determine the success of the mitigation will be required beyond the period of time to which the permit fee will ordinarily apply. If it is determined at the time of the permit application that monitoring and evaluation to determine the success of the mitigation will be required beyond the time period to which the permit fee will ordinarily apply, then this single additional fee shall be due when it is determined that this monitoring and evaluation is required.

(4) Application for proprietary authorization under Chapters 253 and 258, F.S., except consent of use authorizations, processing fees are in the following table:

TABLE 40E-1.607(4)
PERMIT APPLICATION PROCESSING FEES FOR
PROPRIETARY AUTHORIZATIONS UNDER
CHAPTERS 253 AND 258, F.S.,
EXCEPT CONSENT OF USE AUTHORIZATIONS

See Chapter 18-21, F.A.C. for application fees for proprietary authorizations, specifically as follows:

Subparagraph 18-21.008(1)(a)8., F.A.C.	Applications for Lease (eff. 8-10-05)
Paragraph 18-21.0081(1)(k), F.A.C.	Grandfather Structure Applications (eff. 8-10-05)
Paragraph 18-21.009(1)(g), F.A.C.	Applications for Public Easement (eff. 8-10-05)
Paragraph 18-21.010(1)(i), F.A.C.	Applications for Private Easement (eff. 8-10-05)
Paragraph 18-21.013(1)(l), F.A.C.	Applications to Purchase Lands Riparian to Uplands (eff. 3-27-82)
Subsection 18-21.019(7), F.A.C.	Applications for Disclaimers, Quitclaim Deeds or Certificates to Clear Title to Filled Sovereignty Lands and for Disclaimers for Lands Lost Due to Avulsion or to Reclaim Lands Lost due to Artificial Erosion or Artificial Erosion and Avulsion (eff. 4-13-98)

(5) Petition for Formal Determination of Wetlands and Other Surface Waters processing fees are in the following table:

TABLE 40E-1.607(5)
DETERMINATION PETITION PROCESSING FEES FOR
FORMAL DETERMINATION OF WETLANDS AND
OTHER SURFACE WATERS

For the validation of informal, non-binding wetland determinations pursuant to Section 373.421(6), F.S., the fees shall be the same as formal determinations listed in Table subsection 40E-1.607(5), F.A.C.

Category	Amount

Property less than or equal to 10 acres.	$500
Property greater than 10 acres but less than or equal to 40 acres.	$1,000
Property greater than 40 acres but less than or equal to 100 acres.	$1,500
Additional fee per 100 acres (or portion thereof) beyond the first 100 acres.	$350
Reissuance of a Formal Determination.	$350

(6) Permit Processing Fee Waiver for Certain Local Governments.
Notwithstanding the provisions set forth above in this rule, the District shall waive permit processing fees for permit applications submitted by the governing body of a county with a population of less than 50,000, a municipality with a population of less than 25,000, a county or municipality not included within a metropolitan statistical area, or a third party under contract with such a county or municipality, provided:

(a) The project for which the fee waiver is sought serves a public purpose; and

(b) The governing body submits Form No. 889 certifying that the fee reduction is necessary due to an environmental need for a particular project or activity; or

(c) The governing body submits Certification of Waiver of Permit Application Processing Fee, Form No. 0889, certifying that the permit processing fee is a fiscal hardship due to one of the following factors:

1. Per capita taxable value is less than the statewide average for the current fiscal year;

2. Percentage of assessed property value that is exempt from ad valorem taxation is higher than the statewide average for the current fiscal year;

3. Any condition specified in Section 218.503, F.S., that determines a state of financial emergency;

4. Ad valorem operating millage rate for the current year is greater than 8 mills; or

5. A financial condition is documented in annual statements at the end of the current fiscal year which indicates an inability to pay the permit processing fee during that fiscal year.

Form 0889, December 2011, http://www.flrules.org/Gateway/reference.asp?No=Ref-00061, is incorporated by reference herein and available at no cost by contacting the South Florida Water Management District Clerk's Office, 3301 Gun Club Road, West Palm Beach, FL 33406, (800)432-2045, ext. 6436 or (561)682-6436.

(7) PERMIT APPLICATION PROCESSING FEES FOR MODIFICATION OR TRANSFER OF ENVIRONMENTAL RESOURCE, SURFACE WATER MANAGEMENT OR WORKS OF THE DISTRICT PERMITS FOR PROPERTIES ACQUIRED BY THE DISTRICT PURSUANT TO THE FLORIDA FOREVER WORK PLAN OR SAVE OUR RIVERS LAND ACQUISITION AND MANAGEMENT PLAN:

(a) Modification of existing permits to reflect property ownership changes where no new works or modifications to an existing stormwater management system is requested.	$0
(b) Permit transfer pursuant to Rules 40E-1.6107 and 62-330.340, F.A.C.	$0

Rulemaking Authority 373.044, 373.109, 373.113, 373.171, 373.421(2), 373.421(6)(b), 373.4131 FS. Law Implemented 218.075, 373.109, 373.4131, 373.421(2), 373.421(6)(b), 403.201 FS. History–New 1-8-89, Amended 1-2-91, 11-15-92, 6-1-93, 1-23-94, 10-3-95, 4-1-96, 11-8-99, 5-24-00, 6-26-02, 7-11-02, 8-10-03, 8-14-03, 11-18-07, 11-1-09, 12-15-11, 10-23-12, 10-1-13, 7-31-14, 9-7-15, 8-7-16.

40E-1.608 Denial of Permits.

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 120.53(1), 120.57, 120.60 FS. History–New 9-3-81, Amended 10-3-95, 7-2-98, 6-12-00, Repealed by Section 3, Chapter 2012-31, Laws of Florida, 5-27-12.

40E-1.609 Suspension, Revocation and Modification of Permits.

(1) Procedures concerning the District's suspension, revocation and modification of a permit are contained in the Uniform Rules of Procedure, Rule 28-106.2015, F.A.C.

(2) The District may temporarily suspend or revoke a permit, in whole or in part, when it determines that the permittee or an agent of the permittee has:

(a) Submitted false or inaccurate information on an application or operational report;

(b) Violated Chapter 373, F.S., or portions of Chapter 403, F.S., for which authority has been delegated to the District, and the

rules promulgated thereunder, or any other provision of Florida law related to the operations or regulations of the District;

(c) Failed to comply with an Administrative Order issued pursuant to Section 373.119, F.S.;

(d) Violated a condition of the permit;

(e) Failed to permit inspection of the subject property.

(3) The District may revoke a permit or modify its terms and conditions when it determines that such action is necessary to protect the public health, safety and welfare, prevent a public or private nuisance, or when the continued utilization of the permit becomes inconsistent with the objectives of the District. In such instances, due consideration shall be given to the extent to which the permittee has detrimentally relied upon the permit.

(4) The provisions of subsections (1) and (2) shall not preclude the District from exercising other enforcement remedies pursuant to Chapters 120, 373 and 403, F.S., when it determines such action is necessary and appropriate either in addition to or instead of suspension or revocation described above.

Rulemaking Authority 120.53, 373.044, 373.113, 373.119, 373.129, 373.136 FS. Law Implemented 120.53(1)(b), (c), 120.60(2), 373.119, 373.239, 373.243, 373.429 FS. History–New 9-3-81, Amended 5-11-93, 10-3-95, 7-2-98, 6-12-00.

40E-1.610 Permit Renewal.

(1) Holders of renewable permits shall make timely application as required by Rule 40E-1.603, F.A.C., for renewal so as to avoid expiration during the renewal process. When timely application is made, the existing permit shall not expire until final agency action, or if the permit is denied or the terms limited, until the last day for seeking review of the District order or a later date fixed by order of the reviewing court.

(2) Application for a permit renewal is timely only if actually filed at the District prior to expiration of the existing permit. Mailing the application does not constitute filing.

Rulemaking Authority 120.53(1), 373.044, 373.113 FS. Law Implemented 120.60, 373.219, 373.239, 373.323, 373.413 FS. History–New 5-11-93, Amended 6-12-00.

40E-1.6105 Notification of Transfer of Interest in Real Property.

Within 30 days of any transfer of interest or control of the real property at which any permitted facility, system, consumptive use, or activity is located, the permittee must notify the District, in writing or electronically at the District's e-Permitting website, of the transfer giving the name and address of the new owner or person in control and providing a copy of the instrument effectuating the transfer. Notification of a transfer shall not constitute a permit transfer pursuant to Rule 40E-1.6107, F.A.C.

Rulemaking Authority 373.044, 373.113, 668.003, 668.004, 668.50 FS. Law Implemented 373.083, 373.171, 373.309, 373.416, 373.426, 373.429, 373.436, 668.003, 668.004, 668.50 FS. History–New 5-11-93, Amended 10-1-06.

40E-1.6107 Transfer of Environmental Resource, Surface Water Management, or Water Use, or Wetland Resource Permit.

(1) The procedures for the transfer of environmental resource permits are set forth in Rule 62-330.340, F.A.C. To transfer a surface water management, water use, or wetland resource permit, the permittee, in addition to satisfying the applicable provisions in Rule 40E-2.351, F.A.C., must submit Form No. 0483, (October 1, 2013), http://www.flrules.org/Gateway/reference.asp?No=Ref-02753, Request for Surface Water Management, Water Use, or Wetland Resource Permit Transfer, incorporated by reference herein. Form No. 0483 is also available at no cost by contacting the South Florida Water Management District Clerk's Office, 3301 Gun Club Road, West Palm Beach, FL 33406, (800)432-2045, ext. 2729, or (561)682-2729.

(2) In addition, the permittee must provide information required in Rule 40E-1.6105, F.A.C., and file a statement from the proposed transferee in writing or at the District's e-Permitting website that it has reviewed the District permit and project design and will be bound by all terms and conditions of the permit, including all compliance requirements, for the duration of the permit.

(3) The District shall approve the transfer of a permit unless it determines that the proposed transferee cannot provide reasonable assurances that conditions of the permit will be met. The determination shall be limited solely to the ability of the new permittee to comply with the conditions of the existing permit, and it shall not concern the adequacy of those permit conditions.

(4) The District shall approve the transfer of the permit if the requirements in subsections (1) and (2) are met. If the District proposes to deny the transfer, it shall provide both the permittee and the proposed transferee a written objection to such transfer

together with the notice of right to request a Chapter 120, F.S., proceeding on such determination.

(5) Until transfer is approved by the District, the permittee shall be liable for compliance with the permit. The permittee transferring the permit shall remain liable for any corrective actions that are required as a result of any violations of the permit which occurred prior to the transfer of the permit.

Rulemaking Authority 373.044, 373.113, 373.171 FS. Law Implemented 373.083, 373.171, 373.219, 373.309, 373.413, 373.4131, 373.414, 373.416, 373.426, 373.429, 373.436, 668.003, 668.004, 668.50 FS. History–New 5-11-93, Amended 10-3-95, 10-1-06, 10-23-12, 10-1-13, 7-14-14, 8-7-16.

40E-1.611 Emergency Action.

Rulemaking Authority 120.54(5), 373.439 FS. Law Implemented 120.54(5), 373.439 FS. History–New 9-3-81, Amended 7-2-98, Repealed by Section 3, Chapter 2012-31, Laws of Florida, 5-27-12.

40E-1.6115 Emergency Authorization.

Rulemaking Authority 120.54(5), 373.439 FS. Law Implemented 120.54(5), 373.439 FS. History–New 7-2-98, Amended 6-12-00, Repealed by Section 3, Chapter 2012-31, Laws of Florida, 5-27-12.

40E-1.615 Coordinated Agency Review Procedures for the Florida Keys Area of Critical State Concern.

(1) This rule applies to applications for environmental resource, surface water management, and water use permits for projects located in the Florida Keys Area of Critical State Concern when the applicant has elected coordinated agency review under Section 380.051, F.S.

(2) The following coordinated agency review procedures apply to projects which are eligible for exemptions from District environmental resource and water use permitting requirements:

(a) No permit and no coordinated agency review participation by the District is required for the water uses exempted by Rule 40E-2.051 (Exemptions), F.A.C., or identified in Rule 40E-2.061, F.A.C.

(b) No permit and no coordinated agency review participation by the District is required for surface water management activities which are exempted by Rule 62-330.051 (Exempt Activities), F.A.C.

(3) The following coordinated agency review procedures apply to projects which require permits pursuant to Chapters 40E-2 (Consumptive Use), 62-330 and 40E-4 (Environmental Resource), F.A.C.:

(a) The Coordinated Review Application shall consist of the application information required by Rules 40E-1.603 (Application Procedures for Processing Permit Applications or Notices of Intent), 40E-2.101 (Content of Application) or 62-330.060 (Content of Application), F.A.C.

(b) The District's Coordinated Review process begins when the District receives the Coordinated Review Application from the Permit Coordinator as required by Section 380.051, F.S.

(c) The District's Coordinated Review process follows the permit review procedures set forth in Rule 40E-1.603, F.A.C. (Application Procedures for Processing Permit Applications or Notices of Intent).

(d) If the applicant waives the time limits required by Chapter 120 and Section 380.051, F.S., the District shall delay initiation of substantive review until notice is received by electronic mail at the District's e-Permitting website or in writing from the Permit Coordinator indicating that substantive review should begin. If the applicant does not waive the time limits, the District shall begin substantive review when the Coordinated Review Application is complete.

(e) The Certification of the Coordinated Review Application required by Section 380.051(2)(a), F.S., shall occur within 60 days after the District begins substantive review, and shall consist of the notice of proposed agency action together with the staff report on the individual permit pursuant to Section 40E-1.603 (Application Procedures for Processing Permit Applications or Notices of Intent), F.A.C., which may recommend denial to the Governing Board, or approval, or approval with conditions to its designee.

(f) Certification concludes the coordinated agency review process. However, the applicant may complete the permit process as set forth in subsections 40E-1.603(6)-(11), F.A.C., which results in the Governing Board's denial, or approval, or approval with conditions to its designee.

Rulemaking Authority 373.044, 373.113, 373.171, 373.4131, 380.051 FS. Law Implemented 373.4131, 380.051, 668.003, 668.004, 668.50 FS. History–New 9-22-87, Amended 10-3-95, 10-1-06, 12-1-11, 10-23-12, 10-1-13, 7-14-14, 8-7-16.

40E-1.659 Forms and Instructions.

The following forms and instructions are incorporated by reference throughout the District's rules as specified below and are listed herein for convenience. Hyperlinks are provided in the rules in which the forms and instructions are referenced and copies can be obtained without cost by contacting the South Florida Water Management District Clerk's Office, 3301 Gun Club Road, West Palm Beach, FL 33406, (800)432-2045, ext. 2729, or (561)682-2729:

Form No.	Date	Title
0186	09-12	Application for a State of Florida Water Well Contractor's License, incorporated by reference in subsection 40E-3.038(1), F.A.C.
0483	10-13	Request for Surface Water Management, Water Use or Wetland Resource Permit Transfer, incorporated by reference in subsection 40E-1.6107(1), F.A.C.
0779	01-01	Application for a Works of the District Permit, incorporated by reference in subsection 40E-63.091(9), F.A.C.
0889	12-11	Certification of Waiver of Permit Application Processing Fee, incorporated by reference in Paragraph 40E-1.607(6)(b), F.A.C.
1045	11-10	Application for a C-139 Basin Works of the District Permit, incorporated by reference in subsection 40E- 63.430(2), F.A.C.
1376	7-14	Report of Planting and Harvest of Seasonal Crops Form, incorporated by reference in paragraph 40E-2.091(2)(a), F.A.C.
1377	7-14	Water Quality Report Form, incorporated by reference in paragraph 40E-2.091(2)(b), F.A.C.
1378	7-14	Water Use Pumpage Report Form, incorporated by reference in paragraph 40E-2.091(2)(c), F.A.C.
1379	7-14	Water Use Permit Application, incorporated by reference in subsection 40E-2.101(3), F.A.C.
1380	7-14	Water Use Permit Application Supplemental Form A – Agricultural Use, incorporated by reference in paragraph 40E-2.101(3)(a), F.A.C.
1381	7-14	Water Use Permit Application Supplemental Form B – Commercial/Industrial Use, incorporated by reference in paragraph 40E-2.101(3)(b), F.A.C.
1382	7-14	Water Use Permit Application Supplemental Form C – Landscape/Recreation Use, incorporated by reference in paragraph 40E-2.101(3)(c), F.A.C.
1383	7-14	Water Use Permit Application Supplemental Form D – Dewatering Use, incorporated by reference in paragraph 40E-2.101(3)(d), F.A.C.
1384	7-14	Water Use Permit Application Supplemental Form E – Public Supply Use, incorporated by reference in paragraph 40E-2.101(3)(e), F.A.C.
1386	7-14	Water Use Permit Application Supplemental Form F – Diversion and Impoundment Use, incorporated by reference in paragraph 40E-2.101(3)(f), F.A.C.
1387	7-14	Flow Meter Accuracy Calibration Report Form, incorporated by reference in paragraph 40E-2.091(2)(d), F.A.C.
1388	7-14	Alternative Method Calibration Report Form, incorporated by reference in paragraph 40E-2.091(2)(e), F.A.C.
1389	7-14	Crop (Freeze) Protection Form, incorporated by reference in pargraph 40E-2.091(2)(f), F.A.C.
1391	7-14	Notice of Intent to Use a Water Use Noticed General Permit, incorporated by reference in subsection 40E-2.101(4), F.A.C.
Subsection 62-532.900(1), F.A.C.	10-10	State of Florida Permit Application to Construct, Repair, Modify or Abandon a Well, incorporated by reference in subsection 40E-3.101(1), F.A.C.
Subsection 62-532.900(2), F.A.C.	10-10	State of Florida Well Completion Report, incorporated by reference in subsection 40E-3.411(1), F.A.C.
DEP Form 3	6-14	Application for Continuing Education Coursework Approval, Florida Water Well Contractor Continuing Education Program.
DEP Form 4	6-14	Application for Continuing Education Course Provider, Florida Water Well Contractor Continuing Education Program.

Rulemaking Authority 218.075, 373.044, 373.113, 373.171, 373.4136, 373.416, 695.03, 704.06 FS. Law Implemented 218.075, 373.113, 373.4135, 373.4136, 373.416, 704.06 FS. History–New 9-3-81, Amended 12-1-82, 3-9-83, Formerly 16K-1.90, Amended 7-26-87, 11-21-89, 1-4-93, Formerly 40E-1.901, Amended 5-11-93, 4-20-94, 10-3-95, 6-26-02, 8-14-02, 8-31-03, 9-16-03, 9-20-04, 2-12-06, 1-23-07, 8-7-07, 7-4-10, 12-15-11, 5-20-12, 10-23-12, 10-1-13, 7-14-14, 9-7-15, 8-7-16.

40E-1.702 Environmental Resource, Surface Water Management Permit and Consumptive Use Enforcement Guidelines. The following guidelines apply to the District's Environmental Resource, Consumptive Use and Surface Water Management Permit enforcement programs:

(1) Adverse impacts to water resources shall be recovered by requiring complete restoration.

(2) In those cases where restoration of the adverse impact is not environmentally feasible, the District shall require mitigation to offset such impacts.

(3) If the violation cannot be resolved in a negotiated, pro-active manner, it is the District's policy to seek full compliance with District permits and rules through appropriate legal action.

(4) The District shall provide for prompt resolution of enforcement matters in a manner that best protects the public interest and water resources.

(5) The District shall ensure that violators do not gain an economic advantage over competitors by circumventing District permitting requirements. Enforcement action shall be designed to remove any economic advantage resulting from the failure to comply with District permits and rules.

Rulemaking Authority 120.53(1), 373.044, 373.113 FS. Law Implemented 120.62, 120.69, 373.083(2), 373.119, 373.129, 373.136, 373.430, 373.433, 373.603 FS. History–New 10-3-95, Amended 7-2-98, 8-7-16.

40E-1.711 Orders of Corrective Action and Consent Orders.

(1) Orders of Corrective Action.

(a) An order of corrective action may accompany and be served with an administrative complaint upon an alleged violator pursuant to Rule 28-106.2015, F.A.C. An order of corrective action shall include a description of remedial action, with implementation timeframes, and shall, if applicable, set forth any damages, costs of investigation, or other demands that the District is authorized to recover pursuant to Chapter 373 or 403, F.S. Unless a responsive pleading and request for a Section 120.57, F.S., administrative hearing is filed within fourteen (14) days after service of the order of corrective action, the order for corrective action shall become final and effective, and shall constitute a final adjudication of the matters alleged, subject only to judicial review under Chapter 120 or 373, F.S.

(b) Orders of corrective action, which constitute final agency action, shall be enforceable pursuant to the enforcement provisions in Chapters 373 and 403, F.S.

(2) Consent Order.

(a) A consent order is final agency action wherein all parties and the District, by negotiation, have arrived at a resolution of alleged violations of law for the purpose of achieving full and expeditious compliance with Chapters 373 and 403, F.S., and District rules promulgated thereunder. A consent order, executed by all parties to an enforcement action, shall have the same force and effect as a final order entered by the District after a formal Section 120.57, F.S., administrative hearing, and shall be enforced in like manner.

(b) The resolution of an enforcement action which requires only the payment of civil penalties and costs but no corrective action shall be memorialized by use of a letter agreement. Any other remedial action required, such as mitigation, restoration, or procurement of permits shall be implemented by use of a consent order.

(c) Upon execution by the Chair of the Governing Board, or a duly authorized designee, and filing by the District Clerk, a consent order shall constitute agency action subject to the provisions of Rule 40E-0.109, F.A.C.

(3) A non-exempt system which is constructed, operated, altered, maintained, removed or abandoned without a permit shall be restored to its pre-violation condition, unless a permit application for such activity is approved by the District.

Rulemaking Authority 120.53, 373.044, 373.113 FS. Law Implemented 373.119, 373.129, 373.136, 373.430, 373.603 FS. History–New 5-11-93, Formerly 40E-1.614, Amended 10-3-95, 10-23-12.

40E-1.715 Civil Penalty Calculation.

(1) Consistency and equitable treatment are essential elements of the District's enforcement guidelines. Therefore, the District has developed two civil penalty matrices (CPM) for use in calculating appropriate civil penalties in enforcement actions. The Comsumptive Use CPM, October 2012, http://www.flrules.org/Gateway/reference/asp?No=Ref-01532, is incorporated by reference herein and utilized for violations of Chapters 40E-2, 40E-3, 40E-5, 40E-20 and 40E-21, F.A.C. The Environmental Resource CPM, October 2012, http://www.flrules.org/Gateway/reference.asp?No=Ref-01533, is incorporated by reference herein and utilized for violations of Chapters 40E-4, 40E-40, 40E-41, 40E-61, 40E-63 and 40E-400, F.A.C. Copies of the CPMs are also available at no cost by contacting the South Florida Water Management District Clerk's Office, 3301 Gun Club Road, West Palm Beach, FL 33405, (800) 432-2045, ext. 6436, or (561) 682-6436.

(2) The CPM is the initial basis for determining the appropriate amount for a particular penalty. The CPM reflects the District's statutory authority under Section 373.129, F.S., to seek civil penalties of up to $10,000 per day, per violation. The CPM is comprised of two principle components:

(a) The actual or potential harm to the public and the environment that may occur as a result of the violation; and,

(b) The extent of deviation from statutory or regulatory requirements.

(3) Because an economic advantage can be derived through avoidance of expenditures necessary to achieve compliance with District permitting rules and regulations, the District shall consider in its assessment of civil penalties any economic benefit which the violator may have gained through noncompliance.

(4) Multiple penalties shall be calculated for every violation which constitutes an independent and substantially distinguishable violation, or when the same person has violated the same requirement in substantially different locations.

(5) Multi-day penalties shall be calculated where daily advantage is being gained by the violator for an ongoing violation, computed by multiplying the original assessment amount by the number of days of noncompliance.

Rulemaking Authority 120.53(1), 373.044, 373.113, 373.333(1) FS. Law Implemented 120.69, 373.129, 373.209(3), 373.430, 373.603 FS. History–New 10-3-95, Amended 10-23-12.

40E-1.721 Complaints, District Investigations, Probable Cause Determinations and Notices of Violations.

(1) Any person may file a written complaint with the District alleging that a person is in violation of any of the provisions of Chapter 373, F.S., or provisions of Chapter 403, F.S., for which authority has been delegated to the District, or the rules promulgated thereunder or an order issued pursuant thereto. Any person may file a written complaint alleging that a lawfully issued District permit is causing a public or private nuisance. District investigations and probable cause determinations preliminary to District action are not subject to the provisions of Section 120.57, F.S., or the rules in this part promulgated thereunder.

(2) The complaint shall specify to the best of complainant's knowledge the identity of the alleged violator, the location and nature of the alleged violation, and any additional information deemed relevant or material by the complainant. The complaint must be signed by the complainant or the complainant's agent and contain an address or phone number where the complainant can be reached. The District shall request that the complainant to furnish any additional information reasonably necessary to aid in investigating the complaint.

(3) Upon receipt of a complaint filed pursuant to this section, the District shall conduct an investigation and make a determination of probable cause. Nothing in this rule shall preclude the District from conducting investigations and probable cause determinations as otherwise authorized or required by law.

(4) An investigation or determination of probable cause is a non-adversary executive function to discover or procure evidence as part of the fact finding function of the District. The District need not have an administrative complaint pending to conduct an investigation or make such a determination.

(5) Upon receipt of a field inspection or investigation report and upon a finding of probable cause, District staff are authorized to issue a Notice of Violation providing instructions for compliance with Chapter 373, F.S., and all applicable District rules. Nothing in this rule shall preclude the District from seeking injunctive relief or filing any other action that is authorized by Chapter 373, F.S.

Rulemaking Authority 120.53(1), 120.54(10), 373.044, 373.113 FS. Law Implemented 120.53(1), 120.57(4), 373.219(2), 373.229(2), 373.333(2), 373.429 FS. History–New 9-3-81, Formerly 16K-1.09, 16K-2.03(3), Amended 5-11-93, Formerly 40E-1.510, Amended 10-3-95.

40E-1.800 Lobbyist Registration.

(1) A person who is a "lobbyist" as defined in Section 112.3215, F.S., may not lobby the South Florida Water Management District (the "District") until he or she has registered as a lobbyist with the District. Registration shall be made by completing, under oath, the "Lobbyist Registration Form," which is incorporated by reference in subsection (7) below, and submitting that form to the District Clerk at the mail or email address provided in the form.

(2) A separate completed Lobbyist Registration Form must be submitted for each principal represented by the lobbyist before the District.

(3) For identifying and designating a principal's main business on the Authorization to Represent the Principal part of the Lobbyist Registration Form, the District adopts and incorporates by reference the 6-digit NAICS code published in the North American Industry Classification System – United States, 2012 which can be found at, http://www.flrules.org/Gateway/reference.asp?No=Ref-05266. Classification system information can be obtained by contacting the NAICS Association, 129 Lakeshore Drive, Rockaway, NJ 07866, or by visiting its website: www.naics.com.

(4) Changes to the information provided on a Lobbyist Registration Form must be reported to the District within 15 days by submitting a completed Lobbyist Registration Form and checking the box indicating the submitted form is for the purpose of changing previously filed information.

(5) A lobbyist may renew his or her registration to lobby by filing a completed Lobbyist Registration Form with the District and checking the box indicating the submitted form is for renewal purposes. Renewals must be filed before January 1 of each year.

(6) The principal of a lobbyist may cancel the lobbyist´s registration by submitting a completed "Lobbyist Registration Cancellation Form," which is incorporated by reference in subsection (7) below, informing the District that a particular lobbyist is no longer authorized to represent that principal. A lobbyist must cancel his or her registration with the District upon termination of his or her contract or other such employment relationship with the principal by promptly submitting a completed Lobbyist Registration Cancellation Form.

(7) The Lobbyist Registration Form, form number 1400, 5/2015 http://www.flrules.org/Gateway/reference.asp?No=Ref-05266, and the Lobbyist Registration Cancellation Form, form number 1402, 5/2015 http://www.flrules.org/Gateway/reference.asp?No=Ref-05266, are hereby incorporated by reference and may be obtained without cost from the District Clerk either at South Florida Water Management District, 3301 Gun Club Road, West Palm Beach, FL 33406, or at clerk@sfwmd.gov. These forms may also be downloaded from the District's website at: www.sfwmd.gov/opengov.

Rulemaking Authority 112.3261(8) FS. Law Implemented 112.3261 FS. History–New 5-14-15.

Rules of the
South Florida Water Management District

Consumptive Use
CHAPTER 40E-2, F.A.C.

Effective: September 7, 2015

CHAPTER 40E-2
CONSUMPTIVE USE

40E-2.010 Review of Consumptive Use Permit Applications
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40E-2.331 Modification of Permits
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40E-2.010 Review of Consumptive Use Permit Applications.
Consumptive use permit applications are processed pursuant to Section 120.60, F.S. and Chapters 40E-1 and 28-106, F.A.C.

Rulemaking Authority 120.54(5), 120.60 FS. Law Implemented 120.54(5), 120.60 FS. History–New 7-2-98, Amended 10-23-12.

40E-2.011 Policy and Purpose.
(1) It is the policy of the District to control all water uses within its boundaries, pursuant to the provisions of Chapter 373, F.S. and Chapter 62-40 and Title 40E, F.A.C.
(2) The rules in this chapter implement the comprehensive water use permit system contemplated in Chapter 373, Part II, F.S.
(3) Additional rules relating to water use are found in Chapter 40E-5, F.A.C. (Artificial Recharge), Chapter 40E-8, F.A.C. (Minimum Flows and Levels (MFLs), Chapter 40E-10, F.A.C. (Water Reservations), Chapter 40E-21, F.A.C. (The Water Shortage Plan), Chapter 40E-22, F.A.C. (Regional Water Shortage Plans), and Chapter 40E-24, F.A.C. (Mandatory Year-Round Landscape Irrigation Conservation Measures).
(4) Standards for the construction, repair and abandonment of water wells are found in Chapters 40E-3, F.A.C. (Water Wells).
(5) If an application for any proposed water use does not meet the provisions of this chapter for a general permit or evidence indicates the potential for harm, the District will provide the permit applicant with the option to either withdraw the general permit application or supply the additional information, and if applicable, the fee required for an individual permit. In the event one of these options is not selected, staff will recommend that the Governing Board deny the general permit application. The criteria in the "Applicant's Handbook for Water Use Permit Applications within the South Florida Water Management District," incorporated by reference in Rule 40E-2.091, F.A.C., will be utilized to determine whether the conditions for issuance in Rule 40E-2.301, F.A.C., are satisfied.

Rulemaking Authority 373.044, 373.113, 373.171, 373.216 FS. Law Implemented 373.083, 373.203, 373.216, 373.219, 373.249 FS. History–New 9-3-81, Formerly 16K-2.01, Amended 7-4-82, 2-24-85, 11-18-91, 8-1-02, 8-31-03, 7-2-09, 10-23-12, 7-14-14.

40E-2.031 Implementation.
(1) The effective dates for the water use permitting program established in this chapter are:
(a) If the use or withdrawal of water exceeds 100,000 gallons per day, the effective dates are:
1. January 12, 1977, for the portion of the District formerly within the Ridge and Lower Gulf Coast Water Management District,

2. March 2, 1974, for the remainder of the District;

(b) If the use or withdrawal of water does not exceed 100,000 gallons per day, the effective date is January 14, 1979.

(2) The effective dates specified in subsection (1) are used to determine the two year period provided in Section 373.236, F.S., for existing water users to file initial applications.

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.103(1), 373.216, 373.226 FS. History–New 9-3-81, Formerly 16K-2.011, Amended 10-23-12.

40E-2.041 Permits Required.

(1) Unless expressly exempt by law or District rule, a water use permit must be obtained from the District prior to any use or withdrawal of water.

(2) The District issues water use permits in two forms, individual water use permits and general water use permits. A water use permit may be obtained by meeting the requirements of this chapter.

(3) Under certain circumstances the District may issue a temporary water use permit pursuant to Section 373.244, F.S.

(4) A water user seeking a noticed general permit shall obtain one permit for all withdrawals intended to serve contiguous areas. Unless obtaining multiple permits whose withdrawal quantities are monitored and reported from each withdrawal facility or point of diversion, if required by Subsection 4.1.1 of the Applicant's Handbook, and evaluated for feasibility of using reclaimed water, if required by Subsection 2.2.4.B of the Applicant's Handbook, two or more projects shall be aggregated and treated as a single project for permitting purposes when the District determines that the projects are physicially proximate and either:

(a) Share the same irrigation infrastructure; or,

(b) Are operated as a common enterprise.

However, when multiple use classifications, as set forth in Rule 40E-21.651, F.A.C., are served by separate withdrawal facilities, the District is authorized to issue separate noticed general permits.

Rulemaking Authority 373.044, 373.113, 373.171, 373.216 FS. Law Implemented 373.083, 373.116, 373.118, 373.219, 373.244 FS. History–New 9-3-81, Formerly 16K-2.03(1), (2), Amended 10-23-12, 7-14-14.

40E-2.051 Exemptions.

No permit is required under Rule 40E-2.041, F.A.C., for the following water uses:

(1) Water used strictly for domestic use at a single family dwelling or duplex provided that the water is obtained from one withdrawal facility for each single family dwelling or duplex.

(2) Water used strictly for fire fighting purposes.

Rulemaking Authority 373.044, 373.113, 373.171 FS. Law Implemented 373.219 FS. History–New 9-3-81, Formerly 16K-2.025, Amended 2-24-85, 4-20-94, 3-15-10.

40E-2.061 General Permits by Rule.

Certain specified uses have been determined to be reasonable-beneficial, not interfering with existing legal uses, and consistent with the public interest pursuant to Section 373.223, F.S. The Board hereby grants a General Permit by Rule for all non-exempt consumptive uses within the District that satisfy the following criteria:

(1) General Permit by Rule for Landscape Irrigation at a Single Family Dwelling or Duplex.

(a) The Board hereby grants a general permit to each person for the use, withdrawal, or diversion of water at a single family dwelling or duplex including, but not limited to, home lawn and ornamental irrigation, car washing, and other incidental uses provided that water is obtained from a single on-site withdrawal facility, such as a private irrigation well or surface water diversion, for each single family dwelling or duplex; that landscape irrigation is conducted in accordance with Chapters 40E-21 and 40E-24, F.A.C., or with any approved variance; and that the amount of water used is limited to only that necessary for efficient utilization.

(b) When reclaimed water is available, the use of a private irrigation well or surface water diversion for home lawn and ornamental irrigation is not authorized under this section. Reclaimed water is deemed available when reclaimed water is provided by a utility through a point of connection at the property boundary.

(c) Persons using or proposing to use water in a manner that differs from the conditions imposed by Chapter 40E-24, F.A.C., shall apply for a modification of this permit pursuant to subsection 40E-2.331(4), F.A.C.

(2) General Permit by Rule for Short-Term Dewatering.

(a) The Board hereby grants a general permit for the use of water in conjunction with short-term dewatering operations, such as well pointing, utility construction, lake construction, exploratory testing, and other minor uses; aquifer performance tests; or in conjunction with a short-term Remedial Action Plan approved by the state or local agency having legal jurisdiction over such activities, provided the following criteria are met:

1. Has a maximum daily pumpage of less than 5 million gallons (MG) and a maximum total project pumpage of less than 100 MG over a one year period;

2. Will retain all discharge on the project site unless associated with an aquifer performance test;

3. Will not dewater to a depth below 0.0 feet NGVD (or equivalent NAVD) within 1,000 feet of saline water, except when dewatering water with a chloride concentration of greater than 1,000 milligrams per liter;

4. Will not occur within 100 feet of a wastewater treatment plant rapid-rate land application system permitted under Part IV of Chapter 62-610, F.A.C.;

5. Will not occur within 1,000 feet of a known landfill or contamination; and,

6. Will not occur within 1,000 feet of a freshwater wetland unless dewatering activities are completed within 60 days.

(b) In proceeding with a general permit by rule for dewatering, the permittee acknowledges that the dewatering operation is subject to the Permit Conditions in Section 5.0 of the Applicant's Handbook, including responsibility for mitigating any harm that may occur as a result of the dewatering to existing legal uses, off-site land uses, or natural resources.

(c) Linear projects, such as roads, utilities, or pipelines, may qualify for multiple general permits by rule. The dewatering activity for these projects may have a rolling one-year duration, in which the dewatering operation at the end of each one year period occurs no more than one mile from the location at the beginning of each one year period.

(3) General Permit by Rule for Closed-Loop Systems.

(a) The Board hereby grants a general permit for the use of water for cooling/heating systems for swimming pools and air conditioning units provided the following criteria are met:

1. The withdrawal and discharge points are on property legally controlled by the permittee;

2. The water is discharged to the same source, aquifer, or permeable zone from which it is withdrawn;

3. The discharge or injection has been permitted by the Department; and,

4. The water has no contact or mixing with other water sources, additives, and chemicals.

(b) In proceeding with a general permit by rule for closed-loop systems, the permittee acknowledges that the use is subject to the Permit Conditions in Section 5.0 of the Applicant's Handbook, including responsibility for mitigating any harm that may occur as a result of the withdrawal to existing legal uses, off-site land uses, or natural resources.

(c) The permittee shall not utilize the withdrawal facility associated with this general permit by rule for any other type of consumptive use.

Rulemaking Authority 373.044, 373.113, 373.118, 373.171, 373.216 FS. Law Implemented 373.083, 373.118, 373.219, 373.223 FS. History–New 3-15-10, Amended 7-14-14, 9-7-15.

40E-2.071 Noticed General Permits and Individual Permits.

(1) The use of water, which does not qualify for a general permit by rule, qualifies for a noticed general permit if the use:

(a) Does not withdraw from the following sources:

1. Surface water from the C-23, C-24 or C-25 Canals, or any connected canal systems that derive water supply from these District canals;

2. Surface water from the L-1, L-2 or L-3 Canals;

3. Surface water within the Lake Istokpoga/Indian Prairie Canal System depicted in Figures 21-20 and 21-21, Chapter 40E-21, F.A.C.;

4. Surface or groundwater within the Picayune Strand or Fakahatchee Estuary, groundwater indirectly from the Picayune Strand or Fakahatchee Estuary or any canal identified in Figure 3-4 of the Applicant's Handbook, or surface water indirectly from any canal identified in Figure 3-4 of the Applicant's Handbook;

5. Surface water from the Lower East Coast Everglades Waterbodies, the North Palm Beach County/Loxahatchee River Watershed Waterbodies, or the integrated conveyance system identified in Figures 3-1 and 3-2 of the Applicant's Handbook;

6. Surface water from the protected canal reaches identified in Figure 3-1 in Chapter 40E-10, F.A.C.;

(b) Satisfies the following facility restrictions:

1. Is from facilities having a cumulative withdrawal capacity of less than 1,000,000 GPD;

2. Is from groundwater wells less than eight (8) inches in diameter; and,

3. Is from surface water facilities which have a cumulative intake diameter less than six (6) inches;

(c) Has a cumulative average daily use of less than 100,000 GPD on an annual basis, unless the location and volume criteria in subparagraph (d)4., below, is applicable;

(d) Meets the following location and volume criteria, as applicable:

1. Withdraws groundwater from the Lower Tamiami aquifer within the area depicted in Figure 2-1 and has an annual average allocation of less than 10,000 GPD;

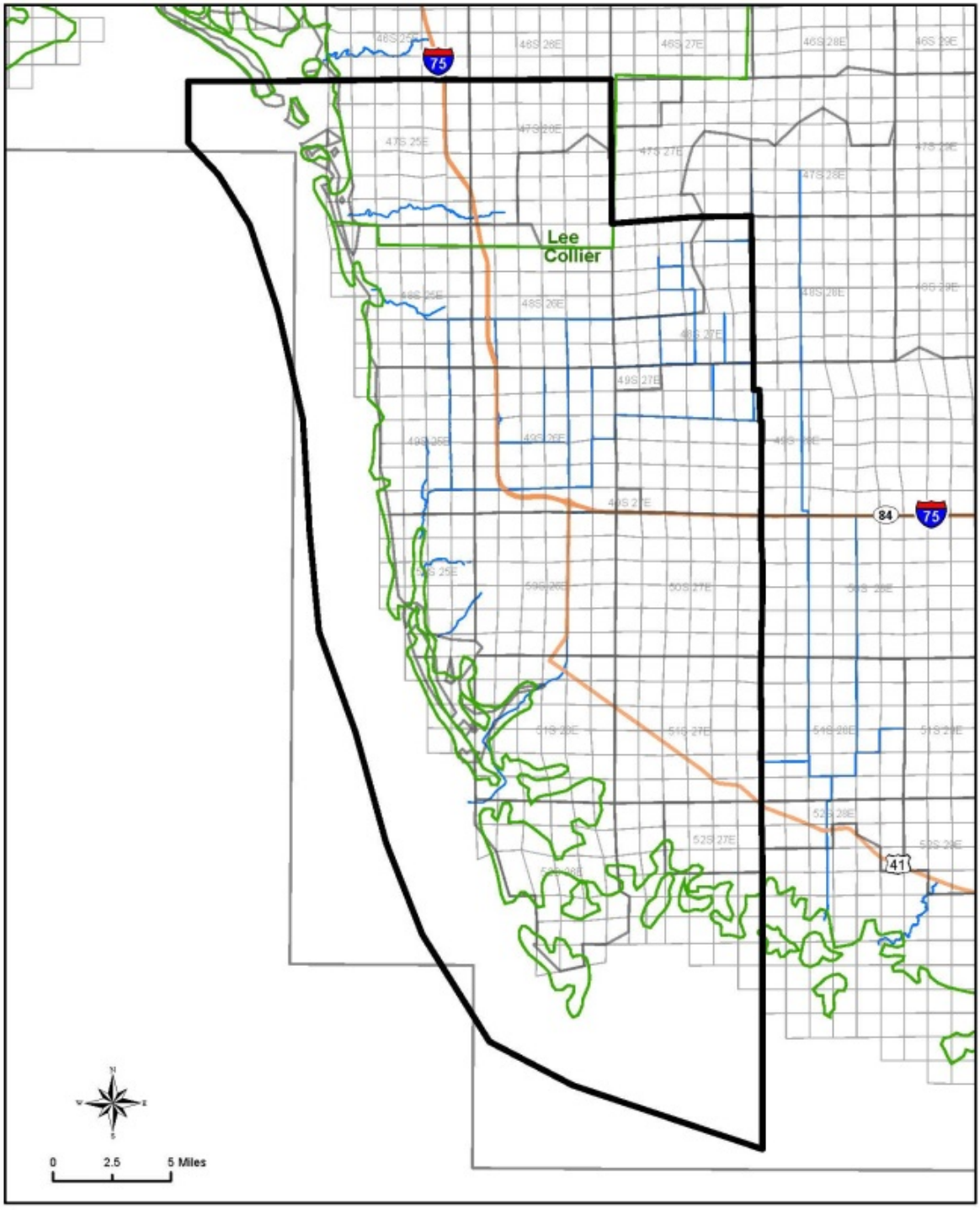
2. Withdraws groundwater from the Sandstone aquifer within the area depicted in Figure 2-2 and has an annual average allocation of less than 10,000 GPD;

3. Withdraws groundwater from the Mid-Hawthorn aquifer within the area depicted in Figure 2-3 and has an annual average allocation of less than 10,000 GPD; or,

4. Withdraws water for irrigation purposes within the South Dade County Water Use Basin depicted in Figure 21-11, Chapter 40E-21, F.A.C., and has an annual average allocation of less than 300,000 GPD, regardless of the facility restrictions in paragraph (1)(b), above; and,

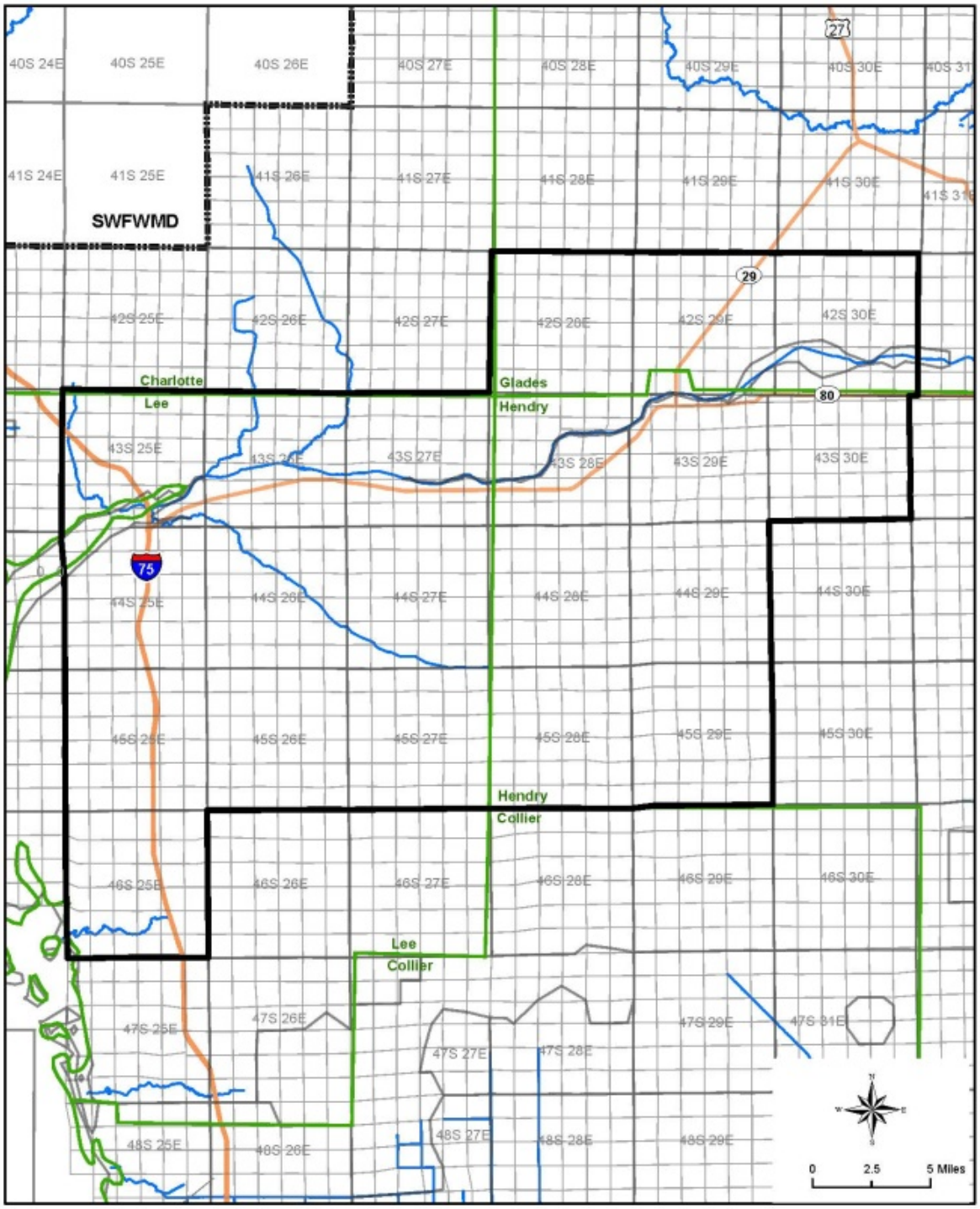
(e) Is consistent with requirements of any applicable mandatory reuse zones.

(2) An individual permit is required for all non-exempt uses that do not qualify for a general permit. Diversion and impoundment uses do not qualify for a general permit and must apply for an individual permit. Dewatering uses that do not qualify for a general permit by rule must apply for an individual permit.



South Florida Water Management District
Water Use Regulation
3301 Gun Club Road, West Palm Beach, FL 33406
561-686-8800 – www.sfwmd.gov

Lower Tamiami Aquifer Threshold Area Figure 2-1



South Florida Water Management District
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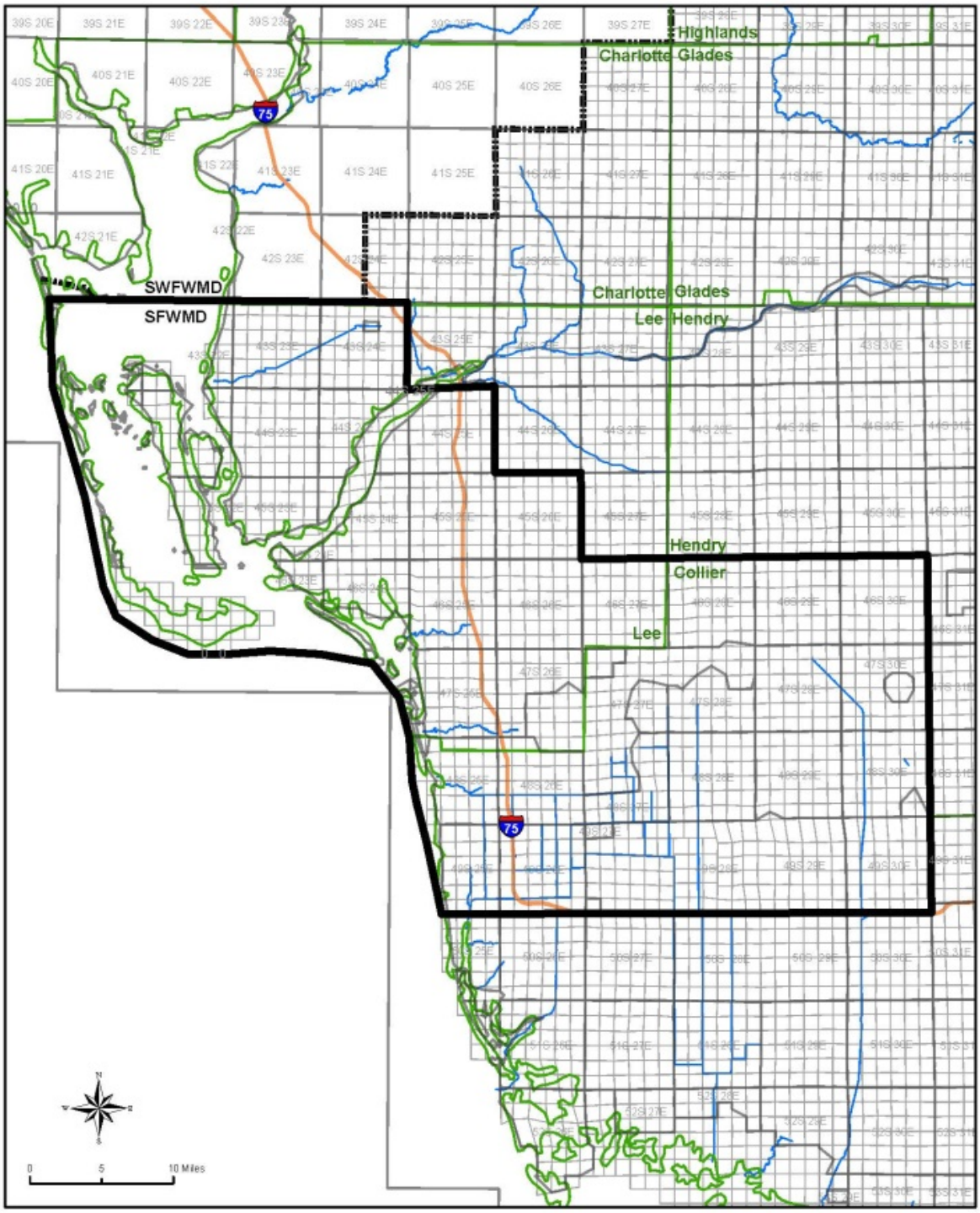
Sandstone Aquifer Threshold Area Figure 2-2



South Florida Water Management District
Water Use Regulation
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Mid-Hawthorn Aquifer Threshold Area
Figure 2-3

Rulemaking Authority 373.044, 373.113, 373.118, 373.171, 373.216 FS. Law Implemented 373.083, 373.118, 373.219, 373.223 FS. History–New 7-14-14, 9-7-15.

40E-2.091 Publications Incorporated by Reference.

(1) The "Applicant's Handbook for Water Use Permit Applications within the South Florida Water Management District – September 7, 2015" (http://www.flrules.org/Gateway/reference.asp?No=Ref-05791) is incorporated by reference herein.

(2) The following forms and materials are referenced in the "Applicant's Handbook for Water Use Permit Applications within the South Florida Water Management District – September 7, 2015" and are incorporated herein:

(a) Form 1376, Report of Planting and Harvest of Seasonal Crops Form, (July 14, 2014) (http://www.flrules.org/Gateway/reference.asp?No=Ref-03855) referenced in Subsection 5.2.1E;

(b) Form 1377, Water Quality Report Form, (July 14, 2014) (http://www.flrules.org/Gateway/reference.asp?No=Ref-03856) referenced in Subsection 4.2.1;

(c) Form 1378, Water Use Pumpage Report Form, (July 14, 2014) (http://www.flrules.org/Gateway/reference.asp?No=Ref-03857) referenced in Subsection 4.1.1;

(d) Form 1387, Flow Meter Accuracy Calibration Report Form, (July 14, 2014) (http://www.flrules.org/Gateway/reference.asp?No=Ref-03881) referenced in Subsection 4.1.1;

(e) Form 1388, Alternative Method Calibration Report Form, (July 14, 2014) (http://www.flrules.org/Gateway/reference.asp?No=Ref-03882) referenced in Subsection 4.1.1; and,

(f) Form 1389, Crop (Freeze) Protection Form, (July 14, 2014) (http://www.flrules.org/Gateway/reference.asp?No=Ref-03883) referenced in Subsection 4.1.1;

(g) Subsections of the Environmental Resource Permit Applicant's Handbook, Volume I (General and Environmental), October 1, 2013 (http://www.flrules.org/Gateway/reference.asp?No=Ref-05372) referenced in Section 3.3.6, as follows:

1. Subsection 10.2.2.3 regarding Assessment of Impacts;
2. Subsection 10.3.1 regarding Types of Mitigation, specifically Subsections 10.3.1.1, 10.3.1.3, and 10.3.1.8;
3. Subsection 10.3.2 regarding Guidelines for the Amount of Mitigation;
4. Subsection 10.3.3 regarding Mitigation Proposals;
5. Subsection 10.3.4 regarding Monitoring Requirements for Mitigation Areas;
6. Subsection 10.3.5 regarding Protection of Mitigation Areas;
7. Subsection 10.3.6 regarding Mitigation Success;
8. Subsection 10.3.7 regarding Financial Responsibility for Mitigation; and,
9. Figure 10.2.8-5.

(3) Subsections 62-40.416(7), (8) and (9), F.A.C. (May 3, 2014) (http://www.flrules.org/Gateway/reference.asp?No=Ref-05792) are referenced in Subsection 3.1.2.A and incorporated by reference herein.

(4) The "Applicant's Handbook for Water Use Permit Applications within the South Florida Water Management District" and forms incorporated herein are available at no cost by contacting the South Florida Water Management District Clerk's Office, 3301 Gun Club Road, West Palm Beach, FL 33406, 1(800)432-2045, ext. 6436 or (561)682-6436.

Rulemaking Authority 373.044, 373.113, 373.118, 373.171, 373.216 FS. Law Implemented 373.042, 373.0421, 373.083, 373.109, 373.196, 373.219, 373.223, 373.224, 373.229, 373.232, 373.233, 373.236, 373.239, 373.250 FS. History–New 9-3-81, Formerly 16K-2.035(1), Amended 2-24-85, 11-21-89, 1-4-93, 4-20-94, 11-26-95, 7-11-96, 4-9-97, 12-10-97, 9-10-01, 12-19-01, 8-1-02, 6-9-03, 8-31-03, 4-23-07, 9-13-07, 2-13-08, 10-14-08, 7-2-09, 3-15-10, 3-18-10, 9-26-12, 10-23-12, 7-21-13, 7-14-14, 7-16-14, 9-7-15.

40E-2.101 Content of Application.

(1) Except in those circumstances detailed in subsection (5), below, applications for permits required by this chapter shall be filed electronically at www.sfwmd.gov.ePermitting, or at the South Florida Water Management District Regulation Reception Desk, 3301 Gun Club Road, West Palm Beach, FL 33406, or at any of the District's Service Centers. The addresses and phone numbers of the District's Service Centers are online at www.sfwmd.gov, "Locations."

(2) The application for all water use permits shall contain:

(a) The appropriate permit application processing fee required by Rule 40E-1.607, F.A.C.;

(b) The information required in Section 373.229(1), F.S.;

(c) Information sufficient to show that the use meets the criteria and conditions established in Rule 40E-2.301, F.A.C.; and,

(d) The application forms, as specified below, signed by the applicant or the authorized agent of the applicant.

(3) Application for an Individual Water Use Permit shall be made using Form No. 1379, Water Use Permit Application, (July 14, 2014), http://www.flrules.org/Gateway/reference.asp?No=Ref-04377. Applicants shall also submit one or more of the following supplemental forms as appropriate for each type of water use proposed in the permit application:

(a) Form 1380, Water Use Permit Application Supplemental Form A – Agricultural Use, (July 14, 2014), http://www.flrules.org/Gateway/reference.asp?No=Ref-04378;

(b) Form 1381, Water Use Permit Application Supplemental Form B – Commercial/Industrial Use, (July 14, 2014), http://www.flrules.org/Gateway/reference.asp?No=Ref-04379;

(c) Form 1382, Water Use Permit Application Supplemental Form C – Landscape/Recreation Use, (July 14, 2014), http://www.flrules.org/Gateway/reference.asp?No=Ref-04380;

(d) Form 1383, Water Use Permit Application Supplemental Form D – Dewatering Use, (July 14, 2014), http://www.flrules.org/Gateway/reference.asp?No=Ref-04381;

(e) Form 1384, Water Use Permit Application Supplemental Form E – Public Supply Use, (July 14, 2014), http://www.flrules.org/Gateway/reference.asp?No=Ref-04382;

(f) Form 1386, Water Use Permit Application Supplemental Form F – Diversion and Impoundment Use, (July 14, 2014), http://www.flrules.org/Gateway/reference.asp?No=Ref-04383.

(4) Application for a Noticed General Water Use Permit shall be made using Form 1391, Notice of Intent to Use a Water Use Noticed General Permit, (July 14, 2014), http://www.flrules.org/Gateway/reference.asp?No=Ref-04384.

(5) The filing of an application is not required for a General Permit by Rule provided the criteria in Rule 40E-2.061, F.A.C., are met.

(6) The forms identified in subsections (3) and (4) above are incorporated by reference herein and are available at no cost by contacting the South Florida Water Management District Clerk's Office, 3301 Gun Club Road, West Palm Beach, FL 33406, 1(800) 432-2045, ext. 6436, or (561) 682-6436.

Rulemaking Authority 373.044, 373.113, 373.171, 373.216 FS. Law Implemented 373.083, 373.103(1), 373.116, 373.219, 373.223, 373.229 FS. History–New 9-3-81, Amended 12-1-82, 2-24-85, 11-21-89, Repromulgated 1-4-93, Amended 4-20-94, 8-1-02, 10-23-12, 7-14-14.

40E-2.301 Conditions for Issuance of Permits.

(1) In order to obtain a permit, permit renewal, or permit modification under this chapter, an applicant must give reasonable assurances that the proposed water use at the time the permit application is deemed complete:

(a) Will not cause harmful saline water intrusion;

(b) Will not harm offsite land uses;

(c) Will not cause harm to wetlands or other surface waters;

(d) Will not cause pollution of the water resources;

(e) Is otherwise a reasonable-beneficial use as defined in Section 373.019(13), F.S., with consideration given to the factors set forth in Rule 62-40.410, F.A.C.;

(f) Will not interfere with presently existing legal uses;

(g) Is in accordance with Section 373.2295, F.S., concerning interdistrict transfer of groundwater and Section 373.223(3), F.S., concerning water transport and use of groundwater or surface water across county boundaries.

(h) For uses with a recommended maximum allocation which exceeds 100,000 gallons per day or uses within a mandatory reuse zone, makes use of a reclaimed water source in accordance with the criteria contained in the "Applicant's Handbook for Water Use Permit Applications within the South Florida Water Management District," incorporated by reference in Rule 40E-2.091, F.A.C.

(i) Is in accordance with any minimum flow or level and implementation strategy established pursuant to Sections 373.042 and 373.0421, F.S.; and

(j) Is consistent with Sections 373.016 and 373.036, F.S., and otherwise is consistent with the public interest as prescribed by Chapter 373, F.S., and this chapter.

(k) Will not withdraw water reserved under Chapter 40E-10, F.A.C.

(2) In order to satisfy the conditions for permit issuance in subsection (1), the permit applicant must provide reasonable assurances that the criteria in the "Applicant's Handbook for Water Use Permit Applications within the South Florida Water Management District," incorporated by reference in Rule 40E-2.091, F.A.C., are met.

Rulemaking Authority 373.044, 373.113, 373.118, 373.171 FS. Law Implemented 373.036, 373.042, 373.083, 373.103(4), 373.1501, 373.1502, 373.223, 373.229, 373.2295, 373.470 FS. History–New 8-14-02, Amended 8-31-03, 4-23-07, 2-13-08, 7-2-09, 7-14-14.

40E-2.321 Duration of Permit.

General Duration Provision. When requested by an applicant, a consumptive use permit shall have a duration of 20 years provided the applicant provides sufficient data to demonstrate reasonable assurance that the proposed use meets the conditions for issuance for the requested 20 year permit duration; or otherwise, permits may be issued for a shorter duration that reflects the period for which such reasonable assurances can be provided. This determination will be made pursuant to requirements in Rule 40E-2.301, F.A.C., and the "Applicant's Handbook for Water Use Permit Applications within the South Florida Water Management District," incorporated by reference in Rule 40E-2.091, F.A.C.

Rulemaking Authority 373.044, 373.113, 373.171, 373.216 FS. Law Implemented 373.236 FS. History–New 9-3-81, Amended 2-24-85, 4-20-94, 7-11-96, 8-31-03, 4-23-07, 2-13-08, 7-14-14.

40E-2.331 Modification of Permits.

(1) A permittee shall apply to the District for approval of any modification of an unexpired permit pursuant to Section 373.239, F.S. and Rule 40E-1.609, F.A.C.

(2) Applications for modification, except letter modifications issued pursuant to subsection (4), shall contain the information required in Rule 40E-2.101, F.A.C., will be evaluated using the criteria specified in Rule 40E-2.301, F.A.C., and will be subject to the limiting conditions specified in Rule 40E-2.381, F.A.C. Modifications shall be approved if criteria in Rule 40E-2.301, F.A.C., are met.

(3) Proposed increases in allocation will be treated as new uses to the extent the proposed allocation exceeds the existing allocation.

(4)(a) Modification of an existing water use permit shall be approved by letter, provided the permit is in compliance with all applicable limiting conditions and the modification request:

1. Does not result in an increase in the amount of the permit allocation;

2. Does not modify the existing permit expiration date, except when:

a. The permit duration is based upon the current lease expiration date, the permit duration shall be extended by letter modification to the new lease date, but shall not exceed the applicable permit duration pursuant to Rule 40E-2.321, F.A.C.;

b. A public water supply permittee achieves demonstrable savings attributable to implementation of its water conservation plan beyond that required by Subsection 2.3.2.F.1 of the Applicant's Handbook;

c. A permittee complies with the extension provisions of Section 373.236(5), F.S.; or,

d. The permit duration is based upon a proposed "start" date for dewatering, the permit duration shall be extended to one year from the new "start" date, but shall not exceed the applicable permit duration in Rule 40E-2.321, F.A.C.; or

3. Does not potentially interfere with any presently existing legal use of water, cause environmental harm, saltwater intrusion, pollution of the water resources, harm to offsite land uses, does not withdraw water reserved under Chapter 40E-10, F.A.C., or does not otherwise raise issues requiring a Staff determination of whether such impacts would occur pursuant to the "Applicant's Handbook for Water Use Permit Applications within the South Florida Water Management District," incorporated by reference in Rule 40E-2.091, F.A.C.;

4. Does not change the permitted withdrawal source(s) or use classification;

5. Does not result in a modification of the permit pursuant to Section 373.239(2), F.S.; and,

6. Does not allow more cumulative days and time to conduct landscape irrigation pursuant to Chapter 40E-24, F.A.C., for those permits issued pursuant to Rule 40E-2.061, F.A.C., and those permits classified as landscape irrigation use.

(b) The timeframes set forth in Rule 40E-1.603, F.A.C., shall apply to the processing of letter modifications.

Rulemaking Authority 373.044, 373.113, 373.171, 373.216 FS. Law Implemented 373.083, 373.223, 373.229, 373.239 FS. History–New 9-3-81, Formerly 16K-2.09(1), Amended 4-20-94, 7-11-96, 4-9-97, 12-10-97, 8-1-02, 4-23-07, 2-13-08, 7-2-09, 3-15-10, 10-23-12, 7-14-14.

40E-2.341 Revocation of Permits.

Violations of this chapter may result in the revocation or suspension of the authorization in whole or in part in accordance with the provisions of Chapter 373, F.S., including Sections 373.119 and 373.243, Chapter 120, F.S. and Rules 40E-1.609 and 28-106.2015, F.A.C.

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 120.60(6), 373.103(4), 373.219, 373.229 FS. History–New 4-20-94, Amended 7-2-98, 10-23-12.

40E-2.351 Transfer of Permits.

A permittee must comply with the requirements of Rule 40E-1.6107, F.A.C., in order to obtain a permit transfer to a new permittee. If the permit transfer is in conjunction with an application for permit modification, the permit shall be transferred at the time of permit modification if all applicable permit transfer criteria are met. Upon approval, all terms and conditions of the permit shall be binding on the transferee.

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.223, 373.229, 373.239 FS. History–New 9-3-81, Formerly 16K-2.09(2), Amended 4-20-94.

40E-2.381 Permit Conditions.

Pursuant to Sections 373.216, 373.219 and 373.223, F.S., the District shall impose reasonable permit conditions on permits granted under this chapter. Standard permit conditions in Section 5.1 of the "Applicant's Handbook for Water Use Permit Applications within the South Florida Water Management District," incorporated by reference in Rule 40E-2.091, F.A.C., shall be set forth in the permit. Special permit conditions, including those specified in Section 5.2 of the "Applicant's Handbook for Water Use Permit Applications within the South Florida Water Management District," incorporated by reference in Rule 40E-2.091, F.A.C., shall be set forth in the permit as applicable.

Rulemaking Authority 373.044, 373.113, 373.171, 373.216 FS. Law Implemented 373.042, 373.0421, 373.083, 373.216, 373.219(1), 373.223 FS. History–New 9-3-81, Amended 2-24-85, 7-26-87, 4-20-94, 7-11-96, 4-9-97, 12-10-97, 9-10-01, 8-1-02, 4-23-07, 2-13-08, 10-23-12, 7-14-14.

40E-2.441 Temporary Permits.

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.244 FS. History–New 9-3-81, Amended 4-20-94, Repealed by Section 3, Chapter 2012-31, Laws of Florida, 5-27-12.

40E-2.451 Emergency Authorization.

(1) Permission to begin use, withdrawal, or diversion of water prior to the issuance of a permit may be applied for in writing, when emergency conditions exist which would justify such permission. However, no such permission shall be granted unless the use, withdrawal, or diversion is already being considered for a permit under Rule 40E-2.041, F.A.C. A serious set of unforeseen or unforeseeable circumstances must exist to create an emergency. Mere carelessness or lack of planning on the part of the applicant shall not be sufficient grounds to warrant the granting of emergency authorization.

(2) Emergency authorizations shall be administered pursuant to Rule 40E-0.108, F.A.C.

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 120.60(5), 373.219 FS. History–New 9-3-81, Formerly 16K-2.11, Amended 4-20-94, 7-2-98, 10-23-12.

40E-2.501 Permit Classification.

Each water use permit shall be classified according to source, use and method of withdrawal. The source use and method of withdrawal classes are listed in Rules 40E-21.631 through 40E-21.691, F.A.C.

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.246 FS. History–New 9-3-81, Formerly 16K-2.12(2), Amended 7-4-82, 10-23-12.

Rules of the
South Florida Water Management District

WATER WELLS
CHAPTER 40E-3, F.A.C.

Effective: June 8, 2015

CHAPTER 40E-3
WATER WELLS

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40E-3.010 Review of Water Well Permit Applications.

Rulemaking Authority 120.54(5), 120.60 FS. Law Implemented 120.54(5), 120.60 FS. History–New 7-2-98, Repealed by Section 3, Chapter 2012-31, Laws of Florida, 5-27-12.

40E-3.011 Policy and Purpose.

(1) The purpose of Chapter 40E-3, F.A.C., is to implement the duties and responsibilities of the South Florida Water Management District (District) under Chapter 373, Part III, F.S., and those responsibilities and duties delegated to the District by the Department of Environmental Protection (Department) to regulate the location, construction, repair, or abandonment of water wells and the licensing of water well contractors. It is the policy of the Governing Board that these rules are reasonably necessary to insure the protection and management of water resources and the health, safety, and general welfare of the people of this District.

(2) Additional District rules relating to water wells are found in Chapters 40E-5 (Artificial Recharge) and 40E-2, F.A.C. (Consumptive Use).

Rulemaking Authority 373.044, 373.113, 373.171 FS. Law Implemented 373.103(1), 373.306, 373.308, 373.309, 373.313, 373.314, 373.316, 373.319, 373.323(2), 373.326, 373.329, 373.333, 373.342 FS. History–New 1-1-85, Amended 12-19-89, 3-16-05, 7-14-14, 6-8-15.

40E-3.021 Definitions.

When used in this chapter:

(1) “Annulus” or “Annular Space” means any artificially created void existing between a well casing or liner pipe and a borehole wall, or between two casings, or between tubing and the casing for liner pipes.

(2) “Casing Diameter” or “Diameter of Casing” means the largest nominal permanent water bearing casing. For the purpose of this chapter, the diameter of the casing at the upper terminus will be presumed to be the diameter for the entire length, unless the well owner or contractor can demonstrate that the well has a smaller diameter permanent water bearing casing below the upper terminus.

(3) “Consolidated” means a geologic stratum, which is cemented with a binding substance commonly derived from within the deposit containing that stratum.

(4) “Consumptive Use Permit” or “Water Use Permit” means a Water Use Permit issued under Chapter 40E-2, F.A.C.

(5) “Dewatering” means the use of wells or other such equipment to temporarily lower a water level as may be necessary during construction activities.

(6) “Driller” means a person working under the direct supervision of a licensed water well contractor who actually constructs the well.

(7) “Field Log” means a log with accurate, written documentation of all construction activities needed to fill out well completion reports.

(8) “Filter Pack” means sand or gravel that is uniform, clean, and siliceous. It is placed in the annulus of the well between the borehole wall and the well screen.

(9) “Inspection Port” means any opening not less than three-quarters (3/4) inch in diameter through which unobstructed access to the inside of the casing can be obtained for measuring water levels. Inspection ports shall be threaded openings temporarily sealed with a removable watertight plug.

(10) “Jetted Well” or “Sand Point Well” means a pipe with an attached well point or open-ended screen. The well is installed in unconsolidated formations by the washing action of a water jet.

(11) “Monitoring Well” or “Observation Well” means a well used primarily to monitor hydrologic parameters such as water levels or water quality.

(12) “Packer” means a device placed within a well casing that seals the annulus between two pieces of casing, between the casing and the screen, between one formation or water bearing strata and another, or between the formation and the casing.

(13) “Public Water Supply Well” means a well constructed for the purpose of supplying water to a public water system, as permitted under Chapters 62-550, 62-555, 62-560, 62-524 and 64E-8, F.A.C.

(14) “Test Hole” means any temporarily cased or uncased hole drilled, bored, cored, washed, or jetted, for the intended use of obtaining data for engineering, geophysical or geological exploration, and/or prospecting for minerals or products of mining or quarrying, and not for the purposes of either producing, disposing of, or searching for water.

(15) “Upper Terminus” means that portion of a well casing ending at land surface or within an approved depth below land surface. Land surface is considered to be the ground elevation of the finished grade at the well.

(16) “Water Test Well” means a temporary water well for the purpose of obtaining data to determine aquifer properties or water quality. Water test wells are typically drilled prior to applying for a water use permit. Water test wells must either be abandoned or converted to a water well or monitoring well within 30 days of completion of testing.

(17) “Well Casing” means a metallic or non-metallic pipe installed in a borehole or driven to prevent caving, provide structural strength, seal off zones of poor water quality, or prevent the interchange of waters between aquifers.

(18) “Well Completion Report” means the form, supplied or approved by the District, that is completed and signed by the licensed water well contractor.

(19) All definitions contained in Section 373.303, F.S. and Chapters 62-531 and 62-532, F.A.C., are adopted and incorporated by reference in sebsections 40E-3.036(1) and (2), F.A.C., respectively.

Rulemaking Authority 373.044, 373.113, 373.171 FS. Law Implemented 373.019, 373.106, 373.303, 373.306 FS. History–New 1-1-85, Amended 12-19-89, 3-16-05, 9-26-12, 7-14-14, 6-8-15.

40E-3.032 Delegation.

The authority for general administration of Chapter 40E-3, F.A.C., is delegated to the Executive Director of the District. It is the

policy of the Governing Board that in making this delegation the Executive Director is authorized to designate specific staff members to carry out various tasks but that overall supervision and responsibility shall rest with the Executive Director. The Executive Director is expressly authorized to issue permits under this chapter as provided in Section 373.342(1), F.S.

Rulemaking Authority 373.044, 373.113, 373.171 FS. Law Implemented 373.308, 373.309(2), 373.339, 373.342 FS. History–New 1-1-85, Amended 3-16-05.

40E-3.035 Agreements.

The Governing Board hereby incorporates by reference the following documents, which are available at no cost by contacting the South Florida Water Management District Clerk's Office, 3301 Gun Club Road, West Palm Beach, FL 33406, (800)432-2045, ext. 6436, or (561)682-6436:

(1) "Delegation Agreement between South Florida Water Management District and Lee County for Regulation of Water Wells" (September 13, 2005) http://www.flrules.org/Gateway/reference.asp?No=Ref-05373.

(2) "Delegation Agreement between South Florida Water Management District and Miami-Dade County Health Department" (August 10, 2005) http://www.flrules.org/Gateway/reference.asp?No=Ref-05374.

(3) "Agreement between Collier County and South Florida Water Management District" (February 5, 1985) http://www.flrules.org/Gateway/reference.asp?No=Ref-05376 "Amendment to Agreement between South Florida Water Management District and Collier County" (February 28, 1989) http://www.flrules.org/Gateway/reference.asp?No=Ref-05145; "Amendment to the Water Well Construction Permit Program Delegation Agreement between South Florida Water Management District and Collier County" (May 11, 2005) http://www.flrules.org/Gateway/reference.asp?No=Ref-05378.

(4) "Agreement between the City of Cape Coral and South Florida Water Management District" (October 10, 1986) http://www.flrules.org/Gateway/reference.asp?No=Ref-05379; "Amendment to the Water Well Construction Permit Program Delegation Agreement between South Florida Water Management District and the City of Cape Coral" (August 10, 2005) http://www.flrules.org/Gateway/reference.asp?No=Ref-05380.

(5) "Agreement between the Martin County Health Department and South Florida Water Management District" (June 12, 1998) http://www.flrules.org/Gateway/reference.asp?No=Ref-05381; "Amendment to the Water Well Construction Permit Program Delegation Agreement between South Florida Water Management District and Martin County Health Department" (April 18, 2005) http://www.flrules.org/Gateway/reference.asp?No=Ref-05382; "Second Amendment to the Water Well Construction Permit Program Delegation Agreement between South Florida Water Management District and Martin County Health Department" (May 13, 2010) http://www.flrules.org/Gateway/reference.asp?No=Ref-05383.

(6) "Agreement between the Osceola County Health Department and South Florida Water Management District" (February 11, 1999) http://www.flrules.org/Gateway/reference.asp?No=Ref-05384; "Amendment to the Water Well Construction Permit Program Delegation Agreement between South Florida Water Management District and Osceola County Health Department" (April 18, 2005) http://www.flrules.org/Gateway/reference.asp?No=Ref-05385.

(7) "Agreement between the St. Lucie County Health Department and South Florida Water Management District" (April 13, 2000) http://www.flrules.org/Gateway/reference.asp?No=Ref-05387; "Amendment to the Water Well Construction Permit Program Delegation Agreement between South Florida Water Management District and St. Lucie County Health Department" (May 11, 2005) http://www.flrules.org/Gateway/reference.asp?No=Ref-05388; "Second Amendment to the Water Well Construction Permit Program Delegation Agreement between South Florida Water Management District and St. Lucie County Health Department" (May 13, 2010) http://www.flrules.org/Gateway/reference.asp?No=Ref-05389.

(8) "Agreement between the Hendry County Health Department and South Florida Water Management District" (September 14, 2000) http://www.flrules.org/Gateway/reference.asp?No=Ref-05390; "Amendment to the Water Well Construction Permit Program Delegation Agreement between South Florida Water Management District and Hendry County Health Department" (April 18, 2005) http://www.flrules.org/Gateway/reference.asp?No=Ref-05391.

(9) "Agreement between the Okeechobee County Health Department and South Florida Water Management District" (April 11, 2002) http://www.flrules.org/Gateway/reference.asp?No=Ref-05392; "Amendment to the Water Well Construction Permit Program Delegation Agreement between South Florida Water Management District and Okeechobee County Health Department" (April 18, 2005) http://www.flrules.org/Gateway/reference.asp?No=Ref-05393; "Second Amendment to the Water Well Construction Permit Program Delegation Agreement between South Florida Water Management District and Okeechobee County Health Department" (May 13, 2010) http://www.flrules.org/Gateway/reference.asp?No=Ref-05394.

(10) "Water Well Construction Permit Program Delegation Agreement between South Florida Water Management District and Glades County Health Department" (May 11, 2005) http://www.flrules.org/Gateway/reference.asp?No=Ref-05395.

(11) "Delegation Agreement between South Florida Water Management District and Orange County Health Department" (May 11, 2005) http://www.flrules.org/Gateway/reference.asp?No=Ref-05396.

(12) "Delegation Agreement between South Florida Water Management District and Osceola County and Polk County Health Departments" (May 11, 2005) http://www.flrules.org/Gateway/reference.asp?No=Ref-05397.

(13) "Delegation Agreement between South Florida Water Management District and Palm Beach County Health Department" (May 11, 2005) http://www.flrules.org/Gateway/reference.asp?No=Ref-05398.

(14) "Delegation Agreement between South Florida Water Management District and State of Florida Department of Health, Broward County Health Department" (June 8, 2005) http://www.flrules.org/Gateway/reference.asp?No=Ref-05399.

(15) "Delegation Agreement between South Florida Water Management District and Highlands County Health Department" (May 13, 2010) http://www.flrules.org/Gateway/reference.asp?No=Ref-05400.

Rulemaking Authority 373.044, 373.113, 373.171 FS. Law Implemented 373.103, 373.308, 373.309, 373.323, 373.324, 373.326, 373.329, 373.333 FS. History–New 3-16-05, Amended 8-26-10, 6-8-15.

40E-3.036 Rules and Publications Incorporated by Reference.

The following Department rules, publications, standards and forms, regarding construction, repair, and abandonment of wells, shall apply to the well contractor licensing program administered by the District, and are incorporated by reference herein. Copies may be obtained by contacting the Department or the District in accordance with subsection (8) below:

(1) Chapter 62-531, F.A.C., Water Well Contractor Licensing Requirements (June 22, 2014), (http://www.flrules.org/Gateway/reference.asp?No=Ref-05146). The following publications referenced in Chapter 62-531, F.A.C., are also incorporated by reference herein.

(a) The Department's Water Well Contractor Disciplinary Guidelines and Citations Dictionary (June 22, 2014) (http://www.flrules.org/Gateway/reference.asp?No=Ref-05147), incorporated by reference in subsection 62-531.450(1), F.A.C.;

(b) The Department's Water Well Contractor Continuing Education Program Manual (June 22, 2014) (http://www.flrules.org/Gateway/reference.asp?No=Ref-05148), incorporated by reference in subsection 62-531.300(2), F.A.C.;

(2) Chapter 62-532, F.A.C., Water Well Permitting and Construction Requirements (October 7, 2010), (http://www.flrules.org/Gateway/reference.asp?No=Ref-05149). The following publications referenced in Chapter 62-532, F.A.C., are also incorporated by reference herein:

(a) American Society for Testing and Materials (ASTM) A53/A53M-99b (1999); A135-01 (2001), A252-98 (1998), and A589-96 (1996), incorporated by reference in paragraph 62-532.500(1)(a), F.A.C. Copies of these copyrighted standards may be obtained from the American Society for Testing and Materials, 100 Barr Harbor Drive, P. O. Box C700, West Conshohocken, PA 19428-2959;

(b) American Petroleum Institute (API) 5L-2000 (2000), incorporated by reference in paragraph 62-532.500(1)(a), F.A.C. Copies of this copyrighted standard may be obtained from the American Petroleum Institute, 1220 L Street N.W., Washington, DC 20005-4070;

(c) ANSI/ASME B36. 10M-2000, incorporated by reference in paragraph 62-532.500(1)(a), F.A.C. Copies of this copyrighted standard may be obtained from the American National Standards Institute, 1819 L Street N.W., Washington, DC 20036;

(d) Schedule 10S and Schedule 40 of the ANSI/ASME B36. 19M-1985, incorporated by reference in paragraph 62-532.500(1)(d), F.A.C. Copies of this copyrighted standard may be obtained from the American National Standards Institute, 1819 L Street N.W., Washington, DC 20036;

(e) 2008 NSF International Standard/American National Standard NSF/ANSI 14-2008e, Plastics Piping System Components and Related Materials; NSF International Standard/American National Standard NSF/ANSI 61-2008, Drinking Water System Components – Health Effects, incorporated by reference in paragraph 62-532.500(1)(g), F.A.C. Copies of these copyrighted standards may be obtained from NSF International, P. O. Box 130140, Ann Arbor, MI 48113-0140;

(f) Closed-Loop/Geothermal Heat Pump Systems Design and Installation Standards, Revised Edition 2008, published by the International Ground Source Heat Pump Association, Oklahoma State University; Closed-Loop/Ground-Source Heat Pump Systems Installation Guide, 1988, Oklahoma State University, incorporated by reference in subsection 62-532.500(2), F.A.C. Copies of these copyrighted materials may be obtained from the International Ground Source Heat Pump Association, Oklahoma State University,

374 Cordell South, Stillwater, OK 74078-8018;

(g) Appendix C of American Water Works Association (AWWA) Standard A100-97 (1997), AWWA Standard for Water Wells, incorporated by reference in subparagraph 62-532.500(3)(i)6., F.A.C. Copies of these copyrighted, recommended practices and methods may be obtained from the American Water Works Association, 6666 West Quincy Avenue, Denver, CO 80235;

(h) Grouting and Sealing for Vertical Geothermal Heat Pump Systems Engineering Design and Field Procedures Manual, published by the International Ground Source Heat Pump Association, First Edition 2000, Oklahoma State University, incorporated by reference in subparagraph 62-532.500(3)(i)6., F.A.C. Copies of these copyrighted, recommended practices and methods may be obtained from the International Ground Source Heat Pump Association, Oklahoma State University, 374 Cordell South, Stillwater, OK 74078-8018.

(3) Rule 62-555.310, F.A.C., Source and Siting Requirements for Public Water Systems (August 28, 2003), (http://www.flrules.org/Gateway/reference.asp?No=Ref-05150).

(4) Rule 62-555.312, F.A.C., Location of Public Water System Wells (August 28, 2003), (http://www.flrules.org/Gateway/reference.asp?No=Ref-05151).

(5) Subsection 62-555.315(1), F.A.C., Public Water System Wells – Well Security (August 28, 2003), (http://www.flrules.org/Gateway/reference.asp?No=Ref-05152).

(6) Chapter 62-524, F.A.C., New Potable Water Well Permitting in Delineated Areas (June 27, 2000), (http://www.flrules.org/Gateway/reference.asp?No=Ref-05153), and the maps containing Delineated Areas for the following Counties: Broward, Glades, Highlands, Martin, Miami-Dade, Orange, Osceola, Polk, and St. Lucie, incorporated by reference in Rule 62-524.430, F.A.C. (http://www.flrules.org/Gateway/reference.asp?No=Ref-01529). Copies may be obtained upon receipt of reproduction and other appropriate costs.

(7) The following Department forms are incorporated by reference into this chapter and shall apply to the well contractor licensing program administered by the District and to all wells constructed, repaired, or abandoned in the District:

(a) State of Florida Permit Application to Construct, Repair, Modify, or Abandon a Well, DEP Form 62-532.900(1), incorporated by reference in subsection 40E-3.101(1), F.A.C.

(b) State of Florida Well Completion Report, DEP Form 62-532.900(2), incorporated by reference in subsection 40E-3.411(1), F.A.C.

(c) Application for a State of Florida Water Well Contractor's License, DEP Form 0186, incorporated by reference in subsection 40E-3.038(1), F.A.C.

(d) Application for Continuing Education Coursework Approval, Florida Water Well Contractor Continuing Education Program, DEP Form 3 (June 2014) (http://www.flrules.org/Gateway/reference.asp?No=Ref-05154), incorporated by reference in Rule 62-531.300, F.A.C.

(e) Application for Continuing Education Course Provider, Florida Water Well Contractor Continuing Education Program, DEP Form 4 (June 2014) (http://www.flrules.org/Gateway/reference.asp?No=Ref-05155), incorporated by reference in Rule 62-531.300, F.A.C.

(8) All rules and publications incorporated by reference herein, other than the copyrighted materials identified in paragraphs (2)(a) through (h) herein, may be obtained by writing or calling the Department, 2600 Blair Stone Road, Tallahassee, FL 32399-2400, telephone (850)245-8648, or the South Florida Water Management District, 3301 Gun Club Road, West Palm Beach, FL 33406, telephone (800)432-2045 ext. 6436 or (561)686-6436.

Rulemaking Authority 373.044, 373.113, 373.171 FS. Law Implemented 373.103, 373.308, 373.309, 373.323, 373.324, 373.326, 373.329, 373.333 FS. History–New 3-16-05, Amended 9-8-13, 6-8-15.

40E-3.038 Contractor Licensing and Well Construction Requirements.

(1) Applications for a water well contractor license shall be filed with the District on Form 0186, State of Florida Water Well Contractor's License Application (September 2012) incorporated by reference herein, which is available at no cost by contacting the South Florida Water Management District Clerk, 3301 Gun Club Road, West Palm Beach, FL 33406, (800)432-2045, ext. 6436 or (561)682-6436, and the delegated permitting authorities' offices, as identified in Rule 40E-3.035, F.A.C.

(2) Each well contractor meeting the licensing requirements set forth in Chapter 62-531, F.A.C., incorporated by reference in paragraph 40E-3.036(1)(a), F.A.C., will be assigned a permanent license number and shall be issued a certificate with that number.

(3) Violations of the contractor licensing requirements and well construction requirements are provided by Chapter 373, F.S.,

and Chapters 62-531 and 62-532, F.A.C.

(4) The licensed contractor must submit any change of address to the District within 30 days.

Rulemaking Authority 373.044, 373.113, 373.171, 373.333 FS. Law Implemented 373.323, 373.326, 373.333, 373.336 FS. History–New 12-19-89, Amended 3-16-05, 9-26-12, 6-8-15.

40E-3.040 Scope of Part I.

The rules in this part relate to the permitting requirements applicable to the construction, repair, or abandonment of wells. Unless expressly exempt by statute or this rule, all wells must be permitted prior to construction, repair, or abandonment and must be constructed, repaired, or abandoned by a licensed water well contractor. This exemption does not relieve the applicant from obtaining permits which may be required under Chapter 40E-2 (Consumptive Use) or Chapters 40E-4 and 62-330 (Environmental Resource Permits), F.A.C.

Rulemaking Authority 373.044, 373.113, 373.171 FS. Law Implemented 373.303, 373.308, 373.309, 373.316, 373.326, 373.342 FS. History–New 1-1-85, Amended 7-14-14, 6-8-15.

40E-3.041 Permits Required.

(1) Unless expressly exempted by statute or District rule, a permit must be obtained from the District or delegated agency prior to the construction, repair, or abandonment of any water well within the District's jurisdiction.

(2) No test hole or water test well shall be converted to a water well until a well construction permit or modification is obtained. No monitoring well shall be converted to a production well until a well construction permit or modification thereof is obtained for each production well.

(3) If a potable well is proposed to be constructed in an area of known groundwater contamination, the well shall be permitted pursuant to Chapter 62-524, F.A.C.

(4) Permits for construction, repair, modification, or abandonment of wells for which a water use permit is required under Chapter 40E-2, F.A.C., shall not be issued prior to issuance of the water use permit authorizing water use withdrawals.

Rulemaking Authority 373.044, 373.113, 373.171 FS. Law Implemented 373.103, 373.309, 373.313, 373.316 FS. History–New 1-1-85, Amended 3-16-05, Amended 7-14-14, 6-8-15.

40E-3.042 Multiple Wells under a Single Permit.

(1) The construction, repair, modification, or abandonment of:

(a) Up to eight (8) sandpoint irrigation, monitor, recovery, dewatering, or gang wells 4 inches or less in diameter; or,

(b) A Class V air conditioning heat pump system consisting of one supply well and one return well; may be included under one permit provided the conditions of subsection (2) are met.

(2) A multiple well permit as described in subsection (1) will be issued provided:

(a) The wells are constructed in the same geologic material, completed in the same aquifer, and drilled on a contiguous tract of land owned or controlled by the same individual or entity; and,

(b) Each well is the same diameter and constructed of a similar material.

(3) The District will authorize multi-zone monitor wells consisting of multiple observation tubes monitoring different depths all located in a single larger diameter well casing under a single permit. Provisions listed in subsection (2) do not apply to this type of well.

(4) When a single well construction permit is issued for multiple wells as described above, a separate well completion report is required for each of the wells or tubes.

Rulemaking Authority 373.044, 373.113, 373.171, 373.309, 373.337 FS. Law Implemented 373.106(1), 373.309 FS. History–New 6-8-15.

40E-3.051 Exemptions.

(1) The following wells are exempt from Rule 40E-3.041, F.A.C.:

(a) Existing wells exempted under Section 373.316, F.S.

(b) A well exempted under Section 373.303(7), F.S.

(c) A test hole, as defined in subsection 40E-3.021(14), F.A.C.

(d) A well classified as a Class I, Class II, Class III, Class IV, or Class V Groups 2-9 intended for use as an injection well, which has received a permit under Chapter 62-528, F.A.C. Such wells are exempt from the construction standards in this chapter, provided the applicable standards of Chapter 62-528, F.A.C., are met. A well classified as a Class V Group 1 well under Chapter 62-528, F.A.C., is not exempt from Rule 40E-3.041, F.A.C.

(2) These exemptions do not relieve the applicant from obtaining permits which may be required under Chapter 40E-2 (Consumptive Use) or Chapters 40E-4 and 62-330, F.A.C. (Environmental Resource Permits).

Rulemaking Authority 373.044, 373.113, 373.171 FS. Law Implemented 373.303, 373.308, 373.309, 373.313, 373.316, 373.326 FS. History–New 1-1-85, Amended 3-16-05, 7-14-14, 6-8-15.

40E-3.0511 Exceptions and Variances for Well Construction Permits.

Rulemaking Authority 373.044, 373.113, 373.171 FS. Law Implemented 373.303, 373.308, 373.313, 373.316, 373.326 FS. History–New 1-1-85, Amended 12-19-89, 7-2-98, 9-2-98, 6-12-00, Repealed by Section 3, Chapter 2012-31, Laws of Florida, 5-27-12.

40E-3.101 Content of Application.

(1) All applications shall be submitted to the permitting authority, as identified in Rule 40E-3.035, F.A.C., by the owner or by the water well contractor on behalf of the owner. All applications shall be submitted on DEP Form 62-532.900(1), (10-07-10), http://www.flrules.org/Gateway/reference.asp?No=Ref-00576, "State of Florida Permit Application to Construct, Repair, Modify, or Abandon a Well," incorporated by reference herein and available at no cost by contacting the South Florida Water Management District Clerk, 3301 Gun Club Road, West Palm Beach, FL 33406, 1(800) 432-2045, ext. 6436 or (561) 682-6436, and the delegated permitting authorities' offices, as identified in Rule 40E-3.035, F.A.C.

(2) All applications shall be submitted with the required non-refundable fee pursuant to Rule 40E-1.607, F.A.C., or the fee schedule established by the agency to which permitting authority has been delegated, as identified in Rule 40E-3.035, F.A.C.

(3) Applications for permits required by this chapter shall be filed with the District or the entity to which the authority to issue a permit has been delegated, as identified in Rule 40E-3.035, F.A.C. The application for the construction, repair, or abandonment of water well(s) shall contain:

(a) The name, address, telephone number, license number and signature of the licensed contractor who will be constructing the well(s), except in the case of a state agency or political subdivision that needs an indication of approval from the District in order to obtain financing to construct a well. In this case, the District will take action on the application for a permit not signed by a licensed water well contractor with the following condition: "Prior to well construction, a copy of the original application, signed by the licensed water well contractor chosen to construct the well(s), will be submitted to the District";

(b) The name, address, telephone number and signature of the property owner or his agent, if applicable, on whose property the the well(s) is being drilled;

(c) Written authorization from the owner designating the authorized agent, if any;

(d) The location of the well(s) (latitude and longitude to the nearest second and section, township and range), and property site map of each well location, depicting land marks and providing a scale;

(e) The expected cased depth and total depth of the well;

(f) The proposed use of the well;

(g) The proposed grouting interval;

(h) The specification for well construction including the size(s) of the casing to be used, the proposed construction, repair, or abandonment methods, specifications including casing types, casing diameters; open hole or screened intervals, sizes and screen openings; and proposed grouting materials;

(i) The proposed method of construction and completion of each well, or the method of plugging and abandoning of each well;

(j) The anticipated starting date to begin drilling;

(k) The District water use permit number, the water use application number, and each well number from the water use permit Summary of Groundwater (Well) Facilities, if applicable;

(l) A well completion report and/or lithologic or cuttings log for any test hole or water test well and testing results, which is being requested to be converted to a water well;

(m) Applications for public supply wells shall include: the name and address of the water system; the number of persons the

well is intended to serve; and a scaled map showing the well location, property boundaries, existing buildings or physical features, the location of all known and proposed sources of contamination within a 500 feet radius of the proposed well location; and,

(n) Applications for water test wells must be accompanied by a description of the proposed test. The description at a minimum, shall include:

1. Purpose of the test, a brief description of the testing method, and a summary of the results to be provided to the District within 30 days of completion of the testing.

2. Name, address, and telephone number of the person or consulting firm performing the test.

3. A site map showing the location of the water test well(s) and any observation wells.

(4) In addition to the information required to be submitted on the District form, the District staff may specifically request such reasonable additional information as may be necessary to evaluate the hydrologic impacts of the withdrawal to ensure that the impacts will not be harmful to the water resource of the District as set forth in Chapter 40E-2, F.A.C., and that the withdrawals are in compliance with statutory and rule requirements. Pursuant to Section 373.314, F.S., the District will cite a specific rule when requesting such additional information. Such requests for additional information will be made in compliance with Section 120.60, F.S. and Chapter 40E-1, F.A.C.

Rulemaking Authority 373.044, 373.113, 373.171 FS. Law Implemented 373.308, 373.309, 373.313, 373.326, 373.342 FS. History–New 1-1-85, Amended 12-19-89, 11-8-99, 3-16-05, 9-26-12, 6-8-15.

40E-3.301 Conditions for Issuance of Permits.

(1) The applicant shall comply with the applicable provisions of Chapter 373, F.S., and this chapter.

(2) A water use permit, if applicable under Chapter 40E-2, F.A.C., must have already been obtained. If a water use permit has not been obtained, an application for a consumptive use permit must be submitted concurrently with the well construction application and must also be approved by the District prior to issuance of the well construction permit.

(3) The proposed well must not harm the water resources of the District or interfere with existing legal users.

(4) The application must be complete and must meet the requirements of Chapter 373, F.S., and this chapter.

(5) The District or delegated agency shall impose on any permit issued under this chapter such reasonable conditions as are necessary to protect the water resource and to assure that the permitted activity will be consistent with the overall objectives of the District. The District or delegated agency shall attach such conditions to the well construction, repair, or abandonment permit and the conditions shall be performed accordingly.

Rulemaking Authority 373.044, 373.113, 373.171 FS. Law Implemented 373.103, 373.306, 373.308, 373.309, 373.313, 373.342 FS. History–New 1-1-85, Amended 3-16-05, 7-14-14.

40E-3.321 Duration of Permits.

(1) Each permit shall be valid for a period of six (6) months, unless the time limit is extended by the District or delegated agency.

(2) Construction, repair, or abandonment of a well shall not commence or continue after the expiration of a permit.

(3) Extensions of an existing permit shall be granted by the District or delegated agency upon written request if:

(a) Submitted by the permittee prior to the expiration date of the permit, and

(b) The permittee shows circumstances and conditions have not changed substantially since the permit issuance so that the proposed well will not harm the water resource.

(4) A well construction permit may be transferred from one licensed water well contractor to another if the owner or his agent agree to the transfer prior to permit expiration.

Rulemaking Authority 373.044, 373.113, 373.171 FS. Law Implemented 373.308, 373.309, 373.313, 373.326, 373.342 FS. History–New 1-1-85, Amended 3-16-05, 6-8-15.

40E-3.341 Suspension and Revocation.

The District or delegated agency may suspend or revoke a permit to construct, repair or abandon a well by written notice to the permittee under any of the following circumstances:

(1) Material misstatement or misrepresentation in the application for a permit;

(2) Failure to comply with the provisions set forth in the permit;

(3) Disregard or violation of any provisions of this chapter or Chapter 373, Part III, F.S.;

(4) Unforeseen circumstances which may create a danger to the water resources or the public health, safety or welfare, if the well is constructed as permitted; or

(5) Material change of circumstances or conditions from those existing at the time such permit was issued.

Rulemaking Authority 373.044, 373.113, 373.171 FS. Law Implemented 373.103, 373.306, 373.308, 373.309, 373.313, 373.342 FS. History–New 1-1-85, Amended 3-16-05.

40E-3.411 Well Completion Reports.

(1) The water well contractor shall complete and submit DEP Form 62-532.900(2), State of Florida Well Completion Report, (October 7, 2010) (https://www.flrules.org/Gateway/reference.asp?No=Ref-00578), incorporated by reference herein, to the District and delegated agency, as identified in Rule 40E-3.035, F.A.C., for the construction, repair, or abandonment of all wells, regardless of whether a permit is required under Rules 40E-3.041, 40E-3.101, and 40E-3.600, F.A.C. Well completion reports shall be filed with the District and delegated agency, as identified in Rule 40E-3.035, F.A.C., within 30 days of completion of the work, using DEP Form 62-532.900(2). Copies of DEP Form 62-532.900(2) are available at no cost by contacting the South Florida Water Management District Clerk, 3301 Gun Club Road, West Palm Beach, FL 33406, (800)432-2045, ext. 6436 or (561)682-6436, and the delegated permitting authorities' offices, as identified in Rule 40E-3.035, F.A.C. Well completion reports for sites controlled by Chapter 62-761, F.A.C., Underground Storage Tank Systems, may include all monitoring wells for the same site on a single form.

(2) The water well contractor shall keep or cause to be kept by a person in his employ an accurate field log of all well construction, repair, or abandonment activities performed under each permit. Such logs shall be available for inspection at the site during all times when work is in progress.

(3) If no work is performed or if the well is not completed, a report shall be filed within 30 days of the expiration of the permit stating that no well construction was performed under the permit or outlining the status of the incomplete well.

(4) For water test wells, a report on the test results shall be submitted to the District within 30 days of completion of the testing. The report shall also include a request and a proposed schedule to either abandon the water test well or convert the water test well to a production well or monitoring well.

Rulemaking Authority 373.044, 373.113, 373.171 FS. Law Implemented 373.308, 373.309, 373.313, 373.326, 373.342 FS. History–New 1-1-85, Amended 3-16-05, 9-26-12, 6-8-15.

40E-3.451 Emergency Authorization.

(1) Emergency water well construction permits shall be issued by the Executive Director or their designee when one of the following conditions exist which justifies the issuance:

(a) An existing well supplying a particular use has failed and must be immediately replaced;

(b) The health, safety, or general welfare of the people affected by said emergency would be jeopardized without such authorization;

(c) Emergency authorization is needed to immediately mitigate or resolve potentially hazardous degradation of water resources; or

(d) A serious set of unforeseen circumstances occurs which creates the emergency.

(2) Emergency permits may be applied for and issued orally. Mere carelessness or lack of planning on the part of the applicant, contractor or driller will not constitute sufficient cause for the issuance of an emergency permit. If Chapter 40E-2, F.A.C., also applies to the well, an emergency permit may be issued only if, in addition to qualifying under subsection (1) above, an application for a consumptive use permit has been filed with the District. Issuance of an emergency permit will not be evidence of any entitlement to the consumptive use permit.

(3) The applicant for an emergency permit shall submit the application and fee in accordance with Rule 40E-3.101, F.A.C., along with any other requested information within twenty-four hours after making oral application.

Rulemaking Authority 373.044, 373.119, 373.171 FS. Law Implemented 373.308, 373.309, 373.313, 373.326, 373.342 FS. History–New 1-1-85, Amended 7-2-98, 3-16-05, 7-14-14, 6-8-15.

40E-3.461 Inspection.

(1) The District or delegated agency is authorized to inspect any well or abandoned well within its jurisdiction, including those wells permitted under Rule 40E-3.041, F.A.C. Inspections shall be done as necessary to insure conformity with applicable standards. Duly authorized representatives of the District or delegated agency, upon presenting proper identification and at reasonable times, may enter upon any premises for the purpose of such inspection. Such inspection may include, but need not be limited to, geophysical logging, water level measurements, or other methods.

(2) If, based on such inspection, the District or delegated agency finds the standards of this chapter have not been met, the District or delegated agency shall proceed with enforcement actions as prescribed by Chapter 62-531, F.A.C.

(3) A site inspection may be conducted by an authorized representative of the District or delegated agency prior to issuing a permit for construction of a public water supply well.

(4) The District or delegated agency shall be notified at least 24 hours in advance of placement of grout in the annular space of any public water supply well. A District or delegated agency representative may be on site to observe the grouting. If the District or delegated agency is properly notified and a representative is not at the site at the appointed time, the grouting may begin in the absence of a representative.

(5) If, based on an inspection, the District or delegated agency finds any well is an abandoned or incomplete well, the well shall be plugged in accordance with Rule 40E-3.531, F.A.C.

(6) If, based on an inspection, the District or delegated agency determines that applicable laws or rules have not been complied with, it shall disapprove the well. A disapproved well shall not be used until brought into compliance. If compliance cannot be achieved in a reasonable time, the well shall be properly abandoned.

(7) If, based on an inspection, the District determines that any well is a potential hazard to the water resource, the well shall be abandoned in accordance with subsection 62-532.500(4) and Rule 40E-3.531, F.A.C.

(8) In all circumstances, a copy of all applicable well construction permits will be available at the construction site during well construction.

Rulemaking Authority 373.044, 373.171 FS. Law Implemented 373.103, 373.308, 373.309, 373.319 FS. History–New 1-1-85, Amended 3-16-05, 6-8-15.

40E-3.500 Scope of Part II.

The rules in this part relate to the standards and criteria for the construction, repair, and abandonment of wells. All wells within the District unless specifically exempted under Rule 40E-3.051, F.A.C., must comply with these standards regardless of whether a permit is required under Part I.

Rulemaking Authority 373.044, 373.113, 373.171 FS. Law Implemented 373.308, 373.309, 373.313 FS. History–New 1-1-85, Amended 6-8-15.

40E-3.502 Construction Methods.

(1) Water wells must be located, constructed, cased, grouted, plugged, capped, or sealed to prevent uncontrolled surface flow, uncontrolled movement of water from one aquifer or water bearing zone of differing water quality to another, contamination of groundwater or surface water resources, or other adverse impacts. The construction methods and standards in this chapter shall apply to all construction, repair, or abandonment of wells in the District except:

(a) In those areas exempted by the District with the concurrence of the Department; or,

(b) For public water supply wells or limited use public supply wells, which shall be constructed, repaired, or abandoned in accordance with Chapter 62-555 or 64E-8, F.A.C., respectively; or,

(c) For monitor wells, which shall be constructed, repaired, or abandoned in accordance with Chapter 62-761, F.A.C., covering underground storage tank systems; or,

(d) For water wells permitted under Chapter 62-524, F.A.C., delineated areas, which shall be constructed, repaired, or abandoned in accordance with Chapter 62-524, F.A.C., or special criteria developed for specific designated areas; or,

(e) When special well construction conditions have been specified on a water use permit, these conditions shall be attached to applicable well construction permits.

(2) The District may designate special well construction standards areas by emergency rule to prevent transport of surface contaminants to groundwater or movement of introduced or natural contaminants from one aquifer or zone to another. Such

standards will be the minimum necessary to prevent the movement of contaminants and will be in cooperation with other state agencies, local jurisdictions, and the regulated public, in accordance with Chapter 120, F.S., provisions for emergency rulemaking.

Rulemaking Authority 373.044, 373.171, 373.309 FS. Law Implemented 373.113, 373.306, 373.308, 373.309 FS. History–New 1-1-85, Amended 12-19-89, 3-16-05, 6-8-15.

40E-3.504 Location.

(1) Water wells shall be located so as to not pose a threat of contamination to the water resource and to provide for the protection of the health, safety and welfare of the user.

(2) Water wells shall be located to comply with the setback distances in subsection 62-532.400(7), F.A.C. This subsection does not relieve the applicant from the responsibility of complying with the requirements of any other regulatory agency with jurisdiction over the applicant's activities.

(3) The District shall increase these distances if necessary to protect the health, safety and welfare of individuals who may be exposed to ground water contamination.

Rulemaking Authority 373.044, 373.171, 373.309 FS. Law Implemented 373.113, 373.306, 373.308, 373.309 FS. History–New 1-1-85, Amended 3-16-05.

40E-3.507 Casing and Liner Pipe Standards.

(1) All well casing shall conform to the standards identified in subsection 62-532.500(1), F.A.C., incorporated by reference in paragraph 40E-3.036(1)(c), F.A.C.

(2) Wells constructed using telescoping casings shall be considered as a continuous casing provided the following conditions are met:

(a) Any annular space including the overlapped section shall be grouted in accordance with subparagraph 62-532.500(3)(i)4., F.A.C. incorporated by reference in subsection 40E-3.036(2), F.A.C. The grout shall extend from the bottom of the casing to the top of the innermost casing. The use of lead packers is prohibited.

(b) The bottom end of the casing shall extend to or below the water level of the aquifer intended to supply water to the well.

(c) All caving zones below the uppermost consolidated unit shall be cased.

(d) A minimum of 10 feet overlap is required for non-public supply wells. One casing centralizer shall be used within the overlapped section.

(e) A minimum of 20 feet overlap is required for public supply wells. Two casing centralizers shall be used within the overlapped section.

Rulemaking Authority 373.044, 373.171, 373.309 FS. Law Implemented 373.113, 373.306, 373.308, 373.309 FS. History–New 1-1-85, Amended 3-16-05, 9-26-12, 6-8-15.

40E-3.512 Well Construction Requirements.

(1)(a) Materials used in construction shall be reasonably free of contamination.

(b) Water used during construction shall be supplied from a potable well or potable water supply. If the well or water supply is a known source of contamination or is within a known area of contamination, it shall not be used to provide water for well construction.

(2)(a) The well shall be constructed to prevent caving or pumping of sand. A filter pack shall be installed around the screened portion of the well;

(b) The well shall be adequately developed until clear of any drilling fluids, particulate material and turbidity.

(3) For wells obtaining water from consolidated earth materials, a continuous casing shall extend from the upper terminus of the well to the top of the uppermost consolidated unit.

(4) For artesian wells, the casing shall penetrate the entire thickness of the overlying formation above the aquifer. The District may grant waivers for seating of casing within the confining zone above an artesian aquifer provided that:

(a) The casing extends a sufficient distance into the confining zone so as to prevent movement of water from the artesian aquifer to overlying aquifers;

(b) The District determines that such construction will not harm the water resources.

Rulemaking Authority 373.044, 373.171, 373.309 FS. Law Implemented 373.113, 373.306, 373.308, 373.309 FS. History–New 1-1-85, Amended 3-16-05, 9-26-12.

40E-3.517 Grouting and Sealing.

Wells shall be grouted and sealed in accordance with paragraph 62-532.500(3)(i), F.A.C., incorporated by reference in subsection 40E-3.036(2), F.A.C., to protect the water resource from degradation caused by movement of waters along the well annulus either from the surface to the aquifer or between aquifers, and to prevent loss of pressure in artesian aquifers.

(1) All wells that are constructed in a manner which creates an annular space between the casing and the naturally occurring geologic formations shall be grouted and sealed in accordance with the methodologies listed in paragraph 62-532.500(3)(i), F.A.C., incorporated by reference in subsection 40E-3.036(2), F.A.C.

(2) Wells obtaining water from unconsolidated formations, using a method other than jetting or driving a casing, and creating an annular space, shall be grouted from no more than ten (10) feet above the top of the screen to the upper terminus. Borehole cuttings shall not be reintroduced into the annular space.

(3) For jetted wells or sand point wells obtaining water from an unconsolidated formation of a naturally caving nature in which the annular space is completely filled with formation material, only the upper three (3) feet shall be grouted to provide protection from possible contaminated surface water.

(4) For jetted wells or sand point wells circulating drilling fluids to the surface, and obtaining water from a consolidated formation, shall be grouted bottom to top prior to being seated into water bearing formation.

(5) For wells constructed by driven casing, dry bentonite, with an average mesh size of between 4 and 20 U.S. standard sieve size or grain size between 5mm and .85mm, must be added to the continuous casing string at land surface at the beginning and during construction of the well.

(6) All other wells shall be grouted from the bottom of the casing to land surface.

(7) Unless a variance has been granted by the District, grouting and sealing of water wells shall be accomplished in the following manner:

(a) The grout mixture shall consist of either Portland Cement or a natural bentonite slurry for wells and boreholes meeting the requirements in subsection 40E-3.512(7), F.A.C. The mixture shall consist of 5.2 to 5.5 gallons of water per sack of Portland Cement or a mixture of 6.0 gallons of water per sack of Portland Cement with 3 to 7.5 pounds of Bentonite, not to exceed 8% by weight.

(b) The minimum set time for grouting of casing using either Portland Cement or Bentonite before drilling operations may continue is 12 hours.

(c) Grouting of the annular space shall be completed using the tremie pipe, forced pressure, or other equivalent method approved by the District. In all cases, grout will be introduced into the annular space from bottom to top.

(8) Water wells constructed using Bentonite grouts shall meet all the following requirements:

(a) The slurry grout mixture shall be introduced into the annular space from bottom to top. The casing seat must be clean, allowing the casing to set at the total depth bored in a hole reasonably free of drill cuttings;

(b) A formation packer or a 5-foot neat cement plug must be installed at the casing seat;

(c) Neat cement must be placed in the upper ten (10) feet of the annular space to prevent deterioration of, or damage to, the bentonite seal;

(d) Bentonite grout may be used only on monitor, domestic, irrigation, water source, or ground source heat pump installations with a nominal casing diameter of five (5) inches or less. Use of bentonite grout is not allowed on public supply wells, wells in delineated areas, wells where artesian flow occurs, in any identified contamination sites where the contaminants will prevent an adequate seal, or in wells with the water quality concentrations exceeding 10,000 milligrams per liter total dissolved solids;

(e) Bentonite grout may be used for abandonment purposes for any well. However, it cannot be used to abandon a dry well, or a well which flows to surface and cannot be placed any higher in the well than the height of the static water level. Any unsealed remainder above the height of the static water level must be filled with neat cement;

(f) Bentonite chips or pellets used for abandonment purposes may not be placed in any well casing or hole less than three inches in diameter or for sealing the annular space of any well; and,

(g) In all circumstances, the manufacturer's mixing instructions shall be followed.

Rulemaking Authority 373.044, 373.171, 373.309 FS. Law Implemented 373.113, 373.306, 373.308, 373.309 FS. History–New 1-1-85, Amended 3-

16-05, 9-26-12, 6-8-15.

40E-3.521 Well Seals.

Wells shall be covered and sealed in accordance with paragraph 62-532.500(4)(a), F.A.C., incorporated by reference in paragraph 40E-3.036(1)(c), F.A.C.

(1) Permanent Well Seals.

(a) Wells shall be properly sealed to prevent the movement of contaminants and surface water into the well.

(b) The top of the well casing shall at a minimum extend 12 inches above land surface and if practical, 12 inches above the 100-year flood elevation.

Rulemaking Authority 373.044, 373.171, 373.309 FS. Law Implemented 373.113, 373.306, 373.308, 373.309 FS. History–New 3-16-05, Amended 9-26-12.

40E-3.525 Explosives.

The use of explosives in well construction or development is prohibited unless specifically approved by the Department.

Rulemaking Authority 373.044, 373.171, 373.309 FS. Law Implemented 373.113, 373.306, 373.308, 373.309 FS. History–New 1-1-85, Amended 12-19-89, 3-16-05.

40E-3.529 Flowing Wells.

If the well flows at land surface, a valve shall be provided and maintained to control the discharge from the well.

Rulemaking Authority 373.044, 373.171, 373.309 FS. Law Implemented 373.113, 373.306, 373.308, 373.309 FS. History–New 1-1-85, Amended 3-16-05.

40E-3.531 Abandoned Well Plugging.

(1) Any well which was not constructed in accordance with the standards of this chapter and fails to be corrected upon written notice in accordance with subsection 40E-3.461(2), F.A.C., shall be deemed an abandoned well.

(a) Any well, which has been permanently disconnected from pumping equipment and has not been converted to a monitoring well, shall be deemed to be abandoned.

(b) The owner of the property, on which an abandoned well is located, shall be responsible for ensuring that all abandoned wells on the property are properly plugged by a licensed water well contractor.

(2) Any well which is an abandoned artesian well under Section 373.203(1), F.S., shall be plugged in accordance with this section.

(3) All abandoned wells shall be plugged by filling them from bottom to top with grout within a time specified by the District. The work shall be performed by a licensed water well contractor.

(a) Use of clean aggregate to bridge cavernous or lost circulation zones shall be allowed if measurements indicate loss of grout and the borehole or screened portion does not connect two (2) or more aquifers of significantly differing water quality. Prior approval to use aggregate or other material must be obtained from the District.

(b) Obstructions shall be cleared from all wells prior to plugging.

(4) Requests to abandon a well shall be submitted on the application form provided by the District.

Rulemaking Authority 373.044, 373.171, 373.309 FS. Law Implemented 373.113, 373.306, 373.308, 373.309 FS. History–New 1-1-85, Amended 3-16-05.

40E-3.600 Scope of Part III.

(1) This part grants a general permit for certain specified well construction, repair, or abandonment activities which have been determined by the District to exist in unique geographic areas.

(2) The construction, repair, or abandonment of wells in accordance with Rule 40E-3.601, F.A.C., is authorized subject to the requirements of Part III of this chapter.

Rulemaking Authority 373.044, 373.113, 373.171, 373.309 FS. Law Implemented, 373.113, 373.118, 373.306, 373.308, 373.309, 373.342 FS. History–New 9-26-12, Amended 6-8-15.

40E-3.601 General Permit for Water Wells within a Portion of Southern Miami-Dade County.

(1) It is determined that compliance with Rules 40E-3.101, 40E-3.301, 40E-3.321, 40E-3.411, 40E-3.507, 40E-3.512, 40E-3.517 and 40E-3.531, F.A.C., will create an undue hardship to those persons proposing to construct, repair or abandon wells used for agricultural water use within south Miami-Dade County. It is further determined that the continued existence of these wells and method of well construction has not been shown to impair the ground water resources. However, if the continued existence of the rule is determined in any way to impair the purpose and intent of Chapter 373, Part III, F.S., adversely impact the water resources, not be in the public interest, or for any other reason the District may delete the General Permit threshold at any time in accordance with applicable law.

(2) A general permit is granted to those wells intended for agricultural use which do not exceed 25 feet in depth and which are located within the area depicted on Figure 3-1 and described as follows:

BEGINNING at the intersection of the centerline of South Florida Water Management District's Levee 31 West and the south line of Section 7, Township 58 South, Range 38 East; Thence, Easterly along the south line of said Section 7 to the centerline of South Florida Water Management District's Canal 111; Thence, Southeasterly, Southerly and Southeasterly along said centerline of Canal 111 to the centerline of State Road 5 (U.S. Highway 1); Thence, Southerly along said centerline of State Road 5 (U.S. Highway 1) to the Dade-Monroe County line and Florida Bay; Thence, Northeasterly along the Dade-Monroe County line to the Western shore of Little Card Sound; Thence, Northeasterly and Northerly along the Western shore of Little Card Sound and Biscayne Bay to the south line of Section 14, Township 56 South, Range 40 East; Thence, Westerly along the section lines to the centerline of State Road 821; Thence, Northerly along said centerline of State Road 821 to the South line of the North one-half of Section 17, Township 56 South, Range 40 East; Thence, Westerly along the one-quarter section lines to the Southwest corner of the Northwest one-quarter of said Section 18; Thence, Northerly to the Southeast corner of Section 12, Township 56 South, Range 39 East; Thence, Westerly along the south line of said Section 12 to the Southwest corner of said Section 12; Thence, Northerly along the West line of said Section 12 to the centerline of South Florida Water Management District's Canal 1 West; Thence, Northwesterly and Westerly along said centerline of Canal 1 West and its Westerly Extension to the centerline of South Florida Water Management District's Levee 31 North; Thence, Southerly along the centerline of said Levee 31 North and the centerline of South Florida Water Management District's Levee 31 West to the POINT OF BEGINNING.

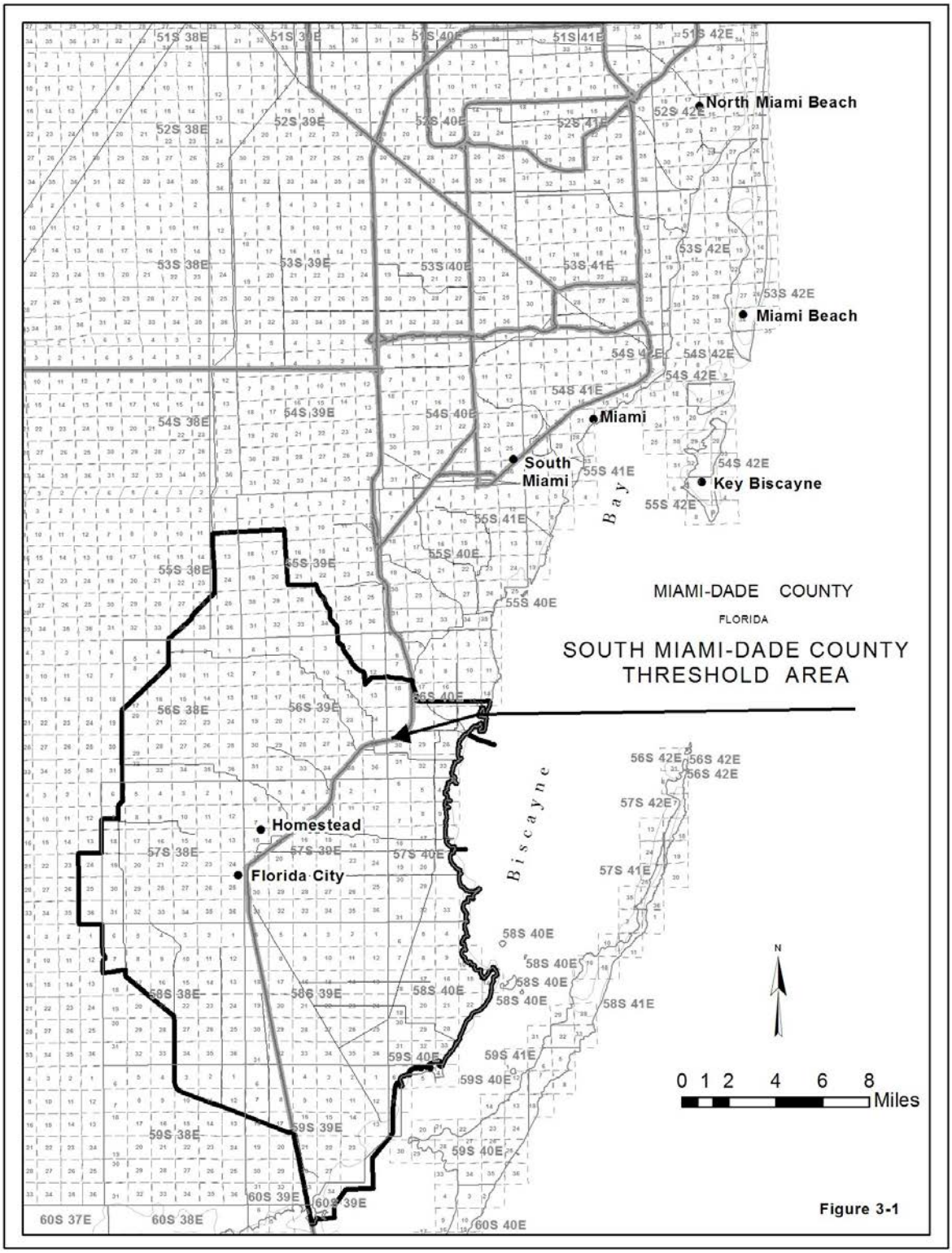

Figure 3-1

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.118, 373.309, 373.313, 373.326, 373.342 FS. History–New 9-26-12.

Rules of the
South Florida Water Management District

Artificial Recharge
CHAPTER 40E-5, F.A.C.

Effective: September 7, 2015

CHAPTER 40E-5
ARTIFICIAL RECHARGE

40E-5.011 Policy and Purpose
40E-5.021 Definitions
40E-5.031 Implementation
40E-5.041 Permits Required
40E-5.051 Exemptions
40E-5.101 Content of Application
40E-5.301 Conditions for Permit Issuance
40E-5.321 Duration of Permit
40E-5.331 Modification of Permit
40E-5.381 Limiting Conditions

40E-5.011 Policy and Purpose.

(1) This chapter implements Sections 373.106, F.S., which authorizes the District to issue permits for projects involving artificial recharge or the intentional introduction of water into any underground formation, except activities under Chapter 377, F.S. Projects that inject waters into aquifers that contain a total dissolved solids concentration greater than 10,000 mg/L or for the purpose of disposal are not regulated under this chapter.

(2) It is the intent of the District to consolidate permits issued pursuant to this chapter with consumptive uses regulated under Chapter 40E-2, F.A.C., when such permit is required. Thus, if water is obtained from a regulated surface or groundwater source, authorization under this chapter shall be issued in conjunction with the associated consumptive use permit. If a consumptive use permit for the project is not required pursuant to Chapter 40E-2, F.A.C., (e.g., the recharge water is reclaimed waste water), a separate permit shall be obtained pursuant to this chapter.

(3) Nothing herein relieves the applicant from complying with the requirements of underground injection control (UIC) permits issued by the Department of Environmental Protection pursuant to Chapter 62-528, F.A.C.

(4) This chapter does not regulate operations of Artificial Recharge Systems authorized under Section 373.087 or 373.1502, F.S.

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.106(1) FS. History–New 9-3-81, Amended 8-14-03, 7-14-14.

40E-5.021 Definitions.

When used in this chapter:

(1) "Aquifer storage and recovery" means a well system operated for the purpose of injecting and storing water in an aquifer for direct retrieval and use.

(2) "Artificial recharge" means the practice of introducing water into an aquifer through a horizontal or vertical well that increases the availability of water for consumptive or non-consumptive uses (e.g., a hydraulic barrier against saltwater intrusion, aquifer recharge systems, aquifer storage and recovery systems or heat exchange systems).

(3) "Heat exchange" means a well or combination of wells that remove groundwater associated with cooling or heating systems where the water withdrawn is returned to an aquifer.

(4) "Storage horizon" or "injection horizon" means the geological underground formation, group of formations, or part of a formation that receives or stores the injected water.

(5) "Underground Source of Drinking Water" or "USDW" means an aquifer or a portion of an aquifer that:

(a) Supplies drinking water for human consumption; is classified by Rule 62-520.410, F.A.C., as Class G-I or G-II ground waters; or, contains a total dissolved solids concentration of less than 10,000 mg/L; and

(b) Is not an "exempted aquifer," pursuant to Chapter 62-528, F.A.C.

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.106 FS. History–New 9-3-81, Formerly 16K-1.05(2), (9), Amended 8-14-03.

40E-5.031 Implementation.

The effective dates for the artificial recharge permitting program established in this chapter are as follows:

(1) January 12, 1977, for the portion of the District formerly within the Ridge and Lower Gulf Coast Water Management

District annexed to the District by operation of Section 1, Chapter 76-243, Laws of Florida.

(2) March 2, 1974, for the remainder of the District.

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.106(1) FS. History–New 9-3-81, Formerly 16K-2.011(1)(a).

40E-5.041 Permits Required.

(1) Unless expressly exempt by law or District rule, a permit is required pursuant to this chapter to operate an artificial recharge system. The permit applicant shall provide reasonable assurances that the proposed activity meets the criteria set forth in Rule 40E-5.301, F.A.C. In the event the project also requires a consumptive use permit pursuant to Chapter 40E-2, F.A.C., demonstration of reasonable assurances required under Rule 40E-5.301, F.A.C., shall be made in conjunction with application for such permit and a consolidated permit will be issued.

(2) Operation of all artificial recharge systems existing at the time of adoption of this rule may be continued only with a permit issued as provided herein. Application for a permit under the provisions of this rule for existing artificial recharge systems that are not currently approved under an existing consumptive use permit shall be made within a period of two years from the effective date of implementation of this rule.

(3) Nothing herein relieves the applicant from complying with the requirements of the UIC program including the acquisition of and compliance with permits issued pursuant to Chapter 62-528, F.A.C.

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.106(1) FS. History–New 9-3-81, Formerly 16K-2.02(1), Amended 8-14-03, 7-14-14, 9-7-15.

40E-5.051 Exemptions.

No permit is required under Rule 40E-5.041, F.A.C., for injection wells permitted under Chapter 377, F.S., or for projects authorized under Section 373.087 or 373.1502, F.S.

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.106(1) FS. History–New 9-3-81, Formerly 16K-2.02(1), Amended 8-14-03.

40E-5.101 Content of Application.

(1) Applications for permits required by this chapter shall be filed electronically at www.sfwmd.gov/ePermitting, or at the South Florida Water Management District Regulation Reception Desk, 3301 Gun Club Road, West Palm Beach, FL 33406, or at any of the District's Service Centers. The addresses and phone numbers of the District's Service Centers are available online at www.sfwmd.gov, "Locations." Water Use Permit Application, Form No. 1379 or 1391, which is incorporated by reference in subsections 40E-2.101(3) and (4), F.A.C., shall contain:

(a) The appropriate permit application processing fee required by Rule 40E-1.607, F.A.C.; and,

(b) The information required in Section 373.229(1), F.S.; and,

(c) Information sufficient to show that the use meets the criteria and conditions established in Rules 40E-2.301 and 40E-5.301, F.A.C.

(2) All final plans, calculations, analyses, or other documents, submitted as part of a permit application are required to be signed and sealed by an appropriate registered professional pursuant to Sections 373.117 or 492.111, F.S.

Rulemaking Authority 373.044, 373.113, 373.229 FS. Law Implemented 373.106(1) FS. History–New 9-3-81, Formerly 16K-2.02(2), Amended 5-30-82, 8-14-03, 10-23-12, 9-7-15.

40E-5.301 Conditions for Permit Issuance.

In order to obtain a permit, permit renewal, or permit modification pursuant to this chapter, an applicant must give reasonable assurances that the proposed diversion of water to be introduced into an aquifer and the impact of introducing and recovering the water from an aquifer:

(1) Shall not violate the conditions of issuance in Rule 40E-2.301, F.A.C., with regard to the impacts associated with diverting source water for: (i) injection, (ii) storage, and (iii) recovery.

(2) For artificial recharge systems that inject water sources not currently regulated under Chapter 40E-2, F.A.C. (e.g., use of reclaimed water), the system shall not cause water quality changes that would interfere with existing legal uses;

(3) Satisfies the criteria contained in the "Applicant's Handbook for Water Use Permit Applications within the South Florida

Water Management District," incorporated by reference in Rule 40E-2.091, F.A.C.; and

(4) Meets state water quality standards as demonstrated through the issuance of a permit under Chapter 62-528, F.A.C.

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.106(1) FS. History–New 8-14-03, Amended 7-14-14.

40E-5.321 Duration of Permit.

The duration of the permit issued pursuant to this chapter shall be 20 years or the demonstrated period of need for the project, whichever is less.

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.106(1) FS. History–New 8-14-03.

40E-5.331 Modification of Permit.

Modification of a permit issued pursuant to this chapter or a consumptive use permit containing an authorization as specified herein shall be in accordance with the provisions in subsection 40E-2.331(1), F.A.C.

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.106(1) FS. History–New 8-14-03.

40E-5.381 Limiting Conditions.

The District shall impose on any permit granted under this chapter such reasonable standards and special permit conditions necessary to assure that the permitted activity is consistent with the overall objectives of the District, will not be harmful to the water resources of the District, is reasonable-beneficial, will not interfere with any presently existing legal uses, and is consistent with the public interest.

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.079, 373.083, 373.106(1), 373.219 FS. History–New 8-14-03, Amended 10-23-12.

Rules of the
South Florida Water Management District

Minimum Flows and Levels
CHAPTER 40E-8, F.A.C.

Effective: September 7, 2015

CHAPTER 40E-8
MINIMUM FLOWS AND LEVELS

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40E-8.021 Definitions
PART II MFL CRITERIA FOR LOWER EAST COAST REGIONAL PLANNING AREA
40E-8.221 Minimum Flows and Levels (MFLs): Surface Waters
40E-8.231 Minimum Levels: Aquifers
PART III MFL CRITERIA FOR LOWER WEST COAST REGIONAL PLANNING AREA, MFL CRITERIA FOR KISSIMMEE BASIN REGIONAL PLANNING AREA, AND MFL CRITERIA FOR UPPER EAST COAST REGIONAL PLANNING AREA
40E-8.321 Minimum Flows and Levels (MFLs): Surface Waters
40E-8.331 Minimum Levels: Aquifers
40E-8.341 Minimum Flows and Levels (MFLs): Surface Waters for Upper East Coast Regional Planning Area
40E-8.351 Minimum Levels: Surface Waters for Kissimmee Basin Regional Planning Area.
PART IV IMPLEMENTATION
40E-8.421 Prevention and Recovery Strategies
40E-8.431 Consumptive Use Permits
40E-8.441 Water Shortage Plan Implementation

PART I GENERAL

40E-8.011 Purpose and General Provisions.

(1) The purpose of this chapter is:

(a) To establish minimum flows for specific surface watercourses and minimum water levels for specific surface waters and specific aquifers within the South Florida Water Management District, pursuant to Section 373.042, F.S.; and

(b) To establish the rule framework for implementation of recovery and prevention strategies, developed pursuant to Section 373.0421, F.S.

(2) Minimum flows are established to identify where further withdrawals would cause significant harm to the water resources, or to the ecology of the area. Minimum levels are established to identify where further withdrawals would cause significant harm to the water resources of the area. Specific minimum flows and levels (MFLs) are established in this rule for specified priority water bodies that have been designated pursuant to Section 373.042(2), F.S.

(3) The MFLs established herein are based on existing best available information, and will be periodically reviewed, at least every five years, based on new information and changing water resource conditions. Revisions to established MFLs will be peer reviewed as required by Section 373.042, F.S., prior to rule adoption. The minimum flow criteria for the Caloosahatchee River in subsection 40E-8.221(2), F.A.C., shall be reviewed within one year of the effective date of this rule, September 10, 2001, and amended, as necessary, based on best available information.

(4) The recovery and prevention strategies set forth in Rule 40E-8.421, F.A.C., the consumptive use permitting procedures described in paragraph 40E-2.301(1)(i), Rule 40E-8.431, F.A.C., Section 3.9 of the “Applicant’s Handboook for Water Use Permit Applications within the South Florida Water Management District,” incorporated by reference in Rule 40E-2.091, F.A.C., the water shortage plan implementation provisions specified in Rules 40E-8.441, 40E-21.531 and 40E-21.541, F.A.C., and Chapter 40E-22, Part III, F.A.C., are inseparable components of the MFLs established in Rules 40E-8.321 and 40E-8.331, F.A.C. The District would not have adopted the MFLs set forth in Rules 40E-8.321 and 40E-8.331, F.A.C., for Lake Okeechobee, the Everglades, the Biscayne Aquifer, the Lower West Coast Aquifers, and the Caloosahatchee River without simultaneously adopting their related implementation rules. If the rules cited above, as they pertain to a specified MFL water body, are found to be invalid, in whole or in part, such specified minimum flow(s) or level(s) in Rule 40E-8.321 or 40E-8.331, F.A.C., (including Lake Okeechobee, Everglades, Biscayne Aquifer, Lower West Coast Aquifers, Caloosahatchee River) (month, year) shall not be adopted, or if already in effect, shall not continue to be applied, until the District amends the applicable regional water supply plan(s), as necessary, and amends the subject rules, as necessary to address the reason for invalidity consistent with the requirements of Section 373.0421, F.S. This

section shall be triggered after a rule is found to be invalid pursuant to a final order issued under Section 120.56, F.S., and after appellate review remedies have been exhausted.

(5) In concert with establishment of the MFL for the Northwest Fork of the Loxahatchee River in subsection 40E-8.221(5), F.A.C., the District commits to the following activities that are described in greater detail in the Recovery and Prevention Strategy section, subsection 40E-8.421(6), F.A.C.:

(a) Restore freshwater flows to the Northwest Fork of the Loxahatchee River beyond the MFL by developing programs and projects that will provide surface water flows as identified in a practical restoration goal and plan, to be developed with the Florida Department of Environmental Protection.

(b) Implement the restoration plan through structural and non-structural projects associated with the Comprehensive Everglades Restoration Plan and the regional water supply plan;

(c) Establish water reservations to deliver and protect water supplies for restoration of the Loxahatchee River; and

(d) Revise the MFL and the associated recovery and prevention strategy, as necessary, to be consistent with established restoration goals and future water reservations.

(e) Establish MFLs for other tributaries to the Northwest Fork of the Loxahatchee River including Loxahatchee Slough, Cypress Creek, Kitching Creek and Hobe Grove Ditch as committed to in the District's Priority Water Body List, as updated.

Rulemaking Authority §§ 9, 10 P.L. 83-358, 373.044, 373.113, 373.171 FS. Law Implemented 373.016, 373.036, 373.042, 373.0421, 373.709 FS. History–New 9-10-01, Amended 4-1-03, 1-19-06, 10-23-12, 7-14-14.

40E-8.021 Definitions.

The terms set forth herein shall have the meanings ascribed to them, unless the context clearly indicates otherwise, and such meanings shall apply throughout the rules contained in this chapter. The terms defined in Rule 40E-8.021, F.A.C., shall apply throughout the District's consumptive use permit rules. In the event of a conflict or difference between the definitions contained in Rule 40E-8.021, F.A.C., and the definitions set forth in other District rules, the definitions in this Rule 40E-8.021, F.A.C., shall control for purposes of this chapter.

(1) Biscayne Aquifer – means the highly permeable surficial strata (hydraulic conductivities generally greater than 500 ft/day) that occur within Monroe, Miami-Dade (excluding those portions of coastal Monroe and Miami-Dade counties that discharge groundwater into Florida and Biscayne Bays), eastern Broward, and portions of eastern Palm Beach counties.

(2) Caloosahatchee River – means the surface waters that flow through the S-79 structure, combined with tributary contributions below S-79 that collectively flow southwest to San Carlos Bay.

(3) C&SF Project – means the project for Central and Southern Florida authorized under the heading 'CENTRAL AND SOUTHERN FLORIDA' in section 203 of the Flood Control Act of 1948 (Chapter 771).

(4) CERP – means the Comprehensive Everglades Restoration Plan contained in the 'Final Integrated Feasibility Report and Programmatic Environmental Impact Statement', dated April 1, 1999, as modified by the Water Resources Development Act of 2000.

(5) Certification or Certify – means the formal determination by the District, through a validation process consistent with state and federal law, of the total amount of water made available by a project or project phase of a recovery or prevention strategy, as appropriate, for natural systems and other uses.

(6) Direct Withdrawal means:

(a) A ground water withdrawal that causes a water table drawdown greater than 0.1 feet, as determined using a model accepted by the District, at any location beneath the MFL surface water body or aquifer, up through a 1 in 10 year drought; or

(b) A surface water withdrawal from facilities physically located within the boundaries of a MFL surface water body.

(7) Everglades – means the lands and waters included within Water Conservation Areas, the Holeyland/Rotenberger wildlife management areas, and the freshwater portions of the Everglades National Park.

(8) Northeast Subregion of Florida Bay (hereinafter "Florida Bay") – means the bays, basins, and sounds within Taylor Slough and the C-111 Canal basin watersheds, including Long Sound, Little Blackwater Sound, Blackwater Sound, Buttonwood Sound, Joe Bay, Little Madeira Bay, Madeira Bay, Terrapin Bay, Eagle Key Basin, and other open waters of Florida Bay northeast of a boundary line between Terrapin Bay and Plantation Key (see Map 2).

(9) Harm – means the temporary loss of water resource functions, as defined for consumptive use permitting in Chapter 40E-2, F.A.C., that results from a change in surface or ground water hydrology and takes a period of one to two years of average rainfall

conditions to recover.

(10) Indirect Withdrawal – means the withdrawal of water from a water source for a consumptive use that receives surface water or ground water from an MFL water body or is tributary to an MFL water body.

(11) Lake Istokpoga – means the lands and waters contained within the Lake below 40.0 feet NGVD, the top of the U.S. Army Corps of Engineers' regulation schedule.

(12) Lake Okeechobee – means the lands and waters contained within the perimeter of the Hoover Dike.

(13) LEC Plan – means the Lower East Coast Regional Water Supply Plan – May 2000, including all three volumes.

(14) Lower West Coast Aquifers – means the lower Tamiami aquifer, sandstone aquifer and the mid-Hawthorn aquifer that occur within Charlotte, Hendry, Glades, Lee and Collier counties.

(15) LWC Plan – means the Lower West Coast Regional Water Supply Plan – April 2000, including all three volumes.

(16) Minimum Flow – means a flow established by the District pursuant to Sections 373.042 and 373.0421, F.S., for a given water body and set forth in Parts II and III of this chapter, at which further withdrawals would be significantly harmful to the water resources or ecology of the area.

(17) MFL Exceedance – means to fall below a minimum flow or level, which is established in Parts II and III of this chapter, for a duration greater than specified for the MFL water body.

(18) MFL Violation – means to fall below a minimum flow or minimum level, which is established in Parts II and III of this chapter, for a duration and frequency greater than specified for the MFL water body. Unless otherwise specified herein, in determining the frequency with which water flows and levels fall below an established MFL for purposes of determining an MFL violation, a "year" means 365 days from the last day of the previous MFL exceedance.

(19) Minimum Level – means the level of groundwater in an aquifer or the level of surface water established by the District pursuant to Sections 373.042 and 373.0421, F.S., in Parts II and III of this chapter, at which further withdrawals would be significantly harmful to the water resources of the area.

(20) MFL Water Body – means any surface water, watercourse, or aquifer for which an MFL is established in Part II or III of this chapter.

(21) Northwest Fork of the Loxahatchee River: Means those areas defined below:

(a) Northwest Fork of the Loxahatchee River that has been federally designated as Wild, Scenic and Recreational uses (as defined in the Loxahatchee River Wild and Scenic River Management Plan 2000) (see Map 1, incorporated herein), including the river channel that extends from river mile 6.0 (latitude 26.9856, longitude 80.1426) located near the eastern edge of Jonathan Dickinson State Park and continues upstream to the G-92 structure (latitude 26.91014, longitude 80.17578), including the South Indian Water Control District Canal C-14. The river channel includes the physical water flow courses and adjacent floodplain up to the limits of the floodplain swamp and wetlands within Riverbend Park, as determined by state wetland delineation criteria;

(b) Cypress Creek which extends westward from river mile 10.6 to the intersection of Gulf Stream Citrus Road (latitude 26.96484, longitude 80.1855) located approximately one mile west of the Florida Turnpike and includes its natural river channels and contiguous floodplain as determined by state wetland delineation criteria;

(c) Kitching Creek which extends from river mile 8.1 (latitude 26.9908, longitude 80.1540) northward through Jonathan Dickinson State Park to north of Bridge Road (latitude 27.05513, longitude 80.17580), including its natural river channels and contiguous floodplain as determined by state wetland delineation criteria; and

(d) Hobe Grove Ditch which extends west from river mile 9.1 (latitude 26.9854, longitude 80.1594) westward to the Hobe-St. Lucie Conservancy District pump station outfall (latitude 26.5908, longitude 80.1031) including its natural river channels and contiguous floodplain as determined by state wetland delineation criteria.

(22) Operations – means activities taken by the District for the movement of surface water through works of the District pursuant to Chapter 373, F.S.

(23) Parts Per Thousand (ppt) – means in the measurement of salinity the total amount of salt in grams per 1000 grams of water. Practical salinity units (psu) similarly means a measure of salinity, but one that is based on conductivity of water at a standard temperature and pressure. Both terms are used interchangeably for purposes of this rule.

(24) Prevention Strategy(ies) – means the structural and non-structural actions approved by the District in regional water supply plans, pursuant to Section 373.0421, F.S., or by rule, for areas where MFLs are currently not violated, but are projected to be violated within twenty (20) years of the establishment of the minimum flow or level, if said prevention strategies are not implemented.

(25) Recovery Strategy(ies) – means the structural and non-structural actions approved by the District in regional water supply plans, pursuant to Section 373.0421, F.S., or by rule, for areas where MFLs are currently violated.

(26) Regional Water Supply Plan – means a plan approved by the District pursuant to Section 373.709, F.S.

(27) St. Lucie River North Fork – means the surface waters that extend from the Gordy Road Bridge structure (state plane coordinates, x851212.831, y1116105.7470), combined with tributary contributions below Gordy Road and collectively flow south to the confluence with the C-24 canal (state plane coordinates, x873,712.20, y1064,390.41).

(28) St. Lucie River South Fork – means the surface waters that extend from the culverts located at state plane coordinates x902,512.67, y1,001,799.91, north to the confluence of the river and the St. Lucie Canal (C-44).

(29) St. Lucie Estuary – means the surface water body south of the confluence of the St. Lucie River North Fork and C-24, north of the confluence of the St. Lucie River South Fork and C-44, and west of the western boundary of the Intracoastal Waterway, exclusive of canals.

(30) Serious Harm – means the long-term loss of water resource functions, as addressed in Chapters 40E-21 and 40E-22, F.A.C., resulting from a change in surface or ground water hydrology.

(31) Significant Harm – means the temporary loss of water resource functions, which result from a change in surface or ground water hydrology, that takes more than two years to recover, but which is considered less severe than serious harm. The specific water resource functions addressed by an MFL and the duration of the recovery period associated with significant harm are defined for each priority water body based on the MFL technical support document.

Rulemaking Authority §§ 9, 10 P.L. 83-358, 373.044, 373.113, 373.119, 373.129, 373.136, 373.171 FS. Law Implemented 373.016, 373.036, 373.042, 373.0421, 373.175, 373.216, 373.219, 373.223, 373.246, 373.709 FS. History–New 9-10-01, Amended 11-11-02, 4-1-03, 1-19-06, 12-12-06, 10-23-12, 9-7-15.

PART II MFL CRITERIA FOR LOWER EAST COAST REGIONAL PLANNING AREA

40E-8.221 Minimum Flows and Levels (MFLs): Surface Waters.

The MFLs contained in this Part identify the point at which further withdrawals would cause significant harm to the water resources, or ecology, of the area as applicable, pursuant to Sections 373.042 and 373.0421, F.S. It is the District's intent to correct or prevent the violation of these MFLs through management of the water resources and implementation of a recovery strategy.

(1) Lake Okeechobee. An MFL violation occurs in Lake Okeechobee when an exceedance, as defined herein, occurs more than once every six years. An "exceedance" is a decline below 11 feet NGVD for more than 80, non-consecutive or consecutive, days, during an eighteen month period. The eighteen month period shall be initiated following the first day Lake Okeechobee falls below 11 feet NGVD, and shall not include more than one wet season, defined as May 31st through October 31st of any given calendar year.

(2) Caloosahatchee River. A minimum mean monthly flow of 300 CFS is necessary to maintain sufficient salinities at S-79 in order to prevent a MFL exceedance. A MFL exceedance occurs during a 365 day period, when:

(a) A 30-day average salinity concentration exceeds 10 parts per thousand at the Ft. Myers salinity station (measured at 20% of the total river depth from the water surface at a location of latitude 263907.260, longitude 815209.296); or

(b) A single, daily average salinity exceeds a concentration of 20 parts per thousand at the Ft. Myers salinity station. Exceedance of either paragraph (a) or (b), for two consecutive years is a violation of the MFL.

(3) Everglades.

(a) Criteria for Peat-Forming Wetlands. Water levels within wetlands overlying organic peat soils within the water conservation areas, Rotenberger and Holeyland wildlife management areas, and Shark River Slough (Everglades National Park) shall not fall 1.0 feet or more below ground surface, as measured at a key gage, for one or more days during a period in which the water level has remained below ground for a minimum of 30 days, at specific return frequencies as specified in Table 1, below.

(b) Criteria for Marl-Forming Wetlands. Water levels within marl-forming wetlands that are located east and west of Shark River Slough, the Rocky Glades, and Taylor Slough within Everglades National Park, shall not fall 1.5 feet below ground surface, as measured at a key gage, for one or more days during a period in which the water level has remained below ground for a minimum of 90 days, at specific return frequencies for different areas, as identified in Table 1, below.

The MFL criteria listed in Table 1 are based on existing changes and structural alterations to the pre-drainage conditions of the Everglades. It is the District's intent through implementation of the LEC Plan and the CERP to achieve minimum hydropattern return frequencies that approximate CERP compatible pre-drainage conditions in the Everglades. As a result, as the existing

structural changes and alterations are corrected, the MFL criteria contained herein will be modified through a rule amendment consistent with the LEC Plan and the CERP.

(4) Northwest Fork of the Loxahatchee River.

(a) An enhanced freshwater regime is necessary to prevent significant harm to the water resources and ecology of the Northwest Fork of the Loxahatchee River, pursuant to Sections 373.042 and 373.0421, F.S. By establishing the MFL set forth in paragraphs (b) and (c), along with implementation of the associated recovery strategy, it is the interim goal of the District to provide sufficient freshwater flows to create at River Mile 9.2 the freshwater regime found at River Mile 10.2.

(b) A MFL violation occurs within the Northwest fork of the Loxahatchee River when an exceedance, as defined in paragraph (c), occurs more than once in a six year period.

(c) A MFL exceedance occurs within the Northwest Fork of the Loxahatchee River when:

1. Flows over Lainhart Dam decline below 35 cfs for more than 20 consecutive days; or

2. The average daily salinity concentration expressed as a 20-day rolling average exceeds two parts per thousand. The average daily salinity will be representative of mid-depth in the water column (average of salinities measured at 0.5 meters below the surface and 0.5 meters above the bottom) at river mile 9.2 (latitude 26.9839, longitude 80.1609).

(d) In addition to this MFL, which is intended to achieve partial enhancement of the Northwest Fork of the Loxahatchee River to prevent significant harm, restoration of the Loxahatchee River beyond the MFL will be addressed pursuant to subsection 40E-8.421(6), F.A.C., and other applicable provisions of state law. This MFL will be reviewed within two years of adoption and revised, if necessary, to ensure consistency with the restoration goal and plan identified pursuant to Rule 40E-8.421, F.A.C., or other applicable provisions of state law.

(5) Florida Bay.

(a) The minimum flow is that necessary to maintain salinity as described in paragraph (b), below. A net discharge into northeastern Florida Bay of 105,000 acre-feet of water over a 365-day period (a running total measured at West Highway Creek, at $25^0$14'33" north and $80^0$26'50" west; Trout Creek, at $25^0$12'53" north and $80^0$32'01" west; Mud Creek, at $25^0$12'09" north and $80^0$35'01" west; Taylor River, at $25^0$11'27" north and $80^0$38'21" west; and McCormick Creek, at $25^0$10'03" north and $80^0$43'55" west), is estimated to be necessary to maintain salinity as described in paragraph (b), below.

(b) An exceedance of the minimum flow criteria will be deemed to occur when the average salinity over 30 or more consecutive days exceeds 30 parts per thousand at the Taylor River salinity monitoring station, located at $25^0$13'29" north and $80^0$39'10" west. Multiple events of 30 or more day periods with salinity greater than 30 parts per thousand, occurring within a single calendar year, are considered as a single exceedance.

(c) A minimum flow violation occurs when an exceedance occurs during each of two consecutive years, more often than once in a ten-year period. By this definition, three consecutive years of exceedances constitute a violation.

Rulemaking Authority §§ 9, 10 P.L. 83-358, 373.042, 373.044, 373.113, 373.119, 373.129, 373.136, 373.171 FS. Law Implemented 373.016, 373.036, 373.042, 373.0421, 373.175, 373.216, 373.219, 373.223, 373.246, 373.709 FS. History–New 9-10-01, Amended 4-1-03, 12-12-06.

Table 1. Minimum water levels, duration and return frequencies for key water management gages located within the Everglades [1,2, 3]

Area	Key Gage	Soil Type & MFL Criteria	Return Frequency (years) (3)-(4)
WCA-1	1-7	Peat(1)	1 in 4
WCA-2A	2A-17	Peat	1 in 4
WCA-2B	2B-21	Peat	1 in 4
WCA-3A North	3A-NE	Peat	1 in 2
WCA-3A North	3A-NW	Peat	1 in 4
WCA-3A North	3A-2	Peat	1 in 4
WCA-3A North	3A-3	Peat	1 in 3
WCA-3A Central	3A-4	Peat	1 in 4
WCA-3A South	3A-28	Peat	1 in 4
WCA-3B	3B-SE	Peat	1 in 7
Rotenberger WMA	Rotts	Peat	1 in 2

Holeyland WMA	HoleyG	Peat	1 in 3
NE Shark Slough	NESRS-2	Peat	1 in 10
Central Shark Slough	NP-33	Peat	1 in 10
Central Shark Slough	NP-36	Peat	1 in 7
Marl wetlands east of Shark Slough	NP-38	Marl (2)	1 in 3
Marl wetlands west of Shark Slough	NP-201 G-620	Marl	1 in 5
Rockland marl marsh	G-1502	Marl	1 in 2
Taylor Slough	NP-67	Marl	1 in 2

(1) = MFL Criteria for Peat-forming wetlands: Water levels within wetlands overlying organic peat soils within the water conservation areas, Rotenberger and Holeyland wildlife management areas, and Shark River Slough (Everglades National Park) shall not fall 1.0 feet or more below ground surface, as measured at a key gage, for one or more days during a period in which the water level has remained below ground for at least 30 days, at specific return frequencies shown above.

(2) = MFL Criteria for Marl-forming wetlands: Water levels within marl-forming wetlands that are located east and west of Shark River Slough, the Rocky Glades, and Taylor Slough within the Everglades National Park, shall not fall 1.5 ft. below ground surface, as measured at a key gage, for one or more days during a period in which the water level has remained below ground for at least 90 days, at specific return frequencies for different areas, as shown above.

(3) = Return frequencies were developed using version 3.7 of the South Florida Water Management Model (SFWMM) and are the same as those stated on page 168, Table 44 of the adopted LEC Regional Water Supply Plan (May 2000).

(4) = MFL depth, duration and return frequencies are based on historic rainfall conditions for the 31 year period of record from 1965 to 1995.

40E-8.231 Minimum Levels: Aquifers.

Biscayne Aquifer – The minimum level for the Biscayne aquifer is the level that results in movement of the saltwater interface landward to the extent that ground water quality at an established withdrawal point is insufficient to serve as a water supply source. A MFL violation occurs when water levels within the aquifer produce this degree of saltwater movement at any point in time.

Rulemaking Authority 373.044, 373.113, 373.171 FS. Law Implemented 373.016, 373.036, 373.042, 373.0421, 373.709 FS. History–New 9-10-01.

PART III MFL CRITERIA FOR LOWER WEST COAST REGIONAL PLANNING AREA, MFL CRITERIA FOR KISSIMMEE BASIN REGIONAL PLANNING AREA, AND MFL CRITERIA FOR UPPER EAST COAST REGIONAL PLANNING AREA

40E-8.321 Minimum Flows and Levels (MFLs): Surface Waters.

The MFLs contained in this Part identify the point at which further withdrawals would cause significant harm to the water resources or ecology, of the area, as applicable, pursuant to Sections 373.042 and 373.0421, F.S. It is the District's intent to correct or prevent the violation of these criteria through management of the water resources.

Rulemaking Authority 373.044, 373.113, 373.119, 373.129, 373.136, 373.171 FS. Law Implemented 373.016, 373.036, 373.042, 373.0421, 373.175, 373.216, 373.219, 373.223, 373.246, 373.709 FS. History–New 9-10-01.

40E-8.331 Minimum Levels: Aquifers.

The minimum levels for the lower Tamiami aquifer, the Sandstone aquifer and the mid-Hawthorn aquifer shall equal the structural top of the aquifer. A violation of this criteria occurs when the water levels drop below the top of the uppermost geologic strata that comprises the aquifer, at any point in time. Water level measurements that are made to monitor the conditions of the aquifers for the purpose of this rule shall be located no closer than 50 feet from any existing pumping well.

Rulemaking Authority 373.044, 373.113, 373.171 FS. Law Implemented 373.016, 373.036, 373.042, 373.0421, 373.709 FS. History–New 9-10-01.

40E-8.341 Minimum Flows and Levels (MFLs): Surface Waters for Upper East Coast Regional Planning Area.
St. Lucie Estuary – mean monthly flows to the St. Lucie Estuary should not fall below 28cfs from the Gordy Road structure to the St. Lucie River North Fork for two consecutive months during a 365-day period, for two consecutive years.

Rulemaking Authority 373.044, 373.113, 373.171 FS. Law Implemented 373.016, 373.036, 373.042, 373.0421, 373.709 FS. History–New 11-11-02.

40E-8.351 Minimum Levels: Surface Waters for Kissimmee Basin Regional Planning Area.
Lake Istokpoga – An MFL violation occurs in Lake Istokpoga when surface water levels fall below 36.5 feet NGVD for 20 or more weeks, within a calendar year, more often than once every four years.

Rulemaking Authority 373.044, 373.113, 373.171 FS. Law Implemented 373.016, 373.036, 373.042, 373.0421, 373.709 FS. History–New 1-19-06.

PART IV IMPLEMENTATION

40E-8.421 Prevention and Recovery Strategies.

(1) At the time of adoption of this rule, the existing flow or level for certain specified water bodies is below, or within 20 years is projected to fall below, the applicable MFL. For this reason, Section 373.709, F.S., requires regional water supply plans to contain recovery and prevention strategies, including water resource development and water supply development projects that are needed to achieve compliance with MFLs during the planning period. The implementation of such projects will allow for the orderly replacement or enhancement of existing water sources with alternative supplies in order to provide sufficient water for all existing and projected reasonable-beneficial uses, consistent with Section 373.0421, F.S.

(a) MFLs and recovery and prevention strategies will be implemented in phases with consideration of the District's missions in managing water resources, including water supply, flood protection, environmental enhancement and water quality protection, as required by Section 373.016, F.S.

(b) MFLs are implemented to prevent significant harm to the water resources and, where applicable, the ecology of the area due to further withdrawals (Sections 373.042 and 373.0421, F.S.). A consumptive use permitting program is implemented to prevent harm to the water resource (Section 373.219, F.S.). A water shortage program is implemented to prevent serious harm to the water resource (Sections 373.175 and 373.246, F.S.). Additionally, the protection of water resources will, in part, be achieved through the reservation of water for fish and wildlife or public health and safety (Section 373.223(4), F.S.). The conceptual model identifying the relationships between these water resource protection requirements is set forth in Figure I in this Part.

(c) The rules implementing water resource protection tools, including Chapters 40E-2, 40E-8, 40E-21, 40E-22, F.A.C., and the "Applicant's Handbook for Water Use Permit Applications within the South Florida Water Management District," incorporated by reference in Rule 40E-2.091, F.A.C., identify the specific factors and conditions that will be applied and considered in implementing the conceptual model. Due to the extreme variations in water resource conditions, climatic conditions, hydrologic conditions, and economic considerations that will be faced when implementing these rules, it is critical to apply such criteria flexibly and to reserve for the governing board the ability to implement water resource protection and allocation programs considering all of the District's missions under Chapter 373, F.S., and to balance water supply, flood protection, resource protection and water quality protection needs. Implementation of the recovery and prevention strategies will be achieved in compliance with the assurances to consumptive users and to natural systems contained in the LEC Plan and the LWC Plan.

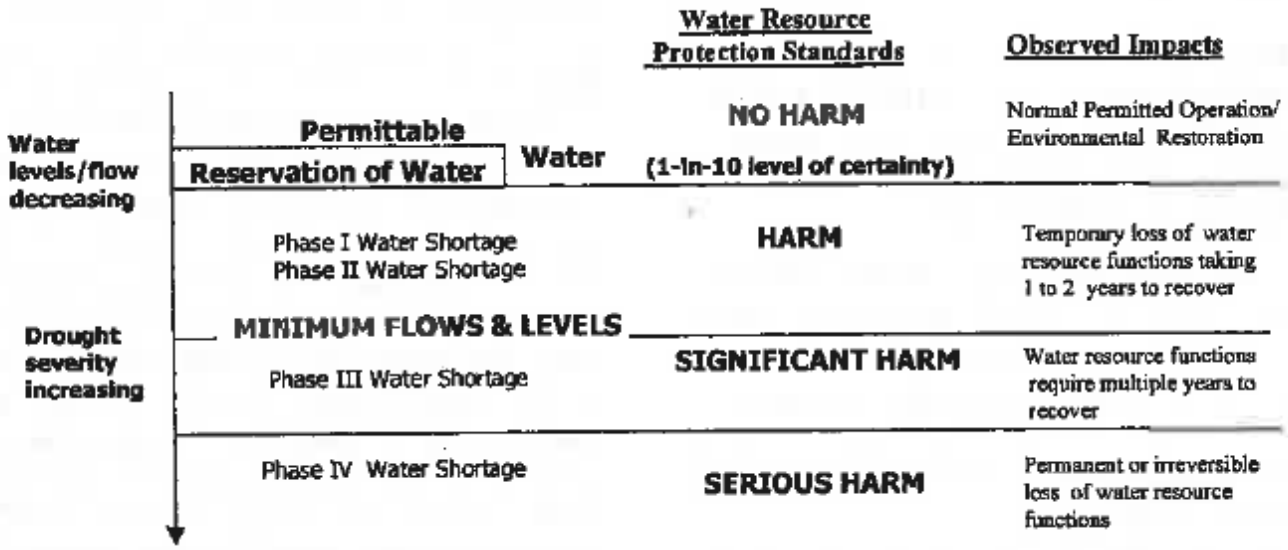
(d) The phasing and timetables for implementation of structural components in recovery and prevention strategies contained in approved regional water supply plans are found to meet the requirements in Section 373.0421(2), F.S., for the expeditious and practicable recovery of the MFLs.

(e) Upon completion of each project or project phase of a recovery or prevention plan the District will certify the availability of water, as defined in subsection 40E-8.021(5), F.A.C.

(f) In order to ensure that the actual and projected performance of prevention and recovery strategies approved in the regional waters supply plans is sufficient to meet water resource needs, including MFLs, and the existing and projected reasonable-beneficial uses, the District will update recovery and prevention strategies on a periodic basis, based on new information and system performance. The performance of the recovery and prevention strategies in comparison to the performance projected in the regional water supply plans, will be assessed by the District for each recovery or prevention strategy phase. Based on the actual performance and new information obtained regarding the water resources, the District will review and revise, if necessary, recovery and prevention strategies through the regional water supply plan update process every five years, or sooner, as required by Section

373.709, F.S. At that time, the governing board will determine if rule modifications to the MFL or recovery and prevention strategies are necessary to continue to meet the requirements of Sections 373.042 and 373.0421, F.S.

Figure 1: Conceptual Relationship Among the Harm, Serious Harm and Significant Harm Standards



(2) The Everglades, Lake Okeechobee, and the Caloosahatchee River.

(a) The Everglades, Lake Okeechobee and Caloosahatchee River have experienced or are projected to experience MFL violations. As a result, the LEC Plan and the LWC Plan contain approved recovery strategies, pursuant to Section 373.0421, F.S. Included in these recovery and prevention strategies is the CERP.

(b) MFLs within the Everglades, Lake Okeechobee, and the Caloosahatchee River, that are part of or served by the C&SF Project, will not be achieved immediately upon adoption of this rule largely because of the lack of adequate regional storage, including U.S. Army Corps of Engineers' regulation schedule effects, or ineffective water drainage and distribution infrastructure. Although not all locations within the Everglades are currently in violation of the proposed MFL, the Everglades, as a whole, is subject to a recovery strategy. The LEC Plan identifies the structural and non-structural remedies necessary for the recovery of MFL water bodies. These structural and non-structural remedies are also intended to restore the Everglades, Lake Okeechobee and the Caloosahatchee River above the MFLs, through Chapter 373, F.S., authorities of the District.

(c) The projected long-term restoration of flows and levels in the Everglades resulting from implementation of the LEC Plan and the CERP is documented in the LEC Plan, and are intended to more closely approximate "pre-drainage" conditions. The planned components include implementing consumptive use and water shortage programs, removing conveyance limitations, implementing revised C&SF Project operational programs, storing additional freshwater, reserving water for the protection of fish and wildlife, and developing alternative sources for water supply. These components will be implemented over the next 20 years, resulting in a phased restoration of the affected areas.

(d) The District, as the U.S. Army Corps of Engineers' local sponsor of the C&SF Project, is charged with implementing the CERP, in accordance with the Water Resources Development Act of 2000 (WRDA), Title VI entitled "Comprehensive Everglades Restoration," and in accordance with State law. Assurances regarding water availability for consumptive uses and protection of natural systems are set forth in WRDA, Chapter 373, F.S., CERP and the LEC Plan, which will be followed by the District in implementing this chapter. Additional quantities of water for both consumptive uses and the natural systems made available from the CERP and other water resource development projects will be documented and protected on a project basis. For project components implemented under CERP, the additional quantity, distribution and timing of delivery of water that is made available for the natural system for consumptive use, will be identified consistent with purposes of the CERP. Under State law, water reservations and water allocations to consumptive uses will be utilized to protect water availability for the intended purposes.

(e) Lake Okeechobee. Under implementation of the Water Supply and Environment lake regulation schedule assumptions, the Lake Okeechobee MFL was not projected to be violated and an MFL prevention strategy was adopted. However, due to changes in the Lake Okeechobee Regulation Schedule, which received final approval in April 2008, the Lake MFL is projected to be violated and an MFL recovery strategy is necessary. This recovery strategy will remain in effect until the MFL criteria is met pursuant to Section 373.0421, F.S. The Lake Okeechobee MFL recovery strategy shall consist of four components, as fully described in the LEC Regional Water Supply Plan, Appendix H, as updated in October 2008. These components consist of:

1. Environmental enhancement projects to be implemented during extreme low Lake stages,
2. Regulatory constraints on consumptive use of Lake water,
3. Water shortage restrictions as described in Chapter 40E-22, F.A.C., and
4. Capital projects that improve storage capacity both within and adjacent to the Lake.

(3) Biscayne Aquifer. The LEC Plan contains an approved prevention strategy for the Biscayne Aquifer pursuant to Section 373.0421, F.S., which consists of the following:

(a) Maintain coastal canal stages at the minimum operation levels shown in Table J-2 of the LEC Plan;

(b) Apply conditions for permit issuance in Chapter 40E-2, F.A.C., to prevent the harmful movement of saltwater intrusion up to a 1-in-10 year level of certainty;

(c) Maintain a ground water monitoring network and utilize data to initiate water shortage actions pursuant to Rule 40E-8.441, F.A.C. and Chapters 40E-21 and 40E-22, F.A.C.;

(d) Construct and operate water resource and water supply development projects; and

(e) Conduct research in high risk areas to identify where the portions of the saltwater front is adjacent to existing and future potable water sources.

(4) Lower West Coast Aquifers. The LWC Plan identifies a prevention strategy for the LWC Aquifers, pursuant to Section 373.0421, F.S., as follows:

(a) Establish “no harm” maximum permittable levels for each aquifer (regulatory levels) for a 1-in-10 year level of certainty;

(b) Implement rule criteria to prevent harm through the consumptive use permitting process, including conditions for permit issuance in Rule 40E-2.301, F.A.C.;

(c) Construct and operate water resource and supply development projects; and

(d) Implement the water shortage plan in Chapter 40E-21, F.A.C., as needed to prevent serious harm during drought conditions in excess of a 1-in-10 year level of certainty.

(5) St. Lucie River and Estuary. The following is the prevention strategy for the St. Lucie River and Estuary:

(a) Discharges from the North Fork will be managed within the operational protocols of the Ten Mile Creek Project scheduled to be completed by 2004. Flow targets will be consistent with the CERP performance requirements for Indian River Lagoon.

(b) A research and monitoring strategy for the North and South Forks of the St. Lucie River will be developed and implemented in coordination with the Upper East Coast Regional Water Supply Plan update.

(6) Northwest Fork of the Loxahatchee River Recovery Strategy: Purpose and Intent.

(a) The Northwest Fork of the Loxahatchee River is currently not meeting the MFL and requires implementation of a recovery strategy to achieve the MFL as soon as practicable, consistent with Section 373.0421, F.S. The recovery strategy consists of projects contained within the following approved plans: the LEC Plan, the CERP, and the Northern Palm Beach County Comprehensive Water Management Plan (NPBCCWMP). Four phases of recovery are identified in the Technical Documentation to Support Development of Minimum Flows and Levels for the Northwest Fork of the Loxahatchee River, November 2002, which are projected to increase flows to meet the MFL for the Northwest Fork of the Loxahatchee River. As part of the recovery strategy, as provided in this rule, the consumptive use permitting and water shortage requirements in this chapter and Chapters 40E-2 and 40E-21, F.A.C., and the “Applicant’s Handbook for Water Use Permit Applications within the South Florida Water Management District,” incorporated by reference in Rule 40E-2.091, F.A.C., including Subsection 3.2.1.E. regarding Restricted Allocation Areas for Lower East Coast Everglades Waterbodies and North Palm Beach County/Loxahatchee River Watershed Waterbodies, shall apply to consumptive use direct and indirect withdrawals from surface and groundwater sources from the Northwest Fork of the Loxahatchee River and those areas directly tributary to the Northwest Fork.

(b) In addition to implementation of this MFL recovery strategy, the District commits to restore freshwater flows to the Northwest Fork of the Loxahatchee River above the MFL through Chapter 373, F.S., and the CERP and its associated authorities. The District will continue to partner with the DEP in establishing a practical restoration goal and plan for the Loxahatchee River

watershed. Recognizing that natural seasonal fluctuations in water flows are necessary to ensure that the functions of the Loxahatchee River are protected, this restoration goal and plan will include a more complete set of seasonally managed flow criteria for the river that are driven primarily by natural rainfall and runoff patterns within the watershed.

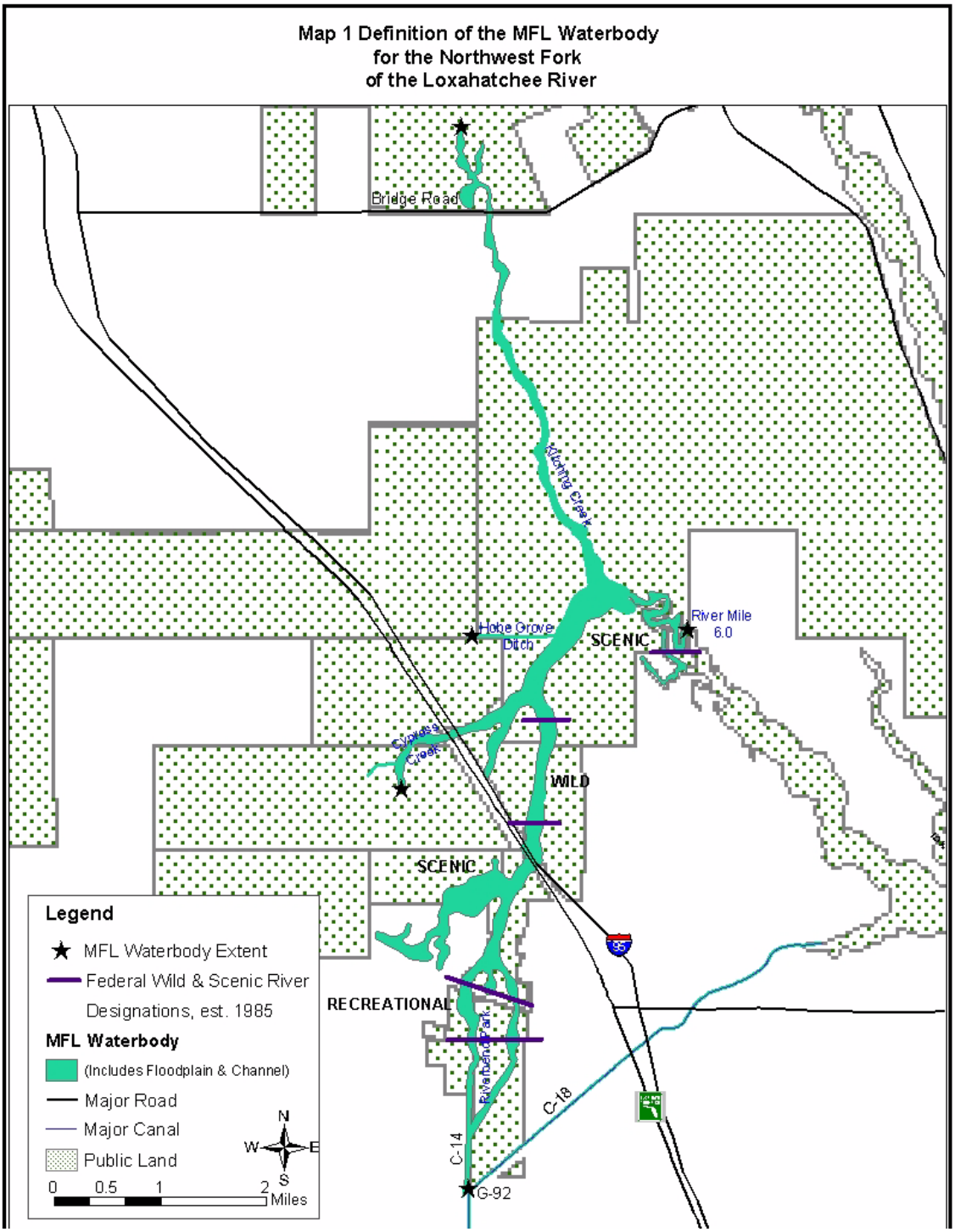
(c) The District shall continue to operate the G-92 structure and associated structures to provide approximately 50 cfs or more over Lainhart Dam to the Northwest Fork of the Loxahatchee River, when the District determines that water supplies are available.

(d) Additionally, it is the intent of the District to continue the current operational protocols of the G-92 structure so as not to reduce the historical high, average and low flows as estimated over the 30 year period of rainfall record used as the basis for the MFL for the Northwest Fork of the Loxahatchee River.

(e) It is the District's intent to implement, along with other partners, projects to meet the practical restoration goal developed according to paragraph (b). Projects contained in the CERP, the LEC Plan and the NPBCCWMP will provide increased storage and conveyance within the basin with a goal of providing more water for restoration of the Northwest Fork of the Loxahatchee River.

(f) To protect water made available for the recovery and restoration of the Loxahatchee River through implementation of these associated projects, the District intends to adopt water reservations for the Loxahatchee River, pursuant to Section 373.223(4), F.S., on a project by project basis over the next 20 years. In addition, the SFWMD intends to adopt an initial reservation to protect existing water used for protection of fish and wildlife, consistent with the practical restoration goal identified for the Loxahatchee River, by 2004. Future reservations related to the Loxahatchee River will be consistent with the reservations being developed for restoration of the Everglades under CERP, and will reflect the needs of the natural system through a range of hydrologic conditions. These water reservations are intended to prevent the future allocation to consumptive uses the freshwater intended for restoration of the Loxahatchee River. The reservations will be implemented through the consumptive use permit program, operational protocols, water shortage rules, and other appropriate provisions in Chapter 373, F.S.

(g) As reservations are adopted to restore the Loxahatchee River beyond that to be achieved by the MFL, the District shall revise the MFL and associated prevention and recovery strategy, as appropriate, under Sections 373.042 and 373.0421, F.S., to be consistent with the reservation.



(7) Lake Istokpoga. The water levels in Lake Istokpoga are controlled by operation of water control structures (G-85 and, primarily, S-68) as guided by a regulation schedule adopted by the U.S. Army Corps of Engineers and implemented by the District. The existing regulation schedule, typical regional weather patterns, and present levels of inflows from area creeks make violation of the Lake's minimum level unlikely; no such events have occurred since implementation of the Lake regulation schedule. Analysis of the current regulation schedule and operational policies for the Lake indicate the proposed Lake Istokpoga minimum level will be met for the foreseeable future. Therefore, the prevention strategy for Lake Istokpoga consists of continuation of the current

operational plan and regulation schedule. The District, in coordination with other appropriate agencies, should also plan and operate extreme Lake drawdowns for environmental purposes in a manner that, to the greatest extent possible, avoids an MFL violation. If significant changes to the Lake's water level management occurs due to new information, altered operational plans, or regulation schedule, a re-evaluation of the minimum level criteria will be conducted. This re-evaluation will occur as part of the next Lake Istokpoga MFL update which is scheduled to occur in 2010, or sooner, if significant changes to Lake management are proposed.

(8) Florida Bay. Under existing system conditions, violations of the MFL are not anticipated to occur. Therefore, a prevention strategy is contained in this rule. In addition to the prevention strategies identified in subsection 40E-8.421(1), F.A.C., the following actions will be taken:

(a) Modifications to operations for improved management of freshwater discharges to the headwaters of Taylor Slough and the southeast Everglades should consider the MFL, in coordination with:

1. The Modified Waters Deliveries to Everglades National Park project and the C-111 Canal project, and any associated operational and construction plans pursuant to these projects;

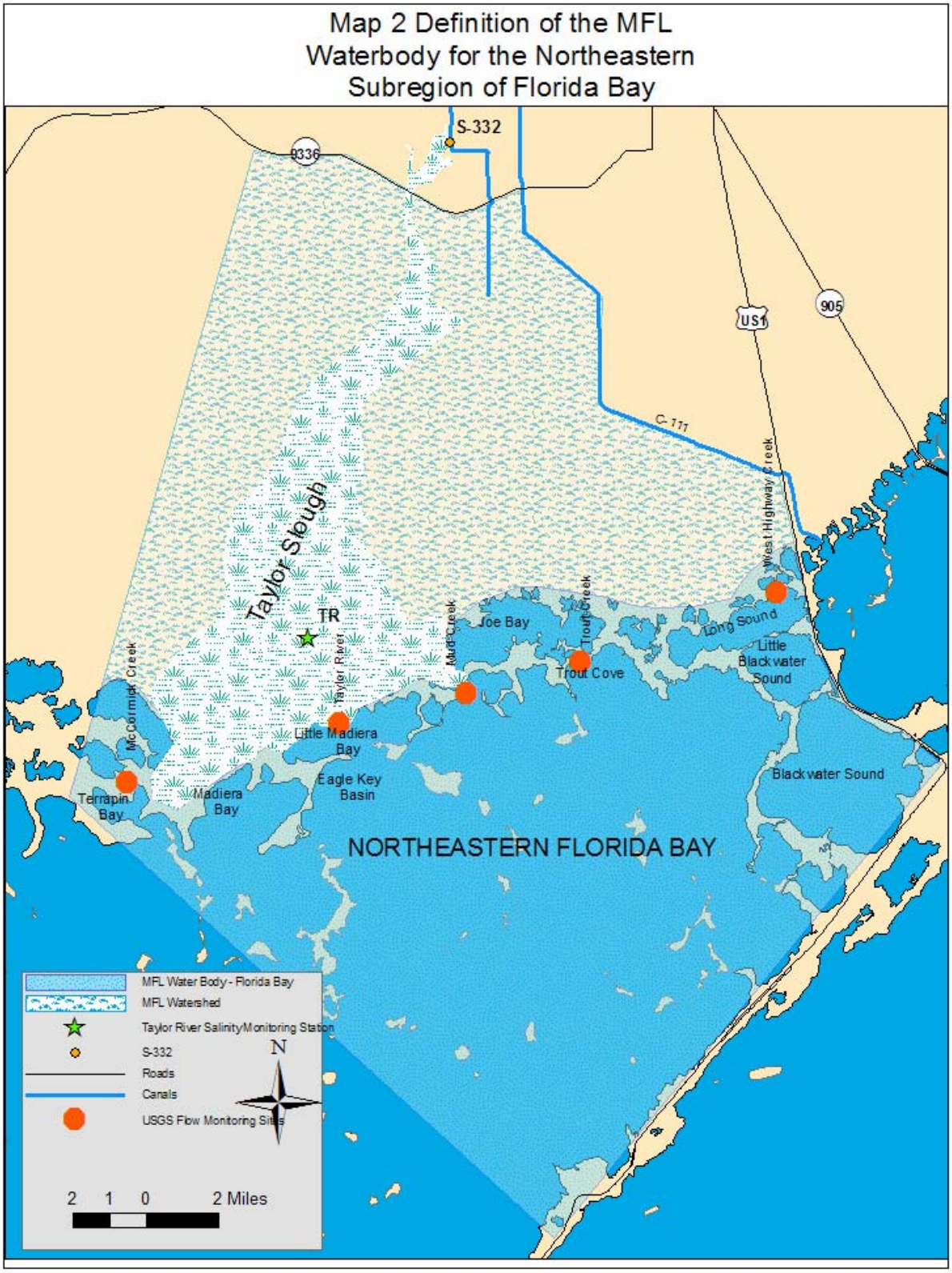
2. The C-111 Canal Spreader Acceler8 and CERP Projects;

3. The CERP Florida Bay and Florida Keys Feasibility Study.

(b) The SFWMD, in cooperation with other management agencies, will continue field monitoring and research to assess salinity, water level, and flow conditions and biological resource response in the region specified above.

(c) The update of the LEC Plan (anticipated in 2006) will contain a description of the elements, scheduling, and funding of the research and monitoring program and additional details of the prevention strategy for Florida Bay pursuant to Section 373.0421, F.S.

(d) These MFL criteria will be reviewed and may be revised no later than five years after adoption based on new information from the CERP Florida Bay and Florida Keys Feasibility Study or other scientific data that may become available. After the initial review, the MFL criteria will be reviewed at subsequent five-year intervals in conjunction with updates to the LEC Plan.


Map 2 Definition of the MFL
Waterbody for the Northeastern
Subregion of Florida Bay
S-332
9336
US1
905
C-111
West Highway Creek
Taylor Slough
TR
Taylor River
Mud Creek
Joe Bay
Trout Creek
Long Sound
Little Blackwater Sound
Trout Cove
McCormick Creek
Little Madiera Bay
Eagle Key Basin
Madiera Bay
Terrapin Bay
Blackwater Sound
NORTHEASTERN FLORIDA BAY
MFL Water Body - Florida Bay
MFL Watershed
Taylor River Salinity Monitoring Station
S-332
Roads
Canals
USGS Flow Monitoring Sites
N
2 1 0 2 Miles

Rulemaking Authority §§ 9, 10 P.L. 83-358, 373.044, 373.113, 373.171 FS. Law Implemented 373.016, 373.036, 373.042, 373.0421, 373.175, 373.216, 373.219, 373.223, 373.246, 373.709 FS. History–New 9-10-01, Amended 11-11-02, 4-1-03, 1-19-06, 12-12-06, 4-23-07, 10-14-08, 10-23-12, 7-14-14, 9-7-15.

40E-8.431 Consumptive Use Permits.

(1) Consumptive use permit applications that propose to withdraw water directly or indirectly from a MFL water body, that meet the conditions for permit issuance in Chapter 373, Part II, F.S. (including implementing rules in this chapter, Chapter 40E-2, F.A.C., and the "Applicant's Handbook for Water Use Permit Applications within the South Florida Water Management District," incorporated by reference in Rule 40E-2.091, F.A.C., as applicable), and are consistent with the approved recovery and prevention strategies under Section 373.0421, F.S., will be permitted. Consumptive use permit applications will be reviewed based on the recovery and prevention strategy approved at the time of permit application review.

(2) An existing permit will not be subject to revocation or modification by the District, prior to permit expiration, based on its impact on a MFL water body, unless the District has determined in the regional water supply plan that the reasonable-beneficial use served by the existing permitted allocation can otherwise be met from new or alternative water sources available (in place and operational) concurrent with such revocation or modification.

(3) A permittee must comply with the requirements of Rule 40E-2.351, F.A.C., in order to obtain a permit transfer to a new permittee.

Rulemaking Authority 373.044, 373.113, 373.171 FS. Law Implemented 373.016, 373.036, 373.042, 373.0421, 373.709 FS. History–New 9-10-01, Amended 7-14-14, 9-7-15.

40E-8.441 Water Shortage Plan Implementation.

(1) Water shortage restrictions will be imposed as required by District rules on the direct or indirect withdrawals from a MFL water body if a MFL exceedance occurs or is projected to occur during climatic conditions more severe than a 1 in 10 year drought, to the extent consumptive uses contribute to such exceedance. Under these circumstances, the District will equitably distribute available supplies to prevent serious harm to the water resources, pursuant to Sections 373.175 and 373.246, F.S., and the District's Water Shortage Plan, Chapter 40E-21, F.A.C. The Water Shortage Plan utilizes a phased cutback approach with the severity of use restrictions increasing commensurate with increased potential for serious harm to the water resources.

(2) Water shortage restrictions will not be used in place of a component in an approved recovery plan to provide hydrologic benefits that are ultimately to be provided by such recovery strategy.

(3) MFL criteria will not be utilized to trigger water shortage restrictions during climatic conditions less severe than a 1 in 10 year level of drought.

(4) Water shortage restrictions will be implemented considering the factors in Chapter 40E-21, F.A.C., and this rule. In declaring a water shortage to protect a MFL water body, the governing board shall give consideration to:

(a) The level of drought;

(b) Whether the MFL criteria will be or is being exceeded due to direct or indirect withdrawals;

(c) The magnitude of the impact on the MFL water body, including water resource functions addressed by the MFL, from such withdrawals;

(d) The magnitude of the regional hydrologic improvements projected to be derived from the proposed cutbacks;

(e) Water management actions significantly contributing to the MFL exceedance; and

(f) The practicality of using other methods, such as deliveries of water from the regional system, to reduce MFL exceedances.

(5) The establishment and implementation of MFLs shall not limit the District's ability to impose water shortage restrictions pursuant to Sections 373.175 and 373.246, F.S., and the District's Water Shortage Plan, Chapter 40E-21, F.A.C., when water levels in a MFL water body are above an established MFL, nor shall it limit the District's ability to allow for the discharge or withdrawal of water from a MFL water body, when water levels are below an established MFL.

(6) Phase III water shortage restrictions may be imposed, consistent with the factors herein, when a MFL criteria exceedance or violation is imminent. Phase III or greater water shortage restrictions shall be implemented allowing for a shared adversity between continuing consumptive use and water resource needs.

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.042, 373.0421, 373.175, 373.246 FS. History–New 9-10-01.

Rules of the
South Florida Water Management District

Water Reservations
Rule Chapter 40E-10, F.A.C

Effective: July 16, 2014

CHAPTER 40E-10
WATER RESERVATIONS

40E-10.011 Policy and Purpose
40E-10.021 Definitions
40E-10.031 Water Reservations Implementation
40E-10.041 Water Reservation Areas: Lower West Coast Planning Area
40E-10.051 Water Reservation Areas: Upper East Coast Planning Area

40E-10.011 Policy and Purpose.
The purpose of this chapter is to define the quantity, location and timing of waters reserved from allocation for the protection of fish and wildlife pursuant to Section 373.223(4), F.S., for specified water bodies. Water reservations are implemented in the water use program pursuant to Chapter 40E-2, F.A.C.

Rulemaking Authority 373.044, 373.113, 373.171 FS. Law Implemented 373.016, 373.026, 373.036, 373.1501, 373.1502, 373.219, 373.223, 373.4592, 373.4595, 373.470 FS. History–New 7-2-09, Amended 7-14-14.

40E-10.021 Definitions.
(1) *Fakahatchee Estuary* – The area within the Ten Thousand Islands region including the following river/bay systems, from west to east: Blackwater River/Blackwater Bay, Whitney River/Buttonwood Bay, Pumpkin River/Pumpkin Bay, Wood River, Little Wood River and Faka Union Canal/Faka Union Bay, and Fakahatchee Bay as depicted in Figure 1-3 Fakahatchee Estuary.

(2) *Picayune Strand* – The area located southwest of the Florida Panther National Wildlife Refuge, north of the Ten Thousand Islands NWR, east of the South Belle Meade State Conservation and Recreation Lands (CARL) Project, west of the Fakahatchee Strand Preserve State Park, and northeast of Collier-Seminole State Park as depicted in Figure 1-2 Picayune Strand. The legal description of the Picayune Strand is contained in Appendix 1.

(3) *North Fork of the St. Lucie River* – The area that extends from the Gordy Road structure (state plane coordinates, x851212.831, y1116105.7470), to the confluence of the North Fork of the St. Lucie River and the C-24 canal (state plane coordinates, x873,712.20, y1064,390.41) as depicted in Appendix 2, Figure 2-1.

(4) *Nearshore Central Biscayne Bay* – The area within Biscayne Bay up to 1640 feet (500 meters) from the shoreline beginning south of Shoal Point extending southward to north of Turkey Point as depicted in Figure 3-1.

(5) Caloosahatchee River – The surface waters that flow through the S-79 structure, combined with tributary contributions below S-79 that collectively flow southwest to San Carlos Bay, as defined in subsection 40E-8.021(2), F.A.C.

(6) Caloosahatchee River (C-43) West Basin Storage Reservoir – A reservoir located in Hendry County, Florida, west of the City of LaBelle on the east side of the Townsend Canal and south of SR 80 as described in Appendix 1-12, and depicted in Figure 1-13 (also known as the 'C-43 Reservoir').

Rulemaking Authority 373.044, 373.113, 373.171 FS. Law Implemented 373.016, 373.026, 373.036, 373.1501, 373.1502, 373.219, 373.223, 373.4592, 373.4595, 373.470 FS. History–New 7-2-09, Amended 3-18-10, 7-21-13, 7-16-14.

40E-10.031 Water Reservations Implementation.
(1) Applicants for consumptive use permits shall meet the requirements of this rule by providing reasonable assurances that Rule 40E-2.301, F.A.C., and Section 3.11 of the "Applicant's Handbook for Water Use Permit Applications within the South Florida Water Management District," incorporated by reference in Rules 40E-2.091, F.A.C., are met.

(2) Water reserved for the protection of fish and wildlife contained within the Picayune Strand and Fakahatchee Estuary is defined in subsections 40E-10.041(1)-(2), F.A.C.

(3) Water reserved for the protection of fish and wildlife contained within the North Fork of the St. Lucie River is defined in subsection 40E-10.051(1), F.A.C.

(4) Water reserved for the protection of fish and wildlife contained within Nearshore Central Biscayne Bay is defined in subsections 40E-10.061(1)-(2), F.A.C.

(5) Water reserved for the protection of fish and wildlife contained within and released, via operation, from the Caloosahatchee River (C-43) west Basin Storage Reservoir is defined in subsection 40E-10.041(3), F.A.C.

Rulemaking Authority 373.044, 373.113, 373.171 FS. Law Implemented 373.016, 373.026, 373.036, 373.1501, 373.1502, 373.219, 373.223, 373.4592, 373.4595, 373.470 FS. History–New 7-2-09, Amended 3-18-10, 7-21-13, 7-14-14, 7-16-14.

40E-10.041 Water Reservation Areas: Lower West Coast Planning Area.

(1) Picayune Strand as defined in subsection 40E-10.021(2), F.A.C.:

(a) Surface waters:

1. All surface water contained within the Picayune Strand are reserved from allocation (see Figure 1).

2. All surface water flowing into the Picayune Strand identified below is reserved from allocation:

i. The surface water flows depicted on Figures 1-4.A, B, and C, simulated at weir 'Miller2' within the Miller Canal (see Figure 1-2);

ii. The surface water flows depicted on Figures 1-5.A, B, and C, simulated at weir 'FU3' within the Faka Union Canal (see Figure 1-2); and

iii. The surface water flows depicted on Figures 1-6.A, B, and C simulated at spillway 'Lucky LA' within the Merritt Canal (see Figure 1-2).

(b) Groundwater: All groundwater in the water table and unconfined portions of Lower Tamiami aquifer underlying the Picayune Strand is reserved from allocation.

Notwithstanding the above, presently existing legal uses for the duration of the permit existing on July 2, 2009 are determined to be not contrary to the public interest, pursuant to Section 373.223(4), F.S.

(2) Fakahatchee Estuary as defined in subsection 40E-10.021(1), F.A.C.:

(a) Surface waters:

The surface water flows into the Fakahatchee Estuary identified below are reserved from allocation:

1. The surface water flows depicted on Figures 1-7.A, B, and C simulated at Faka Union Canal at structure FU1 (See Figure 1-3);

2. The surface water flows depicted on Figures 1-8.A, B, and C simulated at 'Miller@41' transect (beginning at coordinate 471365.13N, 599423.29 E Southeast to 479226.67N, 595105.77E (delivering surface water to Blackwater Bay and Buttonwood Bay) see Figure 1-3);

3. The surface water flows depicted on Figures 1-9.A, B, and C simulated at 'FU@41' transect (beginning at coordinate 480427.89N, 595005.67E Southeast to 487735.34N, 592478.09E (delivering surface water to Pumpkin Bay) see Figure 1-3);

4. The surface water flows depicted on Figures 1-10.A, B, and C simulated at 'Merritt@41' transect (beginning at coordinate 490942.49N, 593218.49E flowing Southeast to 499050.54N, 590515.81E (delivering surface water to Faka Union Bay) see Figure 1-3); and

5. The surface water flows depicted on Figures 1-11.A, B, and C simulated at 'Fakahatchee@41' transect (beginning at coordinate 498623.81N, 587955.37E Southeast to 533587.95N, 575807.53E (delivering surface water to Fakahatchee Bay) see Figure 1-3).

(b) Groundwater: All groundwater in the water table and unconfined portions of Lower Tamiami aquifer underlying the Fakahatchee Estuary is reserved from allocation.

Notwithstanding the above, presently existing legal uses for the duration of the permit existing on July 2, 2009 are determined to be not contrary to the public interest, pursuant to Section 373.223(4), F.S. Reservations contained in this subparagraphs 1. and 2. above shall be reviewed in light of changed conditions or new information by December 31, 2014.

(3) Caloosahatchee River (C-43) West Basin Storage Reservoir:

(a) All surface water contained within and released, via operation, from the Caloosahatchee River (C-43) West Basin Storage Reservoir is reserved from allocation.

(b) The water reserved under this subsection will be available for fish and wildlife upon a formal determination of the Governing Board, pursuant to state and federal law, that the Caloosahatchee River (C-43) West Basin Storage Reservoir is operational.

(c) The reservation contained in this subsection and the criteria contained in Section 3.11.4 of the "Applicant's Handbook for Water Use Permit Applications within the South Florida Water Management District," incorporated by reference in Rule 40E-2.091, F.A.C., shall be revised pursuant to subsection 373.223(4), F.S., in light of changed conditions or new information and prior to the approval described in paragraph (3)(b) above.

Rulemaking Authority 373.044, 373.113, 373.171 FS. Law Implemented 373.016, 373.026, 373.036, 373.1501, 373.1502, 373.219, 373.223, 373.4592, 373.4595, 373.470 FS. History–New 7-2-09, Amended 3-18-10, 7-21-13, 7-16-14.

40E-10.051 Water Reservation Areas: Upper East Coast Planning Area.

North Fork of the St. Lucie River, as defined in subsection 40E-10.021(3), F.A.C.:

Surface waters up to and including the mean monthly flow of 130 cubic feet per second flowing over the Gordy Road Structure from November 1st through May 31st; see Appendix 2, Figure 2-2; are reserved from allocation. The water reserved under this Rule will be available for fish and wildlife upon formal determination of the Governing Board, pursuant to state and federal law, that any one or all of the Comprehensive Everglades Restoration Plan's C-23/C-24 North and South Reservoirs and STA Project are operational. Reservations contained in this Rule and the criteria contained in section 3.11.2 of the "Applicant's Handbook for Water Use Permit Applications within the South Florida Water Management District," incorporated by reference in Rule 40E-2.091, F.A.C., shall be revised pursuant to Section 373.223(4), F.S., in light of changed conditions or new information and concurrent with the approval specified, above.

Notwithstanding the above, presently existing legal uses for the duration of a permit existing on March 18, 2010 are determined to be not contrary to the public interest pursuant to Section 373.223(4), F.S.

Rulemaking Authority 373.044, 373.113, 373.171 FS. Law Implemented 373.016, 373.026, 373.036, 373.1501, 373.1502, 373.219, 373.223, 373.4592, 373.4595, 373.470 FS. History–New-3-18-10, Amended 7-21-13, 7-14-14.

40E-10.061 Water Reservation Areas: Lower East Coast Planning Area.

(1) Nearshore Central Biscayne Bay as defined in subsection 40E-10.021(6), F.A.C.:

All surface water contained within Nearshore Central Biscayne Bay is reserved from allocation (see Figure 3-1).

(2) Surface water flowing into Nearshore Central Biscayne Bay as identified below is reserved from allocation:

(a) Surface water flows depicted on Figures 3-2.A and 3-2.B through S-123 derived from the following contributing canal reaches:

1. The C-100A canal upstream of S-123 to S-120 including all integrated conveyance canals.
2. The C-100C canal upstream of S-123 to S-119 including all integrated conveyance canals.
3. The C-100B canal upstream of S-123 to S-122 including all integrated conveyance canals.
4. The C-100 canal upstream of S-123 to S-118 including all integrated conveyance canals.

(b) Surface water flows depicted on Figures 3-3.A and 3-3.B through S-21 derived from the following contributing canal reaches:

1. The L-31E borrow canal upstream of S-21 to the canal terminus.
2. The C-1 canal upstream of S-21 to S-122 and S-149 including all integrated conveyance canals.
3. The C-1 canal upstream of S-21 to the C-1W canal and S-338 including all integrated conveyance canals.

(c) Surface water flows depicted on Figures 3-4.A and 3-4.B which is the combined flow through S-21A, S-20G, and S-20F as derived from the following contributing canal reaches:

1. The C-102 canal connecting to the C-102 N canal upstream of S-21A to S-195.
2. The C-102 canal upstream of S-21A to S-165
3. The L-31E borrow canal upstream of S-21A to its terminus near S-21 including the Gould's Canal.
4. The L-31E borrow canal upstream of S-21A south to S-20G.
5. The Military canal upstream of S-20G.
6. The C-103 canal upstream of S-20F to S-179.
7. The L-31E borrow canal upstream of S-20F to S-20G including all integrated conveyance canals.
8. The L-31E borrow canal from S-20F south to the North Canal.
9. The North Canal.
10. The L-31E borrow canal from S-20F south to the Florida City Canal.
11. The Florida City Canal from Southwest 107th Avenue to its confluence with the L-31E borrow canal.

Notwithstanding the above, presently existing legal uses for the duration of a permit existing on July 18, 2013, are determined to be not contrary to the public interest pursuant to Section 373.223(4), F.S.

Reservations contained in the section shall be reviewed in light of changed conditions or new information.

Rulemaking Authority 373.044, 373.113, 373.171 FS. Law Implemented 373.016, 373.026, 373.036, 373.1501, 373.1502, 373.219, 373.223, 373.4592, 373.4595, 373.470 FS. History–New 7-21-13.

APPENDIX 1 LOWER WEST COAST PLANNING AREA

1-1 LEGAL DESCRIPTION OF PICAYUNE STRAND AS DEFINED IN SUBSECTION 40E-10.021(1), F.A.C.

A tract of land in Townships 50, 51 and 52 South, Ranges 27 and 28 East, Collier County, Florida, more particularly described as follows:

Beginning at the Southeast Corner of Section 25, Township 51 South, Range 28 East, Collier County, Florida, run S 89°10'50" W, 2659.84 feet to the South Quarter Corner of said Section 25; thence S 89°09'41" W, 2659.37 feet to the Southwest Corner of said Section 25; thence S 00°19'11" W, 2611.61 feet to the East Quarter Corner of Section 35 of said Township 51 South, Range 28 East; thence S 88°56'33" W, 2652.73 feet to the Northeast Corner of the Southwest Quarter of said Section 35; thence S 00°18'15" W, 2614.86 feet to the South Quarter Corner of said Section 35; thence S 88°54'23" W, 2650.59 feet to the Southwest Corner of Section 35; thence S 88°50'39" W, 2639.94 feet to the South Quarter Corner of Section 34 of said Township 51 South, Range 28 East;

thence S 89°00'23" W, 2652.66 feet to the Southwest Corner of said Section 34;

thence S 88°44'21" W along the north line of the Northeast Quarter of Section 4, Township 52 South, Range 28 East, 1450.32 feet to the Northeast Corner of those lands described in Official Record Book 2624, Page 2509, Public Records of Collier County, Florida; thence S 00°27'37" E along the east line of said lands, 6308.01 feet; thence continuing along said east line, S 89°34'56" W, 16.37 feet;

thence continuing along said east line, S 00°25'04" E, 360.00 feet to the north right-of-way line of U.S. Highway 41; thence westerly along the north right-of-way line of U.S. Highway 41, S 84°52'54" W, 327.99 feet; thence N 05°07'06" W, 39.00 feet to a point on a non-tangent curve; thence westerly 900.69 feet along the arc of said curve, concave to the northeast, having a radius of 1835.08 feet, a central angle of 28°07'18" and a chord of 891.68 feet, bearing N 81°03'27" W;

thence S 23°00'12" W, 39.00 feet; thence N 66°59'48" W, 5570.19 feet to a point of curvature; thence northwesterly 800.00 feet along the arc of a curve, concave to the southwest, having a radius of 17224.80 feet, a central angle of 02°39'40" and a chord of 799.93 feet, bearing N 68°19'38" W to a point of tangency;

thence N 69°39'28" W, 6844.52 feet; thence N 20°20'32" E, 39.00 feet to a point on a non-tangent curve; thence northwesterly 671.08 feet along the arc of said curve, concave to the northeast, having a radius of 1835.08 feet, a central angle of 20°57'10" and a chord of 667.35 feet, bearing N 59°10'53" W; thence S 41°17'43" W, 39.00 feet; thence N 48°42'17" W, 6815.31 feet to a point of curvature; thence northwesterly 442.16 feet along the arc of a curve, concave to the southwest, having a radius of 725.20 feet, a central angle of 34°56'02" and a chord of 435.35 feet, bearing N 66°10'19" W to a point of tangency; thence N 83°38'20" W, 300.77 feet to the intersection of the north right-of-way line of U.S. Highway 41 with the west line of Section 36, Township 51 South, Range 27 East;

thence N 00°03'59" E along the west line of said Section 36, 1586.32 feet to the Northwest Corner of Section 36; thence N 01°15'40" W, 2658.40 feet, to the West Quarter Corner of Section 25 of said Township 51 South, Range 27 East;

thence N 01°17'06" W, 2656.42 feet to the Northwest Corner of said Section 25;

thence N 01°16'05" W, 2655.83 feet to the West Quarter Corner of Section 24 of said Township 51 South, Range 27 East; thence N 01°16'15" W, 2656.76 feet to the Northwest Corner of said Section 24; thence N 00°19'01" E, 2764.38 feet to the West Quarter Corner of Section 13 of said Township 51 South, Range 27 East; thence N 00°19'04" E, 2764.32 feet to the Northwest Corner of said Section 13; thence N 01°15'53" E, 2764.69 feet to the West Quarter Corner of Section 12 of said Township 51 South, Range 27 East; thence N 01°16'08" E, 2764.72 feet to the Northwest Corner of said Section 12; thence N 00°37'07" E, 2763.78 feet to the West Quarter Corner of Section 1 of said Township 51 South, Range 27 East; thence N 00°35'09" E, 2732.08 feet to the Northwest Corner of said Section 1; thence N 01°09'58" E, 2697.35 feet to the West Quarter Corner of Section 36 of Township 50 South, Range 27 East; thence N 01°14'25" E, 2554.73 feet to the Northwest Corner of said Section 36; thence N 00°49'11" E, 2618.76 feet to the West Quarter Corner of Section 25 of said Township 50 South, Range 27 East;

thence N 01°30'13" E, 2623.02 feet to the Northwest Corner of said Section 25;

thence N 01°14'51" E, 2643.78 feet to the West Quarter Corner of Section 24 of said Township 50 South, Range 27 East; thence N 00°55'45" E, 2647.27 feet to the Northwest Corner of said Section 24; thence N 89°04'28" W, 2655.08 feet to the South Quarter Corner of Section 14 of said Township 50 South, Range 27 East; thence N 89°06'09" W, 2673.56 feet to the Southwest Corner of

said Section 14; thence N 01°20’52" E, 2642.45 feet to the West Quarter Corner of said Section 14; thence N 01°02'27" E, 2638.34 feet to the Northwest Corner of said Section 14; thence S 88°57’18” E, 2650.45 feet to the North Quarter Corner of said Section 14; thence S 89°16’05” E, 2679.46 feet to the Northeast Corner of said Section 14; thence N 00°32'07" E, 2629.53 feet to the West Quarter Corner of Section 12 of said Township 50 South, Range 27 East; thence N 00°05'55" E, 2655.64 feet to the Northwest Corner of said Section 12; thence N 00°35'20" E, 2638.33 feet to the West Quarter Corner of Section 1 of said Township 50 South, Range 27 East; thence N 09°11'51" W along the west line of the Northwest Quarter of said Section 1 a distance of 2352.20 feet to the intersection with the south line of the south drainage right-of-way of Interstate 75; thence easterly along said line, N 89°40’16” E, 2640.00 feet; thence S 88°14'35" E, 2676.02 feet;
thence S 89°13'04" E, 2656.26 feet; thence N 89°51'50" E, 2650.84 feet;
thence N 89°28’53" E, 2647.15 feet; thence S 89°53’38" E, 2654.08 feet;
thence S 89°59'57" E, 2650.10 feet; thence N 89°51'03" E, 2650.97 feet;
thence S 89°32'18" E, 2648.17 feet; thence N 89°47'26" E, 2686.92 feet;
thence N 00°23'28" W, 124.56 feet; thence S 89°54'09" E, 2649.59 feet;
thence S 89°56'18" E, 2651.63 feet; thence N 89°41'16" E, 2652.50 feet;
thence S 89°49'15" E, 2651.54 feet to the intersection of the south line of said south drainage right-of-way with the east line of Section 1, Township 50 South, Range 28 East; thence S 00°18'22" E along the east line of the Northeast Quarter of said Section 1 a distance of 2460.78 feet to the East Quarter Corner of said Section 1; thence S 00°18'26" E, 2663.16 feet to the Southeast Corner of said Section 1; thence S 00°19'17" E, 2661.71 feet to the East Quarter Corner of Section 12 of said Township 50 South, Range 28 East; thence S 00°18'47" E, 2661.88 feet to the Southeast Corner of said Section 12; thence S 00°18'10" E, 2662.06 feet to the East Quarter Corner of Section 13 of said Township 50 South, Range 28 East; thence S 00°18'16" E, 2662.13 feet to the Southeast Corner of said Section 13; thence S 00°18'16" E, 2662.14 feet to the East Quarter Corner of Section 24 of said Township 50 South, Range 28 East; thence S 00°17'28" E, 2661.81 feet to the Southeast Corner of said Section 24; thence S 00°17'38" E, 2674.16 feet to the East Quarter Corner of Section 25 of said Township 50 South, Range 28 East; thence S 00°10'00" E, 2674.56 feet to the Southeast Corner of said Section 25; thence S 00°13'47" E, 2674.47 feet to the East Quarter Corner of Section 36 of said Township 50 South, Range 28 East; thence S 00°13'47" E, 2674.49 feet to the Southeast Corner of said Section 36; thence S 00°51'18" E, 2682.32 feet to the East Quarter Corner of Section 1 of Township 51 South, Range 28 East; thence S 00°51'18" E, 2682.32 feet to the Southeast Corner of said Section 1; thence S 00°28'26” W, 2596.09 feet to the East Quarter Corner of Section 12 of said Township 51 South, Range 28 East; thence S 00°41'47" W, 2598.68 feet to the Southeast Corner of said Section 12; thence southerly along the east line of Section 13, Township 51 South, Range 28 East, S 00°35'55" W, 5191.01 feet to the Southeast Corner of said Section 13; thence S 00°36'41" W, 2596.95 feet to the East Quarter Corner of Section 24 of said Township 51 South, Range 28 East; thence S 00°34'08" W, 2597.43 feet to the Southeast Corner of said Section 24; thence S 00°33'57" W, 2596.90 feet to the East Quarter Corner of Section 25 of said Township 51 South, Range 28 East; thence S 00°34'27" W, 2597.76 feet to the Southeast Corner of said Section 25 and the Point of Beginning.

Figure 1-2

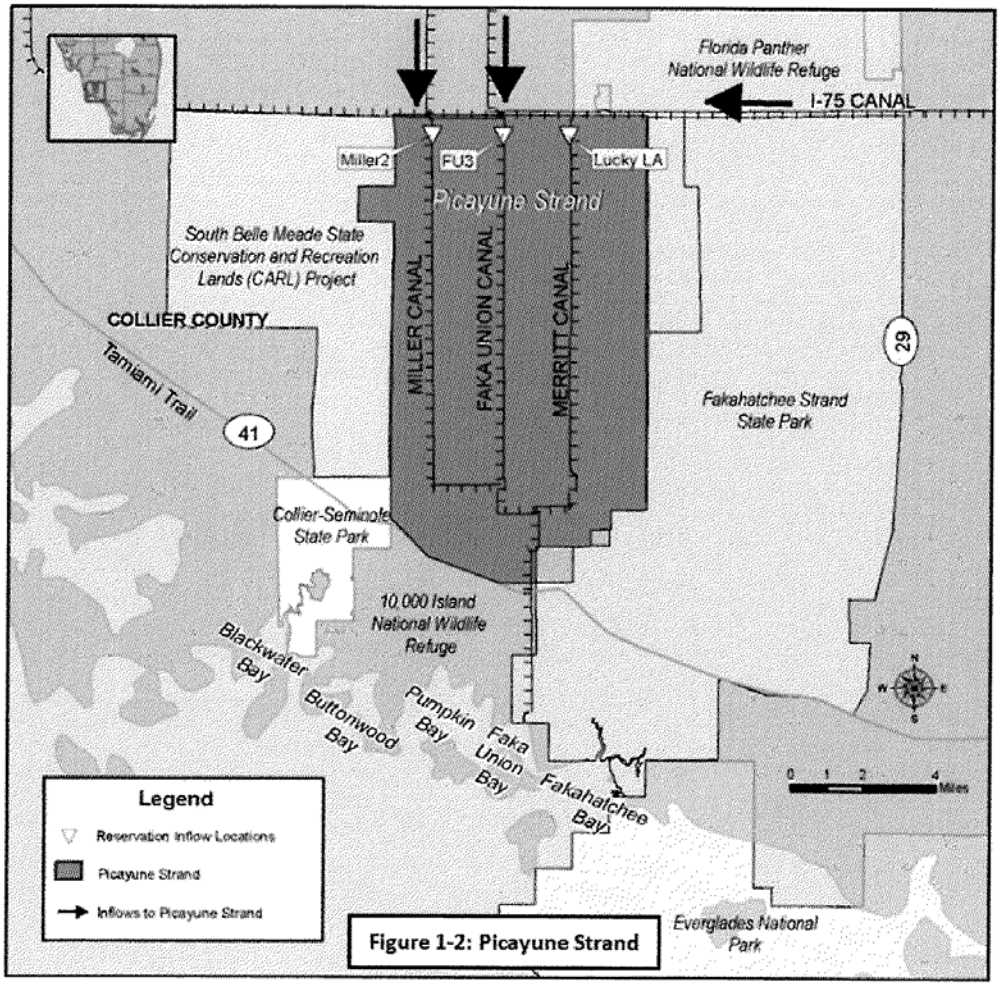


Figure 1-2: Picayune Strand

Figure 1-3

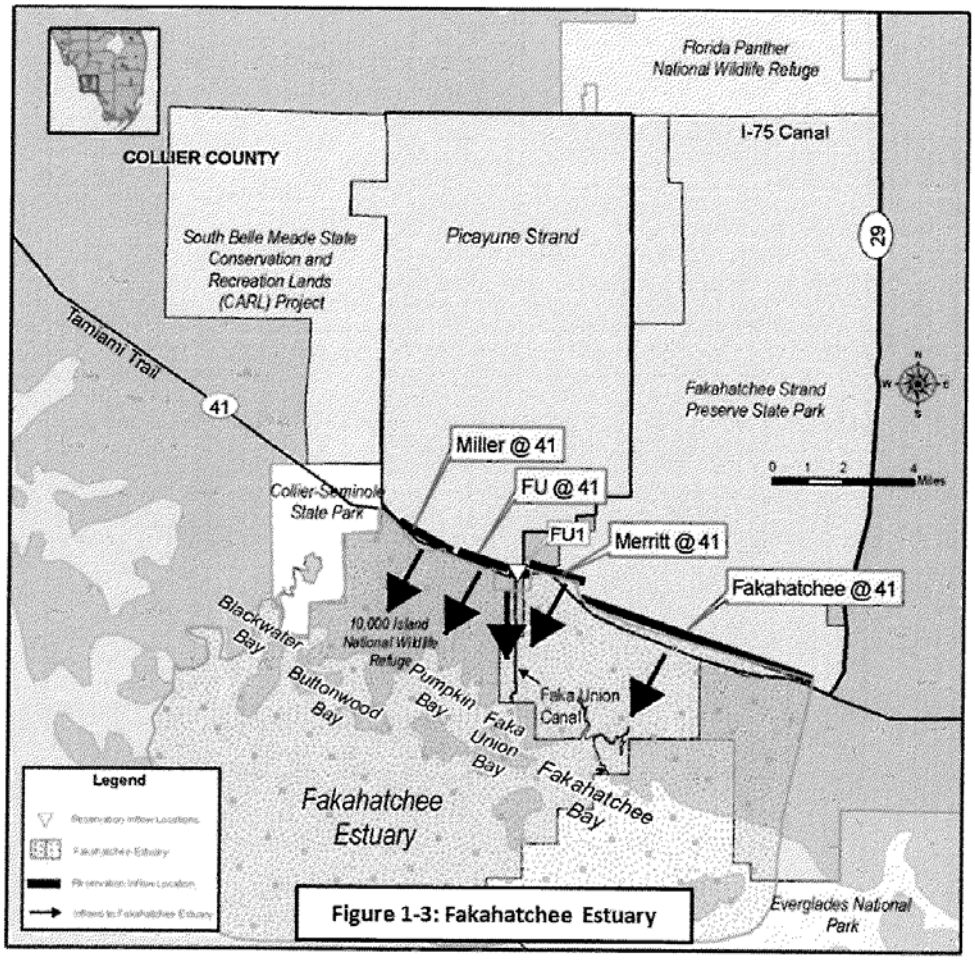


Figure 1-3: Fakahatchee Estuary

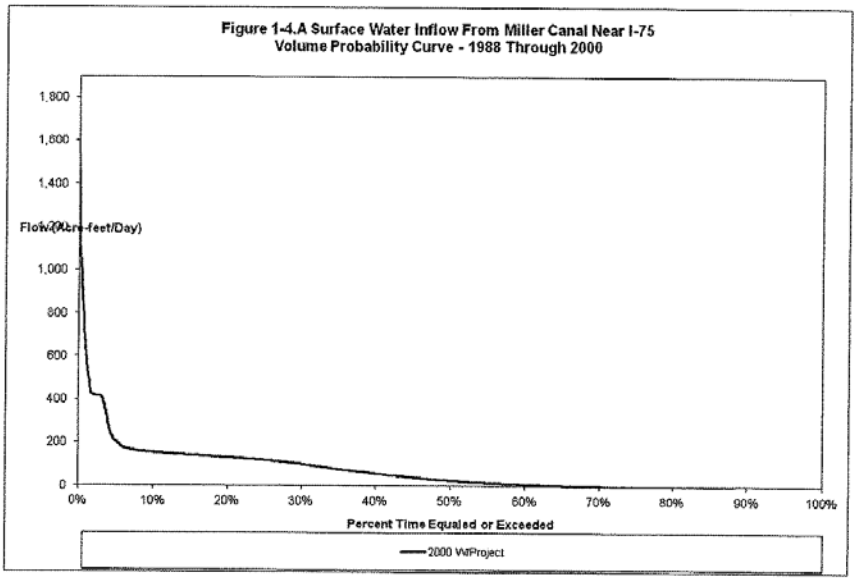


Figure 1-4.A Surface Water Inflow From Miller Canal Near I-75
Volume Probability Curve - 1988 Through 2000
Flow (Acre-feet/Day)
1,800
1,600
1,400
1,000
800
600
400
200
0
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Percent Time Equaled or Exceeded
2000 WdProject

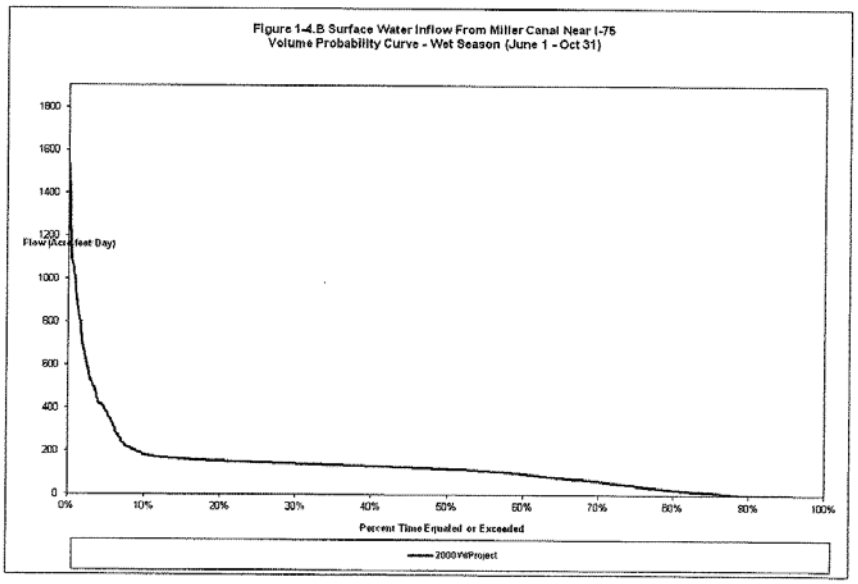


Figure 1-4.B Surface Water Inflow From Miller Canal Near I-75
Volume Probability Curve - Wet Season (June 1 - Oct 31)
1800
1600
1400
1200
1000
800
600
400
200
0
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Percent Time Equaled or Exceeded
2000WdProject

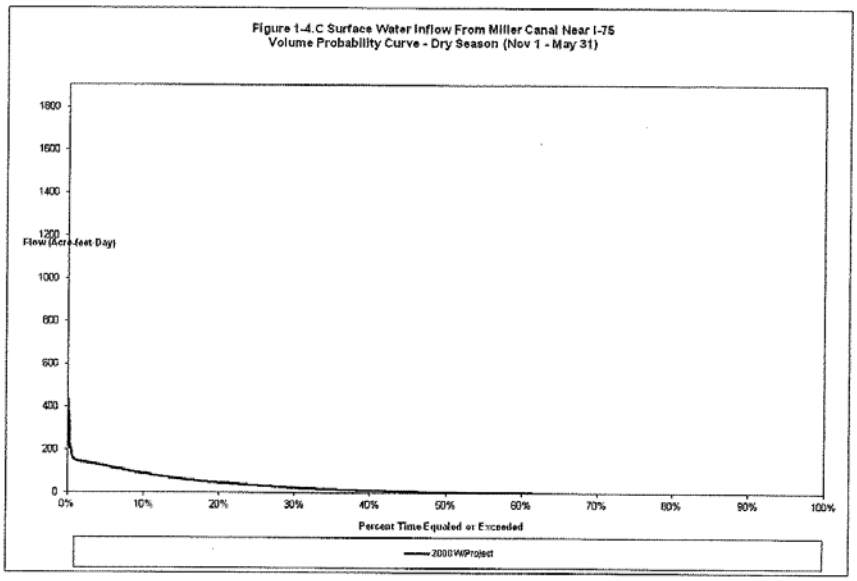


Figure 1-4.C Surface Water Inflow From Miller Canal Near I-75
Volume Probability Curve - Dry Season (Nov 1 - May 31)
1800
1600
1400
1200
Flow (Acre-feet Day)
1000
800
600
400
200
0
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Percent Time Equaled or Exceeded
2000 W/Project

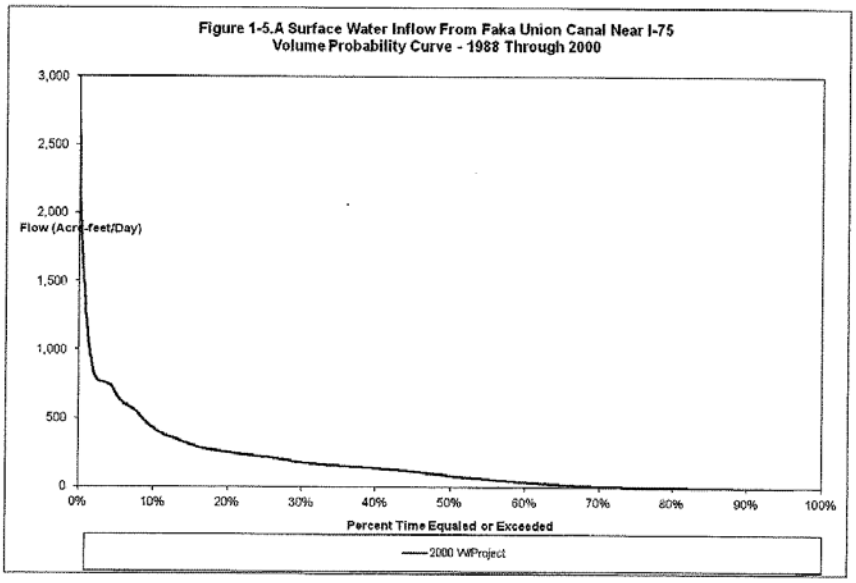


Figure 1-5.A Surface Water Inflow From Faka Union Canal Near I-75
Volume Probability Curve - 1988 Through 2000
3,000
2,500
2,000
Flow (Acre-feet/Day)
1,500
1,000
500
0
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Percent Time Equaled or Exceeded
2000 W/Project

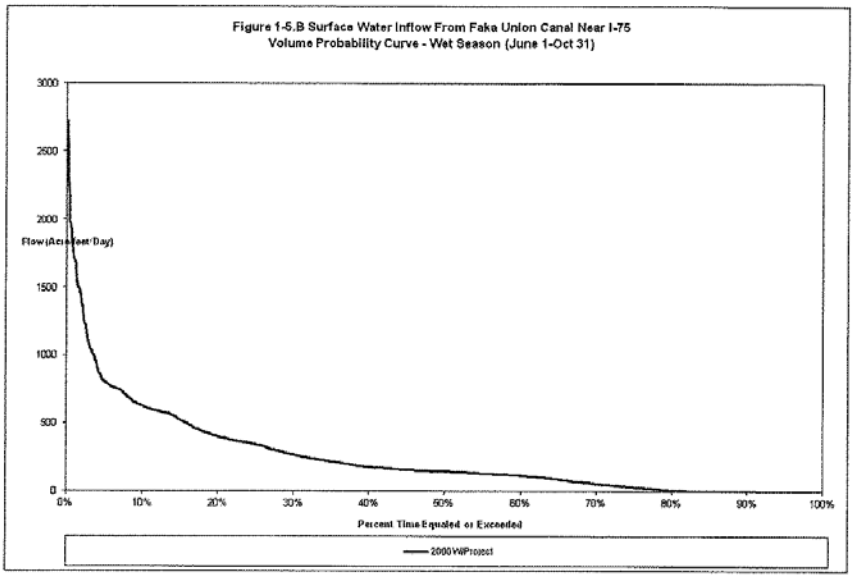


Figure 1-5.B Surface Water Inflow From Faka Union Canal Near I-75
Volume Probability Curve - Wet Season (June 1-Oct 31)
3000
2500
2000
Flow (Acre-feet/Day)
1500
1000
500
0
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Percent Time Equaled or Exceeded
2000WRProject

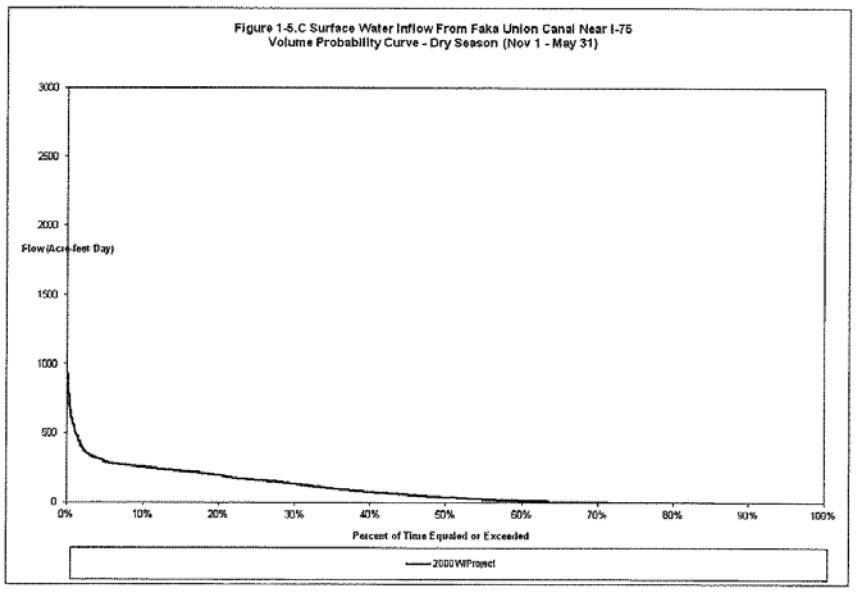


Figure 1-5.C Surface Water Inflow From Faka Union Canal Near I-75
Volume Probability Curve - Dry Season (Nov 1 - May 31)
3000
2500
2000
Flow (Acre-feet/Day)
1500
1000
500
0
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Percent of Time Equaled or Exceeded
2000WRProject

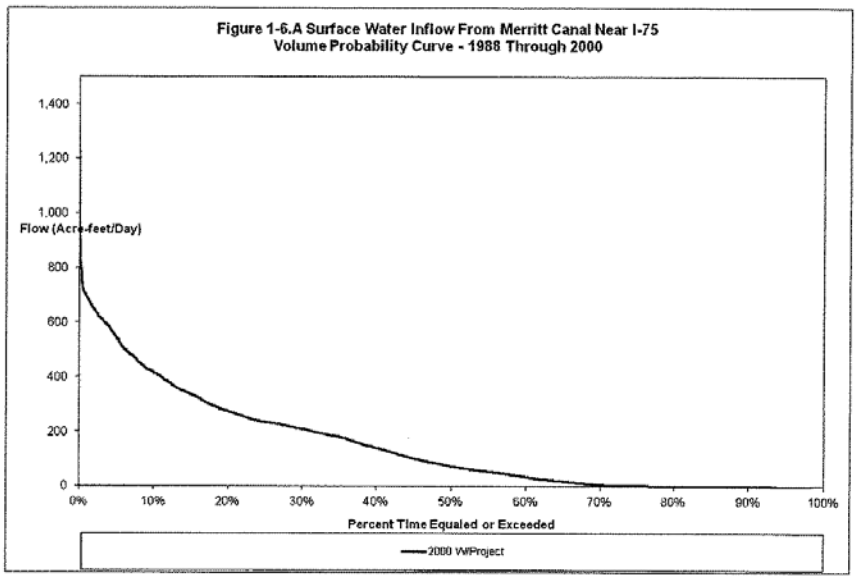


Figure 1-6.A Surface Water Inflow From Merritt Canal Near I-75
Volume Probability Curve - 1988 Through 2000
1,400
1,200
1,000
Flow (Acre-feet/Day)
800
600
400
200
0
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Percent Time Equaled or Exceeded
2000 WPProject

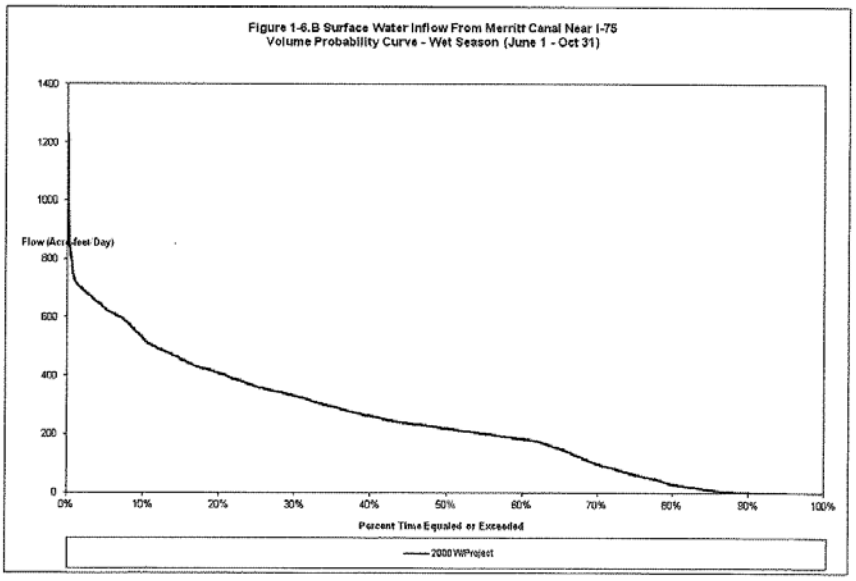


Figure 1-6.B Surface Water Inflow From Merritt Canal Near I-75
Volume Probability Curve - Wet Season (June 1 - Oct 31)
1400
1200
1000
Flow (Acre-feet/Day)
800
600
400
200
0
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Percent Time Equaled or Exceeded
2000 WPProject

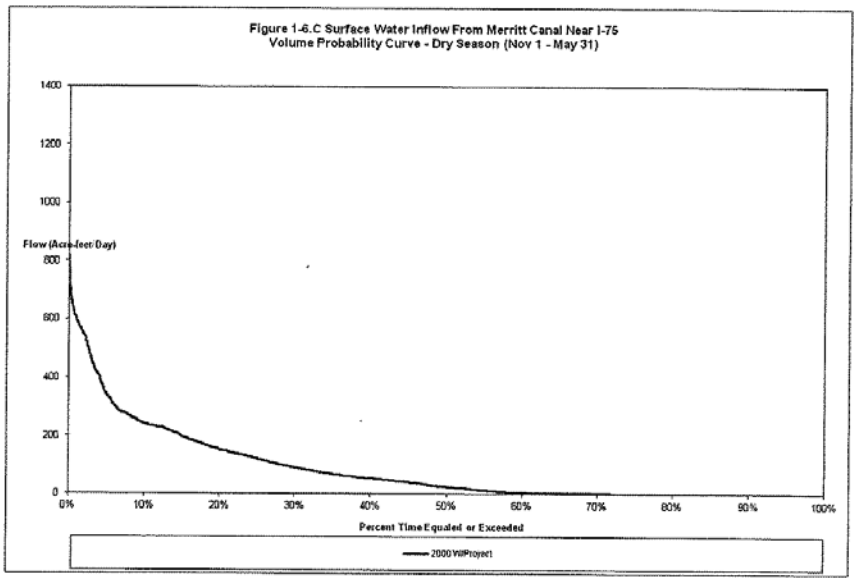


Figure 1-6.C Surface Water Inflow From Merritt Canal Near I-75
Volume Probability Curve - Dry Season (Nov 1 - May 31)
Flow (Acre-feet/Day)
1400
1200
1000
800
600
400
200
0
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Percent Time Equaled or Exceeded
2000 WProject

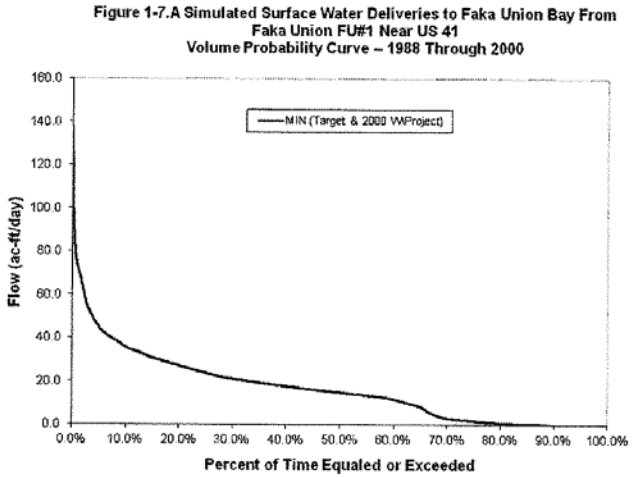


Figure 1-7.A Simulated Surface Water Deliveries to Faka Union Bay From
Faka Union FU#1 Near US 41
Volume Probability Curve – 1988 Through 2000
MIN (Target & 2000 WProject)
Flow (ac-ft/day)
160.0
140.0
120.0
100.0
80.0
60.0
40.0
20.0
0.0
0.0%
10.0%
20.0%
30.0%
40.0%
50.0%
60.0%
70.0%
80.0%
90.0%
100.0%
Percent of Time Equaled or Exceeded

Figure 1-7.B Simulated Surface Water Deliveries to Faka Union Bay from Faka Union FU#1 Near US 41
Wet Season Volume Probability Curve – (June 1 - Oct 31)

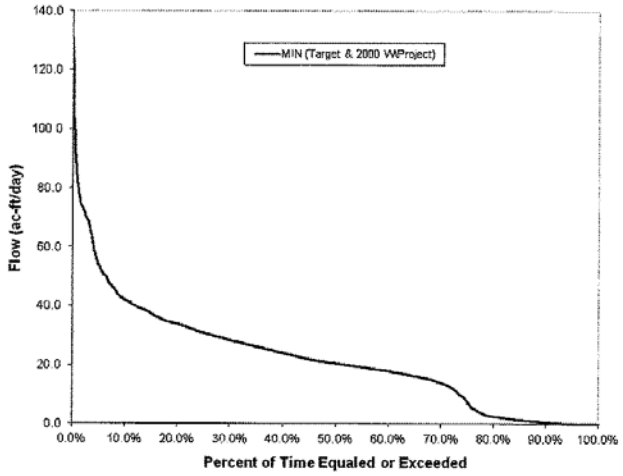
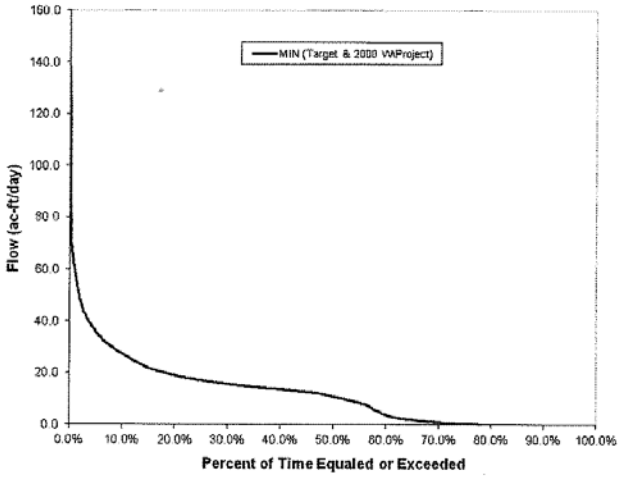


Figure 1-7.C Simulated Surface Water Deliveries to Faka Union Bay from Faka Union FU#1 Near US 41
Dry Sesaon Volume Probability Curve (Nov 1- May 31)



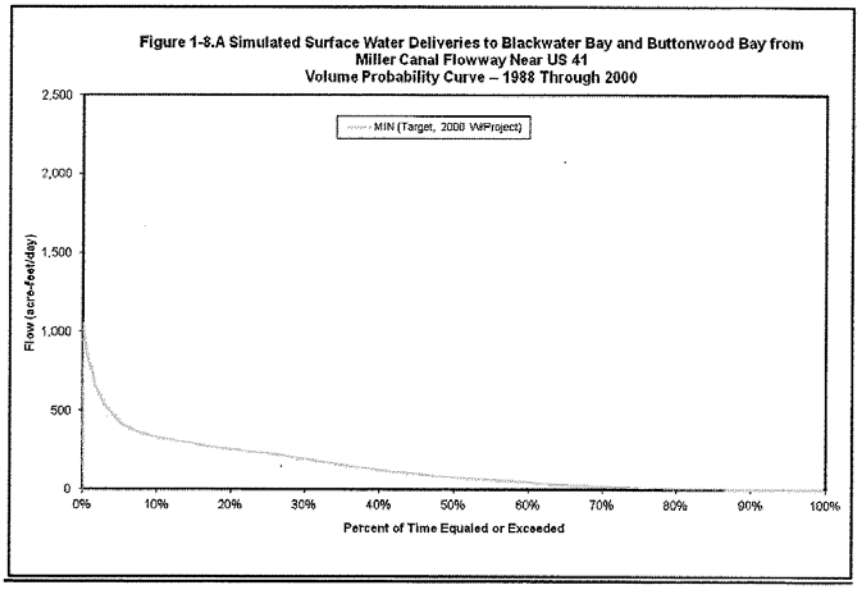


Figure 1-8.A Simulated Surface Water Deliveries to Blackwater Bay and Buttonwood Bay from
Miller Canal Flowway Near US 41
Volume Probability Curve – 1988 Through 2000
MIN (Target, 2000 WProjects)
Flow (acre-feet/day)
2,500
2,000
1,500
1,000
500
0
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Percent of Time Equaled or Exceeded

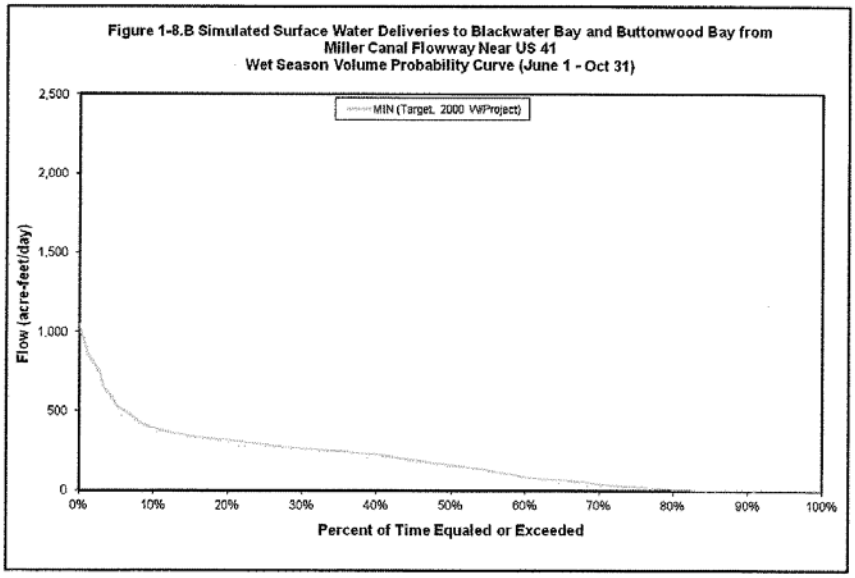


Figure 1-8.B Simulated Surface Water Deliveries to Blackwater Bay and Buttonwood Bay from
Miller Canal Flowway Near US 41
Wet Season Volume Probability Curve (June 1 - Oct 31)
MIN (Target, 2000 WProjects)
Flow (acre-feet/day)
2,500
2,000
1,500
1,000
500
0
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Percent of Time Equaled or Exceeded

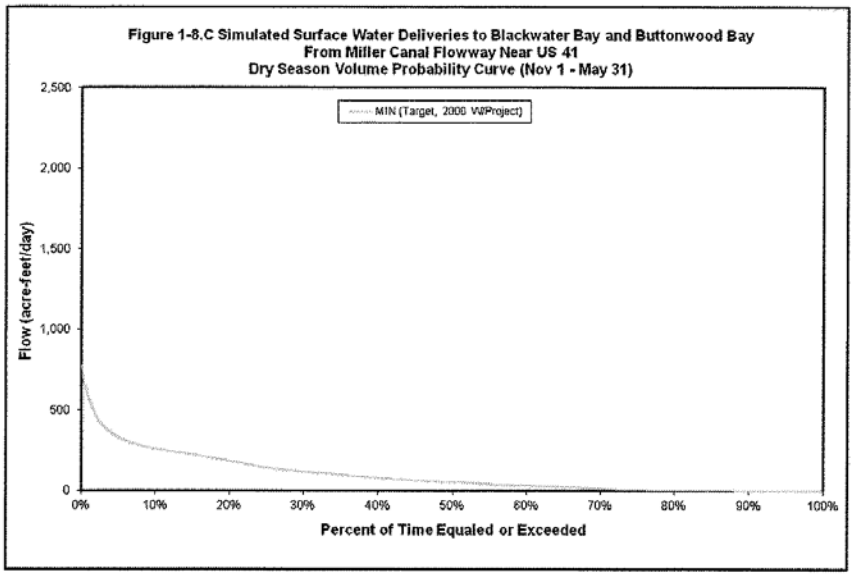


Figure 1-8.C Simulated Surface Water Deliveries to Blackwater Bay and Buttonwood Bay
From Miller Canal Flowway Near US 41
Dry Season Volume Probability Curve (Nov 1 - May 31)
MIN (Target, 2000 W/Project)
Flow (acre-feet/day)
2,500
2,000
1,500
1,000
500
0
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Percent of Time Equaled or Exceeded

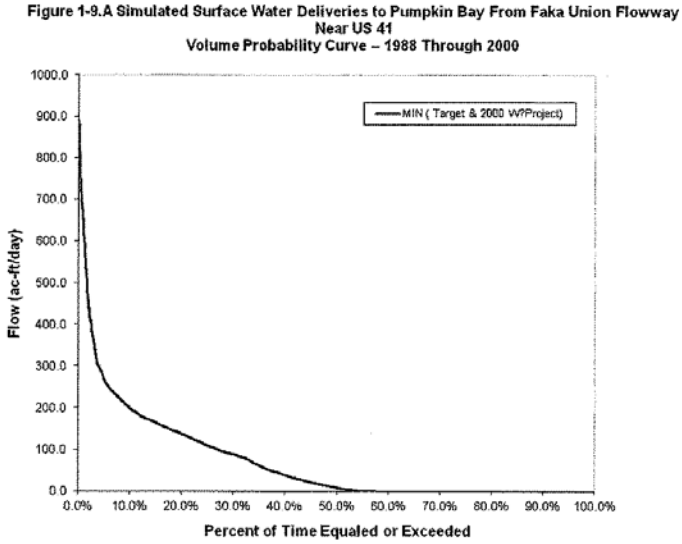


Figure 1-9.A Simulated Surface Water Deliveries to Pumpkin Bay From Faka Union Flowway
Near US 41
Volume Probability Curve – 1988 Through 2000
MIN (Target & 2000 W/Project)
Flow (ac-ft/day)
1000.0
900.0
800.0
700.0
600.0
500.0
400.0
300.0
200.0
100.0
0.0
0.0%
10.0%
20.0%
30.0%
40.0%
50.0%
60.0%
70.0%
80.0%
90.0%
100.0%
Percent of Time Equaled or Exceeded

Figure 1-9.B Simulated Surface Water Deliveries to Pumpkin Bay from Faka Union Flowway Near US 41 Wet Season Volume Probability Curve (June 1 - Oct 31)

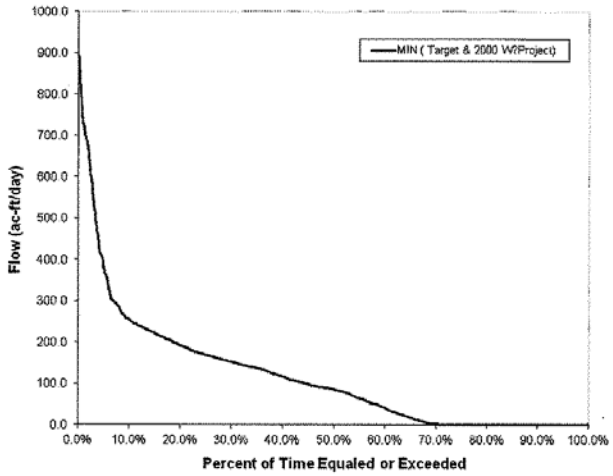


Figure 1-9.C Simulated Surface Water Deliveries to Pumpkin Bay from Faka Union Flowway Near US 41 Dry Season Volume Probability Curve (Nov1 - May 31)

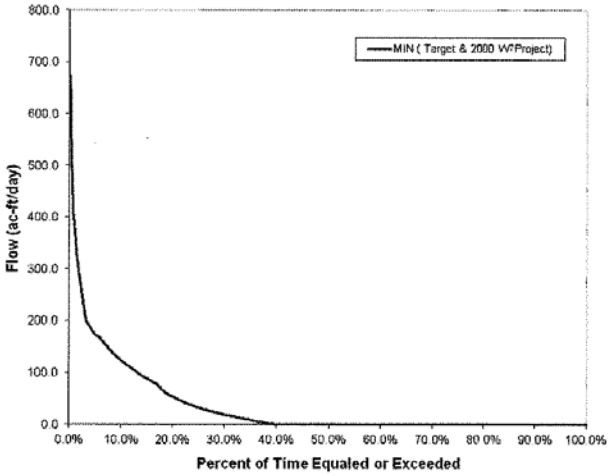


Figure 1-10.A Simulated Surface Water Deliveries to Faka Union Bay From Merritt Canal Flowway Near US41 Volume Probability Curve – 1988 Through 2000

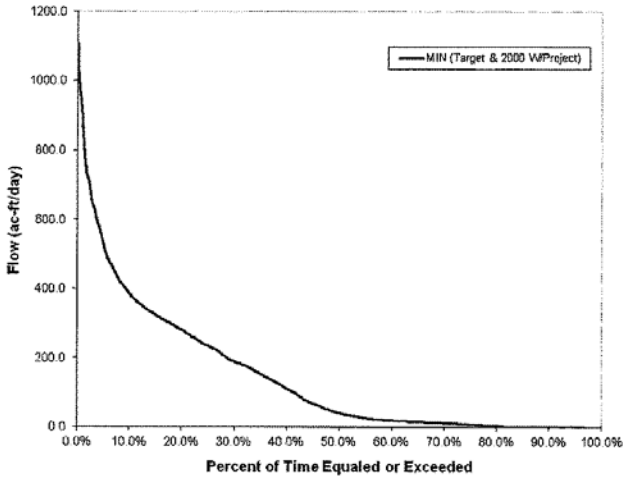


Figure 1-10.B Simulated Surface Water Deliveries to Faka Union Bay from Merritt Canal Flowway Near US41 Wet Sesaon Volume Probability Curve (June 1- Oct 31)

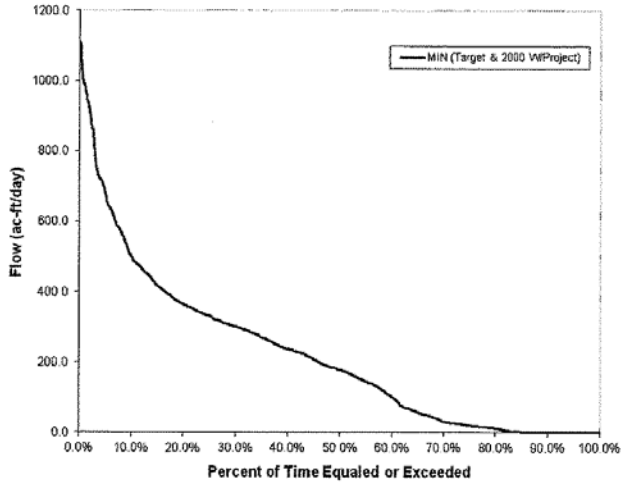


Figure 1-10.C Simulated Surface Water Deliveries to Faka Union Bay from Merritt Canal Flowway Near US41
Dry Season Volume Probability Curve (Nov 1 - May 31)

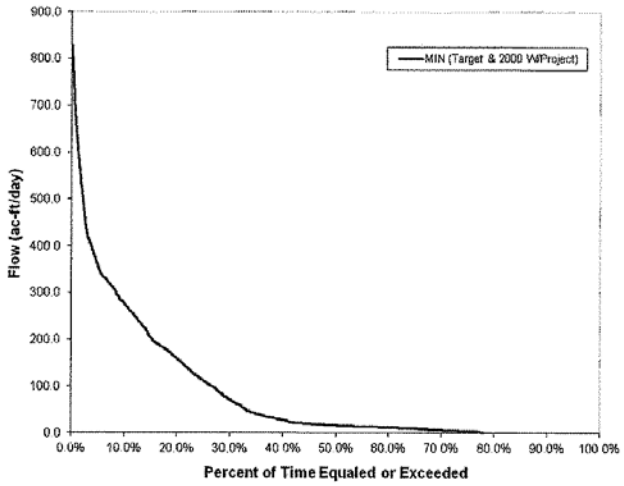


Figure 1-11.A Simulated Surface Water Deliveries to Fakahatchee Bay From Fakahatchee Strand
Volume Probability Curve – 1988 Through 2000

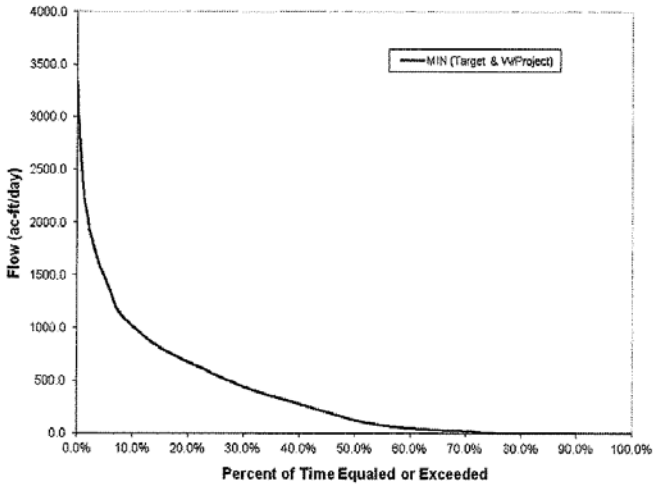


Figure 1-11.B Simulated Surface Water Deliveries to Fakahatchee Bay from Fakahatchee Strand
Wet Season Volume Probability Curve (June 1- Oct 31)

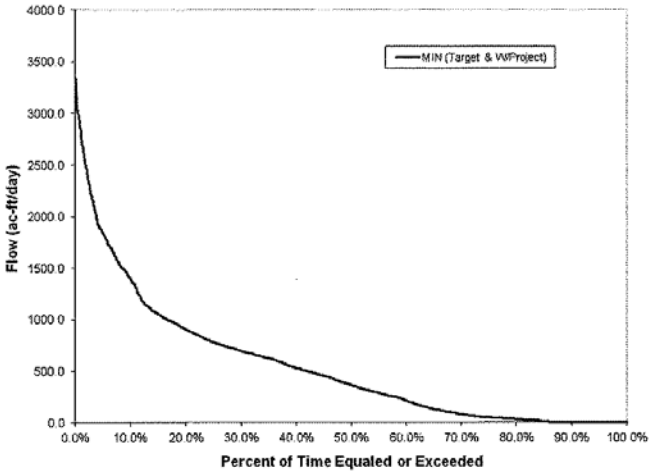
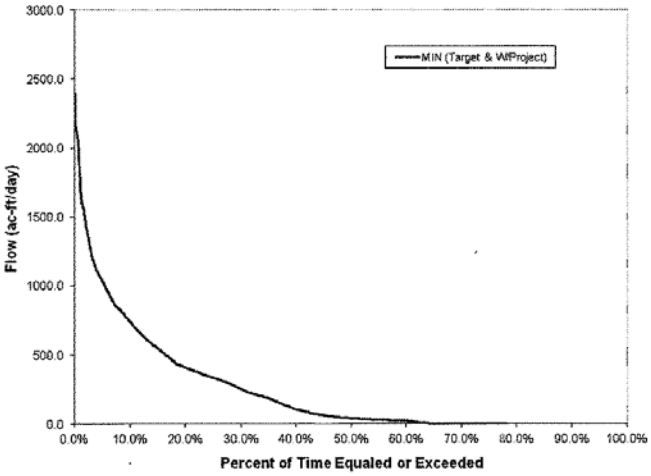


Figure 1-11.C Simulated Surface Water Deliveries to Fakahatchee Bay from Fakahatchee Strand
Dry Season Volume Probability Curve (Nov 1 - May 31)



1-12 LEGAL DESCRIPTION OF CALOOSAHATCHEE RIVER C-43 WEST BASIN STORAGE RESERVOIR

Caloosahatchee River
C-43 West Basin Storage Reservoir
A parcel of land lying in Sections 31, 32, 33, 34, 35, and 36, Township 43 South, Range 28 East, Section 31, Township 43 South, Range 29 East, Section 6, Township 44 South, Range 29 East, and Sections 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, and 12, Township 44 South Range 28 East, Hendry County Florida, being more particularly described as follows:
Beginning at the Northwest corner of the East 1/2 of said Section 31, Township 43 South, Range 28 East; Thence, S89°51'14"E, along the North line of said East 1/2 , a distance of 2,635.83 feet to the Northwest corner of said Section 32;
Thence, N89°26'04"E, along the North line of the Northwest 1/4 of Section 32, a distance of 2,650.29 feet to the North quarter corner of section 32;
Thence, N89°27'01"E, along the North line of the Northeast 1/4 of Section 32 , a distance of 2,651.17 feet to the Northwest corner of said section 33;
Thence, N89°39'17"E, along the North line of the Northwest 1/4 of Section 33, a distance of 2,644.00 feet to the North 1/4 corner of Section 33;
Thence, N89°40'58"E, along the North line of the Northeast 1/4 of Section 33, a distance of 2,644.65 feet to the Northwest corner of said Section 34;
Thence, N89°24'50"E, along the North line of the Northwest 1/4 of Section 34, a distance of 2,644.35 feet to the North 1/4 corner of Section 34;
Thence, N89°25'57"E, along the North line of the Northeast 1/4 of Section 34, a distance of 2,644.21 feet to the Northwest corner of said Section 35;
Thence, N89°13'34"E, along the North line of the Northwest 1/4 of Section 35, a distance of 2,652.53 feet to the North 1/4 corner of Section 35;
Thence, N89°25'25"E, along the North line of Northeast 1/4 of Section 35, a distance of 2,650.20 feet to the Northwest corner of said Section 36;
Thence, N89°39'37"E, along the North line of the Northwest 1/4 of Section 36, a distance of 2,642.30 feet to the North 1/4 corner of Section 36;
Thence, N89°39'50"E, along the North line of the Northeast 1/4 of Section 36, a distance of 1,436.88 feet to an East corner of the Berry land as described in Official Record Book 605, page 1149, public records of Hendry County;
Thence , continue N 89°39'50"E, along said North line 1205.97 feet to the Northwest corner of said Section 31, Township 43 South, Range 29 East;
Thence, N89°39'59"E, along the North line of said Section 31, Township 43 South, Range 29 East for 1878.01 feet to an intersection with a line parallel with and 1,877.97 feet Easterly of, as measured perpendicular to the West line of said Section 31, Township 43 South, Range 29 East;
Thence, S00°09'39"E, along said parallel line for 5298.32 feet to an intersection with a line parallel with and 1877.97 feet Easterly of, as measured perpendicular to the West line of said Section 6, Township 44 South, Range 29 East;
Thence, S00°13'51"E, along said parallel line for 5241.63 feet to an intersection with the South line of the Southwest quarter of said Section 6, Township 44 South, Range 29 East;
Thence, N89°53'18”W, along said South line for 1878.00 feet to the Southwest corner of said Section 6 also being the Northeast corner of said Section 12, Township 44 South, Range 28 East;
Thence, S00°33'18"E, along the East line of Section 12, a distance of 5,310.64 feet to the Southeast corner of Section 12;
Thence, S89°30'12”W, along the South line of the Southeast 1/4 of Section 12, a distance of 2,634.72 feet to the South 1/4 corner;
Thence, S89°09'14”W, along the South line of the Southwest 1/4, a distance of 2,632.48 feet to the Southeast corner of said Section 11;
Thence, S87°42'48”W, along the South line of the Southeast 1/4 of Section 11, a distance of 2,640.48 feet to the South 1/4 corner of section 11;
Thence, S87°51'34”W, along the South line of the Southwest 1/4 of Section 11, a distance of 2,641.90 feet to the Southeast corner of said Section 10;
Thence, N89°40'57”W, along the South line of the Southeast 1/4 of Section 10 , a distance of 2,643.20 feet to the South 1/4 corner of Section 10;

Thence, N89°41'44"W, along the South line of the Southwest 1/4 of Section 10, a distance of 2,643.59 feet to the Southeast corner of said Section 9;
Thence, N89°47'36"W, along the South line of the Southeast 1/4 of Section 9, a distance of 2,654.46 feet to the South 1/4 corner of Section 9;
Thence, N89°47'39"W, along the South line of the Southwest 1/4 of Section 9, a distance of 2,201.47 feet to a point of curvature with the arc of a circular curve to the right having a radius of 459.30 feet and a central angle of 89°13'48"; thence Northwesterly along the arc of said curve, for 715.29 feet to a point of tangency on the West line of Section 9;
Thence, N00°34'21"W, along the West line of Section 9, a distance of 2,230.83 feet to an intersection with a line being 50 feet Northerly of, as measured at right angles and parallel with the South line of the North 1/2 of said Section 8;
Thence, N89°52'19"W, along said parallel line, a distance of 5,287.36 feet;
Thence, N44°21'33"W, a distance of 2,971.24 feet;
Thence, N32°48'36"W, a distance of 535.22 feet to an intersection with a line being 300 feet Easterly of, as measured at right angles and parallel to the West line of the East 1/2 of Section 6, Township 44 South, Range 28 East;
Thence, S89°40'57"W, along the South line of section 6, Township 44 South, Range 28 East, a distance of 300.00 feet to the West line of the East 1/2 ;
Thence, N00°21'09"W, along said West line, a distance of 5,287.40 feet to the South 1/4 corner of said Section 31;
Thence, N00°21'57"W, along the West line of the East 1/2 of Section 31, a distance of 5,275.89 feet to the Point of Beginning.

Figure 1-13. Caloosahatchee River (C-43) West Basin Storage Reservoir Project Location

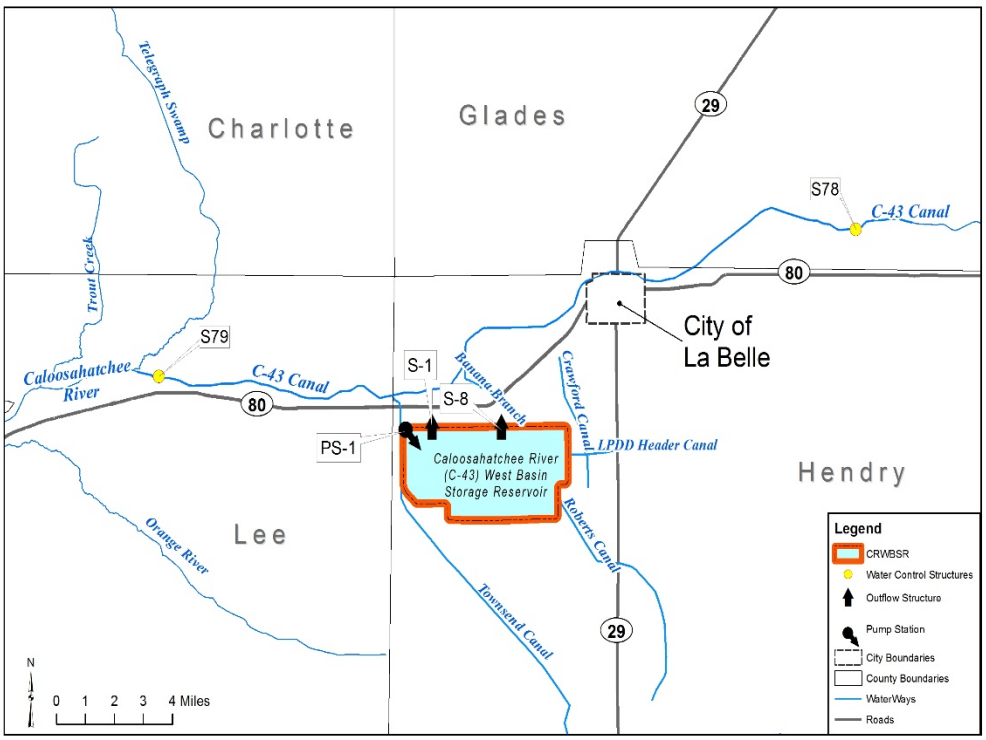


Figure 1-13. Caloosahatchee River (C-43) West Basin Storage Reservoir (CRWBSR) Project Location

APPENDIX 2 UPPER EAST COAST PLANNING AREA

2-1 Upper East Coast Reservation Water Bodies

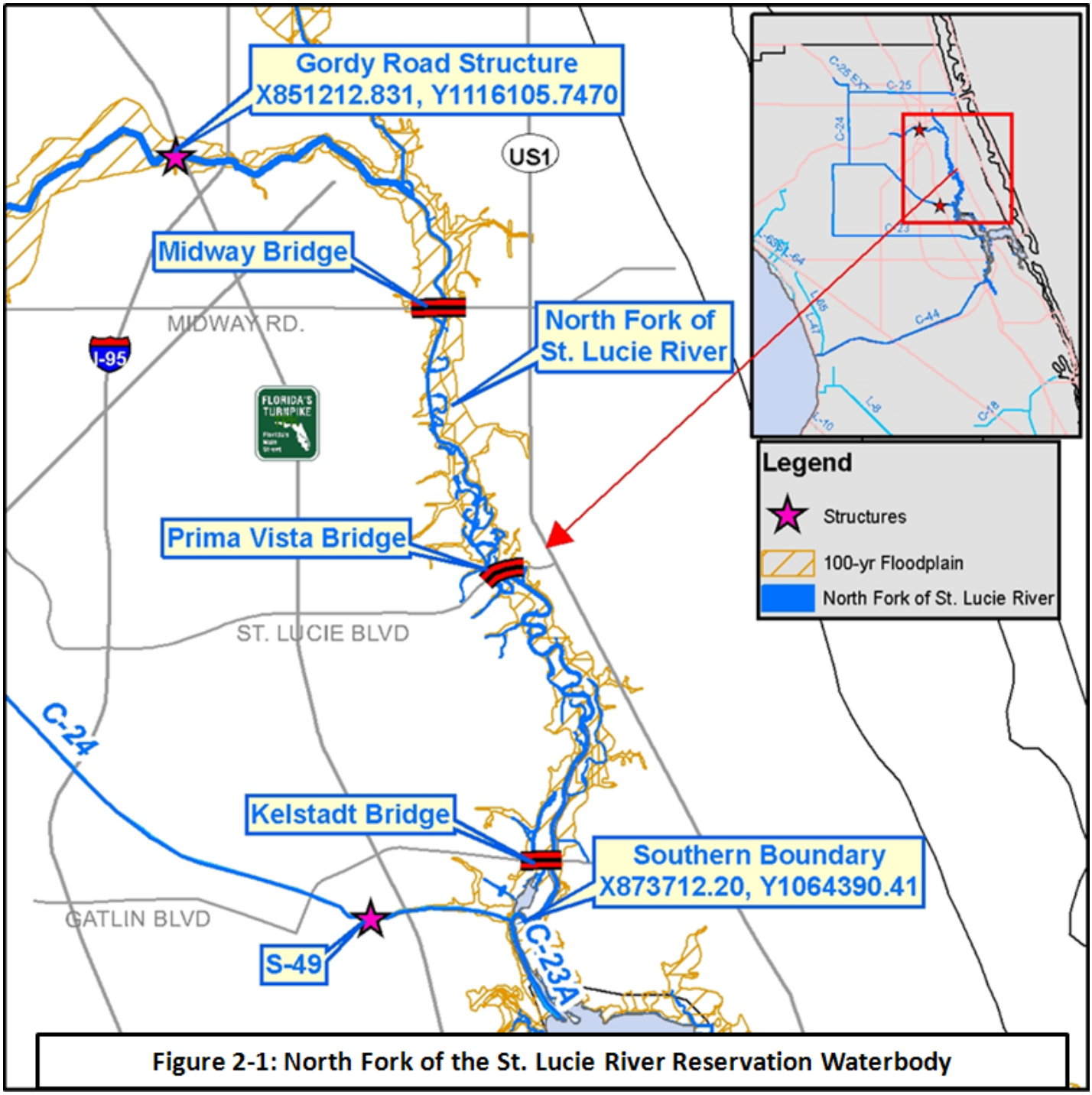
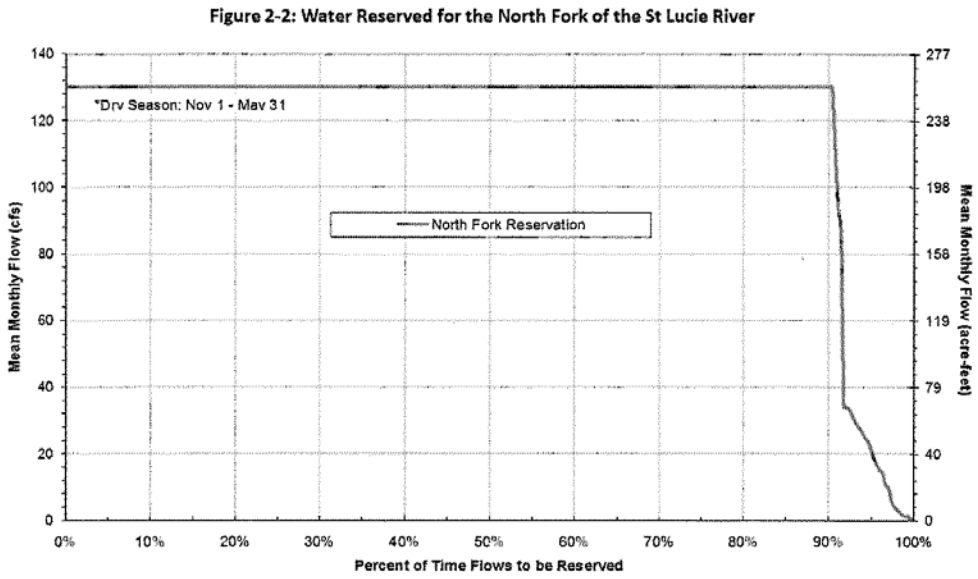


Figure 2-1: North Fork of the St. Lucie River Reservation Waterbody

Figure 2-2: Water Reserved for the North Fork of the St Lucie River



APPENDIX 3: LOWER EAST COAST PLANNING AREA

Figure 3-1 Nearshore Central Biscayne Bay Reservation Water Body and Protected Canal Reaches

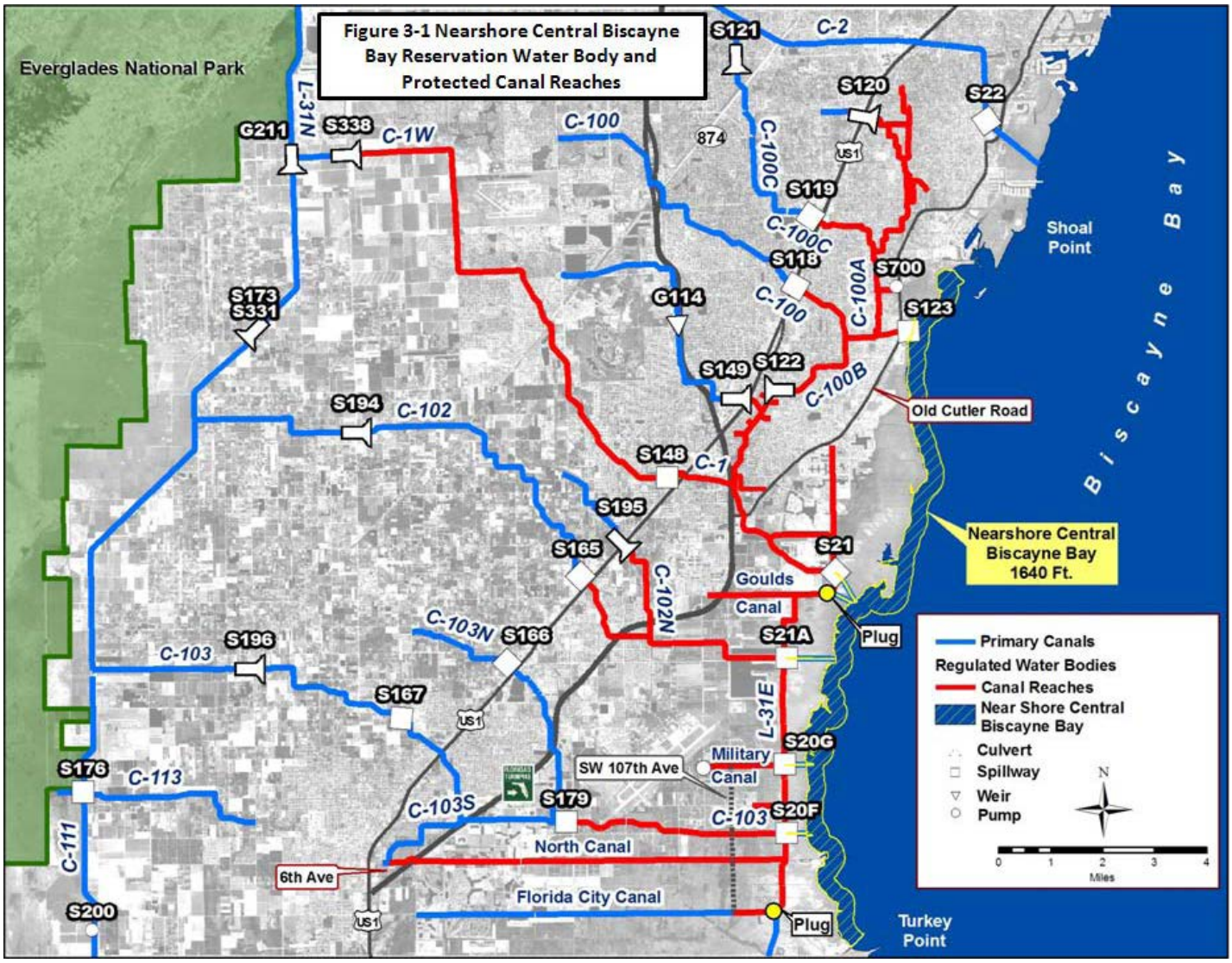


Figure 3-2.A Surface Water Flow from the C-100 canal through S-123 into Biscayne Bay during the Wet Season (June-October) (1986-2011)

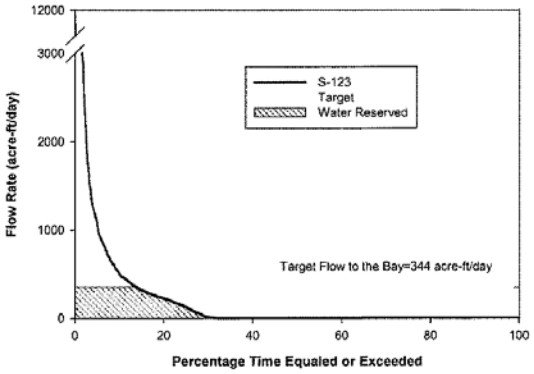


Figure 3-2.B Surface Water Flow from the C-100 canal through S-123 into Biscayne Bay during the Dry Season (November-May) (1986-2011)

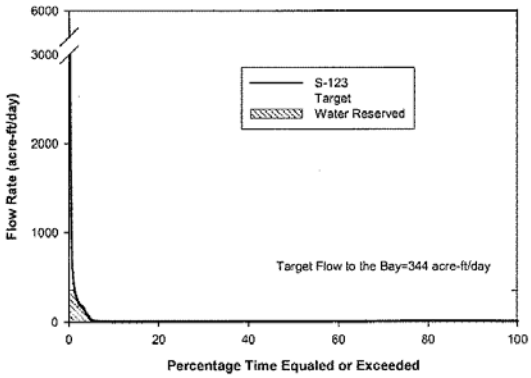


Figure 3-3.A Surface Water Flow from the C-1 canal through S-21 into Biscayne Bay during the Wet Season (June-October) (1986-2011)

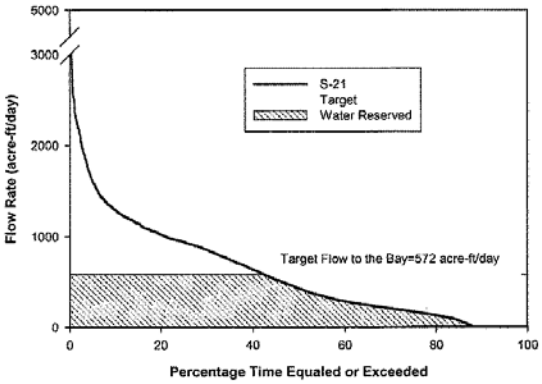


Figure 3-3.B Surface Water Flow from the C-1 canal through S-21 into Biscayne Bay during the Dry Season (November-May) (1986-2011)

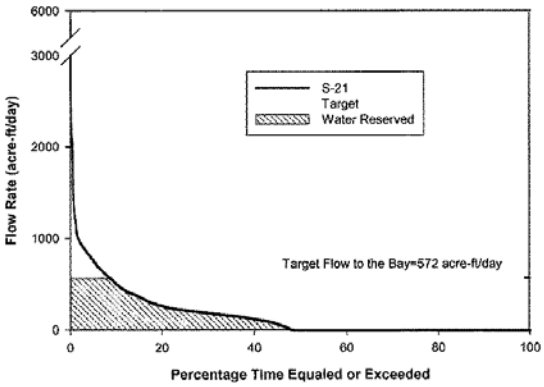


Figure 3-4.A Surface Water Flow from the C-102+Military+C-103 Canal through S-21A+S-20G+S-20F into Biscayne Bay during the Wet Season (June-October) (1986-2011)

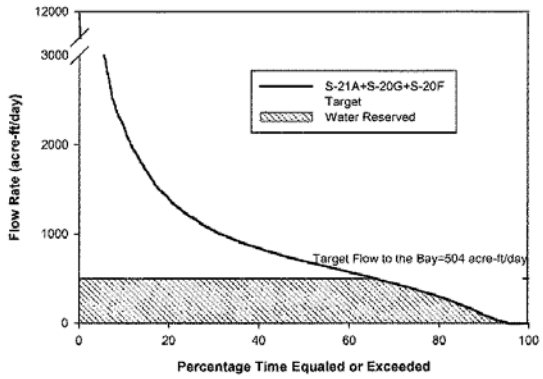
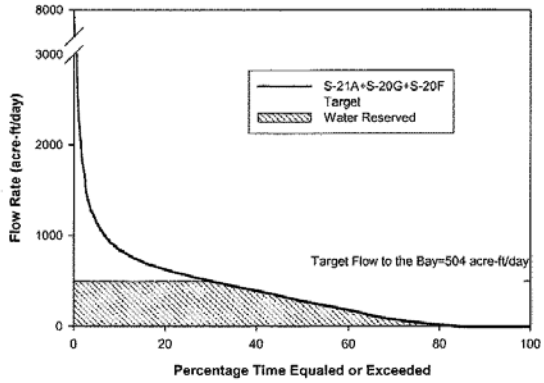


Figure 3-4.B Surface Water Flow from the C-102+Military+C-103 Canal through S-21A+S-20G+S-20F into Biscayne Bay during the Dry Season (November-May) (1986-2011)



Rules of the

South Florida Water Management District

General Water Use Permits

CHAPTER 40E-20, F.A.C.

ENTIRE CHAPTER REPEALED
07/14/2014

Rules of the
South Florida Water Management District

CHAPTER 40E-21
WATER SHORTAGE PLAN

Effective: May 27, 2012

CHAPTER 40E-21
WATER SHORTAGE PLAN

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40E-21.011 Policy and Purpose.

(1) The rules in this chapter comprise the District's water shortage plan required under Section 373.246(1), F.S. The purposes of the plan are to protect the water resources of the District from harm; to assure equitable distribution of available water resources among all water users during times of shortage, consistent with the goals of minimizing adverse economic, social and health related impacts; to provide advance knowledge of the means by which water apportionments and reductions will be made during times of shortage, and to promote greater security for water use permittees.

(2) These rules apply to all water users including those exempt from permitting pursuant to Rule 40E-2.051, F.A.C. However, these rules shall not apply to users whose source of water is limited solely to treated effluent or seawater. Thus, for each regulated source and type of use it is the policy of the District to restrict water users uniformly, regardless of whether the user uses water from a public or private utility system, pursuant to a consumptive use permit issued under Chapter 40E-2, F.A.C., or from a private well for domestic or individual home use.

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.175, 373.246 FS. History–New 5-31-82.

40E-21.031 Elements of the Plan.

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.175, 373.246 FS. History–New 5-31-82, Repealed by Section 3, Chapter 2012-31, Laws of Florida, 5-27-12.

40E-21.051 Definitions.

The terms set forth herein shall have the meanings ascribed to them, unless the context clearly indicates otherwise, and such meanings shall apply throughout the rules contained in this chapter. The definitions set forth in Rule 40E-8.021, F.A.C., shall be incorporated by reference into this rule.

(1) "Water shortage" means that situation within all or part of the District when insufficient water is available to meet the

present and anticipated needs of the users, or when conditions are such as to require temporary reduction in total use within a particular area to protect water resources from serious harm. A water shortage usually occurs due to drought.

(2) "Water shortage emergency" means that situation when the powers which can be exercised under part II of Chapter 40E-21, F.A.C., are not sufficient to protect the public health, safety, or welfare, or the health of animals, fish or aquatic life, or a public water supply, or commercial, industrial, agricultural, recreational or other reasonable uses.

(3) "User" means any person, natural or artificial, individual, firm, association, organization, partnership, business trust, corporation, company, agent, employee or other legal entity, the United States of America, and the State and all political subdivisions, regions, districts, municipalities, and public agencies thereof, which directly or indirectly takes water from the water resource, including but not limited to uses from private or public utility systems, uses under consumptive use permits issued pursuant to Chapter 40E-2, F.A.C., or uses from individual wells or pumps for domestic or individual home use. The term does not include persons who use treated effluent or seawater.

(4) "Water resource" means any and all water on or beneath the surface of the ground, including natural or artificial water courses, lakes, ponds, or diffused surface water and water percolating, standing, or flowing beneath the surface of the ground.

(5) "Source class" means the assigned water resource from which a user is obtaining water either directly or indirectly. Source classes within the District are specified in Rule 40E-21.631, F.A.C.

(6) "Use class" means the category describing the purpose for which the user is utilizing water. Use classes within the District are specified in Rule 40E-21.651, F.A.C.

(7) "Method of withdrawal class" means the type of facility or means of extraction or diversion of the water resource employed by the user. Method of withdrawal classes within the District are specified in Rule 40E-21.671, F.A.C.

(8) "Surface water use basin" means the geographical area within which a user obtains water from surface waters. Surface water use basins are a type of source class and are identified in subsection 40E-21.631(1), F.A.C.

(9) "Ground water source" means a source class within which users obtain water directly from water table aquifers or from confined or semi confined aquifers. Ground water sources are a type of source class and are identified in subsection 40E-21.631(2), F.A.C.

(10) "Percent reduction in overall demand" means the weighted average reduction in all water uses within a source class, regardless of the type of use or method of withdrawal, which is necessary to reduce estimated present and anticipated demand to estimated present and anticipated available water supply.

(11) "Plan" means the water shortage plan authorized in Section 373.246, F.S., and contained in this chapter.

(12) "Low-volume irrigation" means the use of equipment and devices specifically designed to allow the volume of water delivered to be limited to a level consistent with the water requirement of the plant being irrigated and to allow that water to be placed with a high degree of efficiency in the root zone of the plant. The term also includes water use in mist houses and similar establishments for plant propagation. Overhead irrigation and flood irrigation are not included.

(13) "Overhead irrigation" means the use of equipment and devices which deliver water under pressure, through the air, above the level of the plant being irrigated.

(14) "Flood irrigation" means the delivery of plant or crop irrigation water by the design and practice of the flowing of water over the surface to saturate the root zone or in specific applications the raising of the level of groundwater through the root zone or to the soil surface.

(15) "Low volume hand watering" means watering by one hose attended by one person, fitted with a self-canceling or automatic shutoff nozzle.

(16) "Low-volume mobile equipment washing" means the washing of mobile equipment with a "bucket" and "sponge" or a hose with a self-canceling or automatic shutoff nozzle or both.

(17) "Low-volume pressure cleaning" means pressure cleaning by means of equipment which is specifically designed to reduce the inflow volume as accepted by industry standards.

(18) "Nursery stock" means all plants, trees, shrubs, vines, bulbs, cuttings, grafts, scions, buds, flowering annual plants, aquatic plants, seeds, corns, or tubers, grown or kept for propagation, distribution or sale.

(19) "Mobile equipment" means any public, private or commercial automobile, truck, trailer, railroad car, camper, boat, or any other type of similar equipment. The term shall not include mobile homes, boats that serve as a primary residence, sanitation or sludge vehicles or food vending or transporting vehicles.

(20) "Even numbered address" means the house address, box number or rural route ending in the numbers 0, 2, 4, 6, 8 or the

letters A-M. Post office box numbers are not included.

(21) "Odd numbered address" means the house address, box number or rural route ending in the numbers, 1, 3, 5, 7, 9 or the letters N-Z. Post office box numbers are not included.

(22) "Odd numbered days" means the days whose dates end in the numbers 1, 3, 5, 7, or 9. For purposes of this chapter the date shall be determined by the day during which a watering period ends.

(23) "Low-volume watering" means the use of equipment, devices, materials and/or methods, including low-volume hand watering, which limit the amount of water applied to a surface to the minimum necessary for dust control or evaporation suppression; use of equipment specifically designed to reduce flow and increase saturation efficiency to a level accepted under industry standards.

(24) "License" means, but is not limited to, the appropriate professional registration, occupational license, contractor license or applicator license for the jurisdiction in which work is being performed.

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.042, 373.0421, 373.175, 373.246 FS. History–New 5-31-82, Amended 1-26-86, 2-14-91, 9-10-01.

40E-21.132 Water Use Restrictions.

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.119, 373.175, 373.246 FS. History–New 9-3-81, Amended 7-4-82, Formerly 16K-30.09, Repealed by Section 3, Chapter 2012-31, Laws of Florida, 5-27-12.

40E-21.221 Evaluating Water Conditions.

(1) This rule sets forth the steps the District will take to periodically evaluate water conditions within the District in order to determine whether a water shortage should be declared.

(2) The District shall monitor the condition of the water resources in the District as provided in Rule 40E-21.401, F.A.C.

(3) Current data shall be compared to historical data to determine whether estimated present and anticipated available water supply within any source class will be insufficient to meet the estimated present and anticipated demands of the users from the source class, or whether serious harm to the water resources can be expected. It shall be the policy of the District to seek the cooperation and assistance of state, county and municipal government officials in developing the historic and technical data used to periodically evaluate water conditions.

(a) Present and anticipated available water supply shall be periodically estimated for each source class. Factors considered in estimating present and anticipated available supply within a source class may include:

1. Historic, current and anticipated levels in surface and ground waters, including potentiometric heads in confined and semiconfined aquifers,

2. Historic, current and anticipated flows in surface waters,

3. The extent to which water may be transferred from one source class to another,

4. The extent to which present water use restrictions may enhance future supplies, or postpone more stringent restrictions,

5. Historic, current and anticipated demand of natural systems, including losses due to evapotranspiration and seepage,

6. Historic, current and anticipated seasonal fluctuation in rainfall, and

7. Other water resources factors affecting present and anticipated available water supply.

(b) Present and anticipated user demands for each use and method of withdrawal class shall be periodically estimated for each source class. Factors considered in estimating the present and anticipated demands of the users within a source class may include:

1. Estimated current and anticipated demands of permitted users,

2. Estimated current and anticipated demands of users exempt from permitting, but subject to the provisions of the water shortage plan,

3. Current and anticipated demands of users whose supply of water is established by federal law,

4. Anticipated seasonal fluctuations in user demands,

5. The extent to which user demands may be met from other source classes, and

6. Other factors affecting present and anticipated water demands.

(c) Estimated present and anticipated available water supply shall be periodically compared to estimated present and anticipated user demands to determine impact on the water resource. Factors that may be considered in determining whether serious harm to the

water resource may occur include:

1. Potential for increased saltwater intrusion or other ground water contamination,
2. Potential for irreversible adverse impacts on fish and wildlife, and
3. Other factors adversely impacting the water resource.

(d) Evaluations under this rule shall consider established minimum flows and levels and associated rules regarding implementation of water shortage provisions contained in Chapters 40E-8 and 40E-22, F.A.C. Minimum flows and levels shall be implemented allowing for a shared adversity between consumptive uses and water resources, consistent with this chapter, and Chapters 40E-8 and 40E-22, F.A.C.

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.042, 373.0421, 373.175, 373.246 FS. History–New 5-31-82, Amended 1-26-86, 9-10-01.

40E-21.231 Declaring a Water Shortage.

(1) If in the opinion of the District there is a possibility that insufficient water will be available within a source class to meet the estimated present and anticipated user demands from that source, or to protect the water resource from serious harm, as determined by evaluating the factors in Rule 40E-21.221, F.A.C., the Board may declare a water shortage for the affected source class. When the affected source extends beyond the District's boundaries, the District shall coordinate water shortage declarations with the appropriate water management districts to the extent practicable.

(2) A water shortage may also be declared for those source classes not presently experiencing a water shortage if usage from such sources can reasonably be expected to impact the present and anticipated available water supply in those source classes identified in subsection (1).

(3) Prior to declaring a water shortage for a source class, the Board or the Executive Director may issue a water shortage warning calling for voluntary reductions in demand within that source.

(4) If a water shortage is declared for a source class, the District shall estimate the percent reduction in overall demand required to reduce demand to available water supply. The restricted area may include for enforcement purposes, all or part of a county, municipality, surface water basin or utility service area which impacts a source class for which a water shortage is declared.

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.042, 373.0421, 373.175, 373.246 FS. History–New 5-31-82, Amended 1-26-86, 9-10-01.

40E-21.251 Water Shortage Phases.

(1) This rule establishes four phases of water shortage as a function of the estimated percent reduction in overall demand required to reduce estimated present and anticipated demand to estimated present and anticipated available water supply. The water shortage phase determines the type of water use restrictions which will be ordered in a declared water shortage.

(2) The following water shortage phases are established:

	Water Shortage Phase	Color Code	% reduction in overall demand
I. Moderate Water Shortage	Yellow	less than 15%	
II. Severe Water Shortage		Orange	less than 30%
III. Extreme Water Shortage		Red	less than 45%
IV. Critical Water Shortage		Purple	less than 60%

(3) Each source class for which a water shortage has been declared shall be assigned a specific water shortage phase. More than one source class may be combined into a single class for this purpose. The water shortage phase selected for a source class may be based upon:

(a) The estimated percent reduction in overall demand as determined in subsection 40E-21.231(4), F.A.C., and

(b) For areas with multiple sources, the extent to which users have the capability to obtain water from a source or sources other than the source class for which a water shortage has been declared.

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.175, 373.246 FS. History–New 5-31-82.

40E-21.271 General Water Use Restrictions.

(1) This rule specifies general water use restrictions for all users for each water shortage phase. Specific restrictions by user class are presented in part V of this chapter. Users desiring detailed information about the specific restrictions applying to their use should refer to part V.

(2) The Board may order the water use restrictions specified in part V for the appropriate water shortage phase for each affected source class. The restricted area may include for enforcement purposes, all or part of a county, municipality, surface water basin or utility service area which impacts a source class for which a water shortage is declared. Further, the Board may order any combination in lieu of or in addition to the restrictions specified in part V of the restrictions described in subsection (3), by use or method of withdrawal class, within each source class, if necessary to achieve the percent reduction in overall demand.

(3) Additional restrictions which may be considered include:

(a) Provisions that recognize the right of water users in an area to make voluntary agreements among themselves, with the concurrence of the Board or the Executive Director, providing for the mutual reduction, sharing, or rotation of use,

(b) Provisions for the distribution of water to permittees in exchange for ceasing or reducing ground or surface water withdrawals,

(c) Provisions for the metering and reporting of all water used, diverted, impounded, extracted or withdrawn,

(d) Provisions designed to implement minimum flows and levels through water shortage rules in this chapter, and Chapters 40E-8 and 40E-22, F.A.C.

(e) Provisions which recognize the extent to which users can satisfy water demands from sources for which a water shortage has not been declared,

(f) Provisions for monitoring water levels and determining chloride concentrations in order to protect against salt water intrusion or other deterioration of water quality including the closing and plugging of wells,

(g) Restrictions on the total amount of water that may be used, diverted, impounded, extracted, or withdrawn during any day, month, or year,

(h) Restrictions on the timing of use, diversion, impoundment, extraction, or withdrawal of water,

(i) Restrictions on pumping rates or diversion rates, or

(j) Such other provisions or restrictions as are necessary to protect the water resources from serious harm.

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.042, 373.0421, 373.175, 373.246 FS. History–New 5-31-82, Amended 1-26-86, 9-10-01.

40E-21.275 Variances.

(1) All users requesting relief from the provisions of this rule chapter shall file an application for variance but must conform to water use restrictions until the Executive Director grants a temporary variance or the Board grants the variance.

(2) Criteria for Issuance – No application for variance shall be granted unless the applicant provides reasonable assurances that the variance will not otherwise be harmful to the water resources of the District and affirmatively demonstrates that one or more of the following circumstances exists:

(a) The variance is essential to protect health or safety, or

(b) Compliance with the particular rule or order from which a variance is sought will require measures which, because of their extent or cost, cannot be accomplished within the anticipated duration of the shortage, or

(c) Alternative restrictions which achieve the same level of demand reduction as the restrictions from which a variance is sought are available and are binding and enforceable, or

(d) The applicant is a public or private utility that demonstrates that special circumstances exist which necessitate the issuance of a variance, or

(e) The applicant's source of water includes an approved aquifer storage and recovery installation or a water reclamation project.

(3) Limiting Conditions – Variances granted shall be subject to the following conditions:

(a) The variance granted shall be the minimum necessary to alleviate the circumstance for which the variance was requested under subsection (2).

(b) All variances shall expire upon a declaration by the Board that a water shortage no longer exists or when a more restrictive water shortage declaration is made, unless the Board specifies that the variance shall be in effect for a longer period of time,

provided however that variance conditions which require the applicant to modify water use facilities shall remain in full force and effect until such modifications have been completed. However, when a new application for variance is filed within seven working days of the effective date of a more restrictive water shortage declaration, the existing variance shall remain in effect until final agency action on the application.

(c) Variances granted under paragraph (2)(b) may prescribe a timetable for compliance with the restrictions from which a variance was sought.

(4) Applications for Variance – The application shall contain the following:

(a) The applicant's name, address, telephone number and location of the property for which relief is requested.

(b) The specific rule, order, water shortage phase or restriction from which the applicant is requesting relief,

(c) A detailed statement of the facts which the applicant believes demonstrate that the request qualifies for a variance under subsection (2), including reports by qualified technical experts,

(d) A description of the relief desired,

(e) The period of time for which the variance is sought, including the reasons and facts in support thereof,

(f) The damage or harm resulting or which may result to the applicant from compliance with the rule or order,

(g) If the variance is sought under paragraph (2)(b), information identifying the restrictions which currently can be met, a description of the measures which would be necessary to meet all restrictions and the date when these measures could be completed,

(h) If the applicant is the owner or operator of a golf course whose need for a variance arises from the operational inability of its irrigation system or works to meet the front nine-back nine requirement in Chapter 40E-21, Part V, F.A.C., the applicant shall submit a map showing the proposed alternative division of the course in-half and an explanation of the applicant's proposed irrigation scheme,

(i) For applications for variance from restrictions on irrigation, a general description of the irrigation system, including pump or water system output and irrigated area, and

(j) Any other information, the applicant believes is material.

(5) Procedures

(a) Within ten working days after receipt of a complete application for variance, which contains the information listed in subsection 40E-21.275(4), F.A.C., the staff shall recommend to the Executive Director whether the application complies with the provisions of subsections (2) through (4). The recommendation shall be in writing and shall constitute proposed agency action. The District shall set forth in writing the grounds or basis for denial of the variance and inform the applicant of the right to a hearing on the denial of the application by filing a petition. A copy of the recommendation shall be forwarded to the applicant. Any petition for hearing on an application for variance shall be considered a petition for informal proceedings in accordance with subsection 40E-1.571(2), F.A.C.

(b) The Executive Director or his designee shall review the application and the staff recommendation. Applications which do not require immediate action or which do not comply with the provisions of subsections (2) through (4) may be deferred for Board action. Applications which require immediate action and which comply with the provisions of subsections (2) through (4) may be temporarily granted by the Executive Director or his designee. Temporary variances granted by the Executive Director or his designee shall be presented to the Board for concurrence, rejection or modification.

(c) The Board shall consider all deferred applications as well as those temporarily granted by the Executive Director or his designee, at its next regularly scheduled meeting. The Board may grant, or deny the deferred applications and may concur in, reject or modify those variances temporarily granted by the Executive Director or his designee. All Board action denying applications for variances shall be by written order and copies shall be furnished to the applicant and the appropriate law enforcement officials. An applicant whose variance has been granted shall be furnished an appropriate notice of water shortage variance and any attachments which shall be prominently displayed at the applicant's place of use.

(d) The Board may revoke or modify a variance when it determines that the continued utilization of the variance is inconsistent with the objectives of the District.

(6) The variance under this rule is provided in addition to the variance and waiver procedures set forth in Chapter 28-104, F.A.C., which implements Section 120.542, F.S.

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.175, 373.246 FS. History–New 5-31-82, Amended 1-26-86, 2-14-91, 7-2-98, 6-12-00.

40E-21.291 Implementing a Water Shortage Declaration.

(1) When a water shortage is declared, or if already declared if more severe restrictions are imposed, the District will publish notice of the declaration or restrictions at least once in newspapers of general circulation in the areas affected. In addition the District shall make every effort to inform the general public of the restrictions in effect and the sources of supply which are affected. Particular attention shall be given to presenting this information in a form which is easily understood and applied by the citizens of the affected areas.

(2) The District shall notify each affected permittee within the affected source class of any change in the condition of his permit, any suspension of his permit, or any other restriction on his use of water. Notice shall be by regular mail.

(3) The District shall notify local elected officials of any water shortage declaration. Notice shall be by the best practicable means under the circumstances. In addition local law enforcement officials shall be notified as soon as possible of any water shortage declaration or change of restrictions affecting their areas of responsibility. Any special materials necessary for enforcement of the order shall be furnished to local law enforcement officials by the best practicable means under the circumstances.

(4) A declaration of water shortage and any provision or restriction adopted pursuant thereto under the water shortage plan may be modified or rescinded by the Board.

(5) A declaration of water shortage and any provision or restriction adopted pursuant thereto under the water shortage plan may be modified or rescinded by the Executive Director if all of the following circumstances are present:

(a) The Board previously issued a declaration of water shortage which remains in effect,

(b) The order rendering the Board's declaration of water shortage specifically delegates to the Executive Director the authority to modify or rescind the existing water shortage restrictions, and

(c) The District's monitoring of water conditions and plan implementation reasonably demonstrates that a modification or rescission of the Board's declaration of water shortage is warranted and necessary.

(6) All decisions of the Executive Director made pursuant to this subsection shall be by order and subject to ratification by the Board at the next scheduled Board meeting.

(7) An order declaring a water shortage or imposing more severe restrictions shall become effective on the day after any notice required in subsection (1) is published. An order declaring a water shortage shall remain in effect until modified or rescinded by the Board or the Executive Director.

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.119, 373.175, 373.246 FS. History–New 5-31-82, Amended 1-26-86.

40E-21.331 Declaring a Water Shortage Emergency.

(1) This rule sets forth the steps the District will take to evaluate water conditions within the District in order to determine whether a water shortage emergency exists. A water shortage emergency can occur under two situations; first when specific users rather than classes of users must be restricted, and second when the emergency occurs so abruptly that immediate action is needed to restrict classes of users.

(2) The District shall monitor the condition of the water resources of the District and the needs of the users as provided in Rule 40E-21.401, F.A.C.

(3) Current data shall be evaluated to determine whether any user's or classes of users' estimated present and anticipated available water supply will be insufficient to protect the public health, safety or welfare, or the health of animals, fish or aquatic life, a public water supply, or commercial, industrial, agricultural, recreational, or other reasonable-beneficial use.

(a) The present and anticipated water supply available to the user or classes of users shall be estimated. Factors that may be considered include:

1. Those factors listed in paragraph 40E-21.221(3)(a), F.A.C.,

2. The ability of the user or classes of users to obtain water from other users,

3. The ability of the user or classes of users to obtain water from another source class, and

4. Other factors affecting the present and anticipated available water supply of a user or classes of users.

(b) The potential for adverse impacts on the public health, safety or welfare, or the health of animals, fish or aquatic life, or a public water supply, or commercial, industrial, agricultural, recreational, or other reasonable-beneficial use shall be evaluated. Factors that may be considered include:

1. Those factors listed in paragraphs 40E-21.221(3)(b) and (c), F.A.C.,

2. The extent to which adverse impacts can be reduced by imposing additional restrictions on other users from the same source

class,

3. The extent to which restricting other users from the same source class will create other adverse impacts,

4. If the user(s) affected is or includes a local governmental unit, the recommendation of its board of elected officials, and

5. Other factors relating to public health, safety and welfare.

(4) The executive director may declare a water shortage emergency with the advice and concurrence of the Board:

(a) If, in the opinion of the District, the provisions of part II are not sufficient to protect the public health, safety, or welfare, the health of animals, fish or aquatic life, a public water supply, or commercial, industrial, agricultural, recreational, or other reasonable-beneficial uses,

(b) If water restrictions must be immediately imposed on a class or classes of users due to a rapid decline of water availability and there is insufficient time to convene the Board. In order to declare a water shortage emergency under this subsection, the decline must have occurred in such a manner that the monitoring and evaluation of the water resources under Rule 40E-21.221, F.A.C., could not reasonably have predicted the emergency.

(5) If a water shortage emergency is declared for a user, the District shall estimate the percent reduction in user demand required to alleviate the emergency.

(6) If a water shortage emergency is declared for a class or classes of users, the executive director shall define the restrictions needed to alleviate the emergency including those set forth in Rules 40E-21.231 and 40E-21.251, F.A.C.

(7) Water shortage emergencies declared under this rule must be ratified by the board at its next available meeting.

(8) Local governmental units are requested to immediately report any resource-related water supply problems detected or experienced by their community to the District.

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.119, 373.175, 373.246 FS. History–New 5-31-82, Amended 12-16-84, 1-26-86.

40E-21.371 Water Use Restrictions in a Water Shortage Emergency.

(1) This rule specifies water use restrictions for a user subject to an order declaring a water shortage emergency. More than one user may be included in a single order for purposes of establishing water use restrictions pursuant to this rule.

(2) The Executive Director, with the advice and concurrence of the Board, may order water use restrictions for any user experiencing a water shortage emergency, consistent with any water shortage restriction specified in Part V, regardless of the water shortage phase applicable to the remaining users within the source class. Further, the Executive Director, with the advice and concurrence of the Board, may order any additional combination of restrictions necessary to achieve the percent reduction in user demand.

(3) Additional restrictions which may be considered include those listed in subsection 40E-21.271(3), F.A.C.

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.119, 373.175, 373.246 FS. History–New 5-31-82.

40E-21.391 Implementing a Water Shortage Emergency Declaration.

(1) When a water shortage emergency is declared, or if already declared if more severe restrictions are imposed, the District will publish notice of the declaration or restrictions at least once in newspapers of general circulation in the areas affected. In addition the District shall make every effort to inform the general public of the restrictions in effect and the sources of supply which are affected. Particular attention shall be given to presenting this information in a form which is easily understood and applied by the citizens of the affected areas.

(2) The Executive Director shall notify each affected user of any change in the condition of his use, any suspension of his use, or any other restriction on his use by any means reasonable under the circumstances. When the Board concurs in and ratifies the Executive Director's action, affected permittees shall be notified as provided in subsection 40E-21.291(2), F.A.C.

(3) The District shall notify local elected officials of any water shortage emergency declaration. Notice shall be by the best practicable means under the circumstances. In additional local law enforcement officials shall be notified as soon as possible of any water shortage emergency declaration or change of restrictions affecting their areas of responsibility. Any special materials necessary for enforcement of the order shall be furnished to local law enforcement officials by the best practicable means under the circumstances.

(4) The declaration of a water shortage emergency and any measures adopted pursuant thereto may be modified or rescinded by

the Executive Director with the advice and concurrence of the Board or by order of the Board.

(5) An order declaring a water shortage emergency and any measures adopted pursuant thereto shall become effective upon issuance, unless otherwise specified in the order. An order declaring a water shortage emergency and any measures adopted pursuant thereto shall remain in effect until modified or rescinded pursuant to subsection (4).

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.119, 373.175, 373.246 FS. History–New 5-31-82.

40E-21.401 Monitoring.

(1) This rule generally describes the data collection and analysis the District may undertake in anticipation of and during a declared water shortage or water shortage emergency. Monitoring data may be used to determine:

(a) Whether a water shortage or water shortage emergency should be declared,

(b) Whether the restrictions in effect are sufficient to protect the water resources and users within the affected area, in light of existing and anticipated climatological conditions, and

(c) Whether the restrictions in effect are being adequately enforced.

(2) Data may be obtained from any source available, including but not limited to:

(a) The District,

(b) Other water management districts,

(c) Permittees who are required to submit data as a condition of their permit,

(d) Any local, state or federal agency, and

(e) Any other source available.

(3) Resource Monitoring – When appropriate the District shall collect and analyze data concerning any aspect of the water resource. Data which may be collected include but are not limited to:

(a) Levels in surface and ground waters, including potentiometric heads in confined and semiconfined aquifers,

(b) Water quality in surface and ground waters,

(c) Flows in surface waters,

(d) Transfers of water from one source class to another,

(e) Demand of natural systems, including but not limited to losses due to evapotranspiration and seepage,

(f) Rainfall,

(g) Impacts on fish and wildlife, and

(h) Other data required to evaluate the status of the water resources of the District.

(4) Demand Monitoring – When appropriate the District shall collect and analyze data concerning any aspect of user demand upon the water resources. Data which may be collected include but are not limited to:

(a) Demands of permitted users,

(b) Demands of users exempt from permitting, but subject to the provisions of the water shortage plan,

(c) Demands of users whose supply of water is established by federal law, and

(d) Other data required to evaluate demands on the water resources of the District.

(5) When appropriate, the District may prepare a drought management report summarizing the data gathered pursuant to this rule.

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.026, 373.103, 373.175, 373.246 FS. History–New 5-31-82.

40E-21.421 Enforcement.

(1) It shall be the policy of the District to seek the cooperation and assistance of state, county and municipal governmental officials, law enforcement officials, and police officers in the enforcement of the water shortage plan or any water shortage order issued pursuant thereto.

Counties and municipalities throughout the jurisdiction of the District are authorized and encouraged to adopt ordinances which provide for local enforcement of the provisions of this chapter, or any order adopted pursuant thereto. It shall be the policy of the District to encourage local law enforcement officials to provide violators of the water use restrictions with no more than one written warning during the initial phases of a water shortage or water shortage emergency.

(2) In enforcing the provisions of any water shortage order issued pursuant to this chapter, the District may utilize any of the

enforcement remedies available pursuant to Chapters 120 or 373, F.S., or Chapter 40E, F.A.C.

(3) Enforcement action may be initiated by the Executive Director or his designee pursuant to Section 373.603, F.S., against an individual violator or class of violators or all of the violators of a particular water shortage rule or order.

(4) The Executive Director or his designee may assign District personnel for the purpose of initiating enforcement action pursuant to Section 373.603, F.S., for the violation of any water shortage rule or order.

(5) In the event that a water shortage or water shortage emergency has been declared by the Board and the provisions of this chapter have been invoked, the Executive Director or his designee may thereafter take appropriate emergency action pursuant to Sections 373.119, 373.175(4), 373.246(7) and 120.69, F.S., and Rule 40E-1.611, F.A.C., to enforce the provisions of this chapter or any order issued pursuant thereto, or alleviate any emergency conditions which might thereafter occur. Such action shall be subject to subsequent ratification by the Board at its next regular meeting.

(6) In the event a water user is in violation of the water shortage plan or any water shortage order issued pursuant thereto, it shall be presumed that the person present at the premises where such unauthorized use is occurring who has a possessory interest in those premises, is responsible therefor. In the event that no one is present at the premises while such unauthorized use is occurring, it shall be presumed that the owner of the premises is responsible for such use. These presumptions shall not affect the burden of proof of the District to present a prima facie case as to each violation, and shall be rebuttable by the presentation of evidence to indicate that another person was responsible for the unauthorized water use.

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.119, 373.175, 373.246, 373.603, 373.609 FS. History–New 5-31-82.

40E-21.501 Specific Restrictions.

(1) Upon declaration of a water shortage or water shortage emergency it shall be prohibited to use water in a manner inconsistent with the restrictions specified in this part and part II. It shall be the duty of each water user to stay informed as to the phase of water shortage and the applicable restrictions for that phase. Violation of the restrictions specified in this part and Part II shall be subject to enforcement action pursuant to Rule 40E-21.421, F.A.C.

(2) In addition to the restrictions specified in this part and part II, wasteful and unnecessary water use is prohibited regardless of the phase of water shortage. Such wasteful and unnecessary water use shall include, but not be limited to:

(a) Allowing water to be dispersed without any practical purpose to the water user, regardless of the type of water use.

(b) Allowing water to be dispersed in a grossly inefficient manner, regardless of the type of water use.

(c) Allowing water to be dispersed to accomplish a purpose for which water use is unnecessary or which can be readily accomplished through alternative methods without water use.

(3) Within each rule, use classes are grouped in the same sequence as in Rule 40E-21.651, F.A.C.

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.175, 373.246 FS. History–New 5-31-82, Amended 2-14-91.

40E-21.521 Phase I Moderate Water Shortage.

The following restrictions shall apply when a Phase I water shortage is declared by the District.

(1) Essential/Domestic/Utility/Commercial.

(a) Essential Use:

1. The use of water for firefighting, safety, sanitation, health and medical purposes and other essential uses shall not be restricted.

2. Fire hydrant flushing shall be undertaken only on an emergency basis.

3. Sanitary sewer line flushing and testing shall not be restricted except on a voluntary basis.

(b) Domestic Type Use:

1. Residential type domestic use shall be voluntarily reduced to achieve a per capita consumption of 60 gallons per person per day.

2. Domestic type use in industrial and commercial establishments shall be voluntarily reduced.

(c) Water Utility Use:

1. Initial pressure at the point of use (meter) shall be voluntarily reduced to levels no greater than 45 pounds per square inch. Upon reduction of pressure, the utility shall notify the appropriate fire-fighting agencies and make arrangements for direct communication when additional pressure is required.

2. New water line flushing and disinfection shall be restricted to the hours of 7:00 p.m. to 7:00 a.m. seven days per week.

3. As may be appropriate the utility shall institute additional voluntary conservation measures such as reclaiming of backwash water, improving and accelerating leak detection surveys and repair programs, installing and calibrating meters, and stabilizing and equalizing system pressures.

(d) Power Production Use. Water used for power production shall be voluntarily reduced.

(e) Commercial and Industrial Process Use:

1. Commercial car washes shall be restricted as follows:

a. For washes servicing passenger vehicles and mobile equipment weighing less than 10,000 pounds,

i. Use in excess of 75 gallons per wash shall be prohibited and

ii. Use equal to or less than 75 gallons per wash shall be voluntarily reduced;

b. For washes servicing mobile equipment weighing 10,000 pounds or more,

i. Use in excess of 150 gallons per wash shall be prohibited and

ii. Use equal to or less than 150 gallons per wash shall be voluntarily reduced.

2. Water used for commercial and industrial processes shall be voluntarily reduced.

3. Water use for cleaning, adjusting and repair of irrigation systems by a licensed person or entity shall be restricted as follows:

a. Projects one irrigated acre or greater in size shall be limited to one hour per acre per week,

b. Projects less than one irrigated acre in size shall be limited to 10 minutes per zone per week.

4. Water use for pesticide application under the supervision of a licensed pest control operator shall be voluntarily reduced. Under the provisions of this subparagraph, the applicator must be on the premises when water is applied outside of the hours allowed for irrigation.

5. Water use for well development under the supervision of a licensed well contractor shall be voluntarily reduced.

6. Water use for mobile equipment washing by a licensed person or entity shall be voluntarily reduced.

(f) Diversion and Impoundment into Non-District Facilities. Water used for diversion and impoundment into non-District facilities shall be voluntarily reduced; however, the diversion of surface water from sources in the Lake Okeechobee Region as depicted on Figure 21-4 and described in subsection 40E-21.691(3), F.A.C., shall be subject to the restrictions described in subparagraph (2)(a)6., below.

(2) Agriculture.

(a) Agricultural Use:

1. Overhead irrigation shall be restricted to the hours of 2:00 p.m. to 10:00 a.m.

2. Low volume irrigation hours shall not be restricted.

3. All irrigation systems shall be operated in a manner that will maximize the percentage of water withdrawn and held which is placed in the root zone of the crop and will minimize the amount of water which is withdrawn and released or lost to the user but is not immediately available for other users.

4. Users having access to more than one source class shall maximize the use of the lesser or least restricted source class.

5. Overhead irrigation for field grown citrus nursery stock moisture stress reduction shall be allowed daily for 10 minutes per irrigation zone from 11:30 a.m. to 12:00 p.m. and from 1:30 p.m. to 2:00 p.m.

6. The District's allocation determination for agricultural irrigation within the entire Lake Okeechobee Region as depicted on Figure 21-4 will be based on 15% cutbacks to the calculated 1 in 10 supplemental crop demands calculated on a weekly basis. The entire Lake Okeechobee Region supplemental crop demands will be distributed among the sub-basins depicted in Figure 21-4 based on a grouping of crop types, irrigation methods (e.g. flood irrigated crops versus micro irrigated crops), the associated acreage totals as identified in the individual water use permits combined with the associated 1 in 10 evapotranspiration demands of the crops. An additional amount of water from Lake Okeechobee will be added to the weekly allocation as necessary to account for conveyance losses that occur through seepage and free surface evaporation from the Central and Southern Florida Flood Control System Project canals. The share of the entire Lake Okeechobee Region irrigation allocation available to each sub-basin may be further adjusted to prioritize water deliveries among crops, as long as the sum of the sub-basin allocations does not exceed the weekly allocation for the entire Lake Okeechobee Region and that equity among users and sub-basins is assured. Such adjustments shall be based upon irrigation efficiency, potential for economic loss, and acreage irrigated as opposed to non-irrigated acreage. Withdrawals by each permitted user within the Lake Okeechobee Region as described in subsection 40E-21.691(3), F.A.C., shall be limited to an amount that represents each user's share of their sub-basin weekly allocation based on their permitted crop type and irrigated acreage. The

District shall provide the users with the data necessary to calculate their weekly allotment of water.

(b) Livestock Use. Livestock water use shall be voluntarily reduced.

(c) Aquacultural Use. Aquacultural water use shall be voluntarily reduced.

(d) Soil Flooding:

1. Soil flooding for vegetable seed planting, rice planting, burning of sugarcane prior to harvest and to permit harvesting of sod shall be voluntarily reduced.

2. Soil flooding for all other purposes shall be prohibited.

(e) Freeze Protection. Water use for freeze protection shall be restricted to situations in which official weather forecasting services predict temperatures likely to cause permanent damage to crops.

(3) Nursery/Urban Irrigation/Recreation.

(a) Nursery Use:

1. Low volume irrigation uses and low volume hand watering shall be voluntarily reduced.

2. Overhead irrigation uses shall be restricted as follows:

a. Inside – 8:00 a.m. to 8:00 p.m., seven days per week.

b. Outside – 7:00 p.m. to 7:00 a.m., seven days per week.

c. Overhead irrigation for containerized nursery stock moisture stress reduction on stock grown in containers up to and including 1 gallon in size shall be allowed daily for 10 minutes per irrigation zone from 11:30 a.m. to 12:00 p.m., 1:30 p.m. to 2:00 p.m. and 3:30 p.m. to 4:00 p.m.

3. Flood irrigation systems shall be restricted to 8 days per month.

(b) Landscape Irrigation – New Installation:

1. For installations which have been in place for less than 30 days, and

a. Less than 5 irrigated acres in size, water use for irrigation shall be restricted to the hours of 2:00 a.m. to 8:00 a.m., Monday through Friday,

b. 5 irrigated acres or greater in size, water use for irrigation shall be restricted to the hours of 12:01 a.m. to 8:00 a.m., Monday through Friday.

2. Low volume irrigation and low volume hand watering of new landscaping shall be voluntarily reduced.

3. Cleaning and adjusting of new irrigation systems shall be restricted to 10 minutes per zone on a one time basis.

(c) Landscape Irrigation – Existing Installation:

1. For existing installations less than 5 irrigated acres in size, water use for irrigation shall be restricted to the hours from 4:00 a.m. to 8:00 a.m. for all types of irrigation, except low volume irrigation, and 5:00 p.m. to 7:00 p.m. for low volume hand watering only, three days per week.

a. Installations with odd addresses shall be permitted to irrigate on Monday, Wednesday and Saturday.

b. Installations with even addresses or no address shall be permitted to irrigate on Tuesday, Thursday and Sunday.

2. For existing installations 5 irrigated acres or greater in size, water use for irrigation shall be restricted to the hours from 12:01 a.m. to 8:00 a.m. , three days per week.

a. Installations with odd addresses shall be permitted to irrigate on Monday, Wednesday and Saturday.

b. Installations with even addresses or no address shall be permitted to irrigate on Tuesday, Thursday and Sunday.

3. Water use for cleaning, adjusting and repair of existing irrigation systems shall be limited to ten minutes per zone per week.

4. Low volume irrigation uses shall be voluntarily reduced.

(d) Recreation Area Use:

1. Landscape irrigation for new and existing recreation areas shall be restricted to the hours prescribed for new and existing landscape irrigation in paragraphs (b) and (c) respectively.

2. Irrigation of seeded and/or sprigged recreation areas that have been in place for less than thirty days shall be allowed daily for 10 minutes per irrigation zone from 11:30 a.m. to 12:00 p.m., 1:30 p.m. to 2:00 p.m. and 3:30 p.m. to 4:00 p.m.

3. Watering of pervious non-vegetated recreational/sporting surfaces shall be restricted to ten minutes of application prior to each recreational/sporting event. Low volume watering shall be used.

(e) Golf Course Use:

1. Irrigation of greens and tees shall be voluntarily reduced and shall be accomplished during non-daylight hours.

2. Irrigation of fairways, roughs and nonplaying areas on the first nine holes of the course shall be restricted to the hours of

12:01 a.m. to 8:00 a.m. on Monday, Wednesday and Saturday.

3. Irrigation of fairways, roughs and nonplaying areas on the last nine holes of the course shall be restricted to the hours of 12:01 a.m. to 8:00 a.m., Tuesday, Thursday and Sunday.

4. Irrigation of seeded and/or sprigged areas that have been in place for less than thirty days shall be allowed daily for 10 minutes per irrigation zone from 11:30 a.m. to 12:00 p.m., 1:30 p.m. to 2:00 p.m. and 3:30 p.m. to 4:00 p.m.

(f) Water Based Recreation Use:

1. Water based recreation water use shall be voluntarily reduced.

2. Draining of facilities into sewers or onto impervious surfaces shall be prohibited.

(4) Miscellaneous.

(a) Cooling and Air Conditioning Use.

The use of water for cooling and air conditioning shall be restricted to that amount of water necessary to maintain a minimum temperature of 78 degrees Fahrenheit.

(b) Dewatering Use. Discharge of fresh water to tide from dewatering shall be prohibited.

(c) Navigation Use:

1. The District shall request the U.S. Army Corps of Engineers to restrict its lockages to maintain acceptable chloride concentrations upstream of the locks and to conserve water.

2. In the case of the Franklin Lock and Dam, the District shall request the U.S. Army Corps of Engineers to restrict lockages to once every four hours if:

a. Chloride levels upstream of S-79 are 180 parts per million or higher, and

b. A rainfall in excess of one inch in 24 hours is not predicted in the surface water use basin within the next 48 hours.

3. If the restrictions imposed in subparagraph 2. are insufficient to stop the rising chloride levels, the District shall request the U.S. Army Corps of Engineers to further restrict lockages to once every four hours, twice per week.

4. If the restrictions imposed in subparagraphs 2. and 3. are still insufficient to stop the rising chloride levels, the District shall request the U. S. Army Corps of Engineers to prohibit lockages.

(d) Other Outside Uses:

1. Washing or cleaning streets, driveways, sidewalks, or other impervious areas with water shall be prohibited.

2. Outside pressure cleaning shall be restricted to only low volume pressure cleaning, seven days a week.

3. Mobile equipment washing with water shall be restricted to the hours and days prescribed for existing landscape irrigation in subparagraph (3)(c)1., using only low volume mobile equipment washing methods and shall be conducted over a pervious surface or in an area that immediately drains to a pervious surface. Rinsing and flushing of boats after saltwater use shall be limited to 15 minutes once a day for each boat.

4. Washing boats that serve as a primary residence shall be restricted to the hours and days prescribed for existing landscape irrigation in subparagraph (3)(c)1. Boats with an odd slip number shall be permitted to be washed on Monday, Wednesday and Saturday. Boats with an even slip number or no slip number shall be permitted to be washed on Tuesday, Thursday and Sunday.

(e) Aesthetic Use:

1. Non-recirculating outside aesthetic uses of water shall be prohibited.

2. Water use for outside aesthetic purposes by facilities that recirculate water shall be voluntarily reduced and must meet the following criteria:

a. Draining of water from outside aesthetic facilities into sewers or onto impervious surfaces is prohibited.

b. Outside aesthetic facilities shall not be operated when wind conditions cause water to be lost from the recirculating capacity of the facility.

c. Outside aesthetic facilities that leak water shall not be operated.

d. Outside aesthetic facilities that lose water due to an overflow shall not be operated.

3. Inside aesthetic uses of water shall be voluntarily reduced.

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.042, 373.0421, 373.175, 373.246 FS. History–New 5-31-82, Amended 1-26-86, 2-14-91, 9-10-01, 11-19-07.

40E-21.531 Phase II Severe Water Shortage.

The following restrictions shall apply when a Phase II water shortage is declared by the District.

(1) Essential/Domestic/Utility/Commercial.

(a) Essential Use.

1. The use of water for firefighting, safety, sanitation, health and medical purposes and other essential uses shall not be restricted.

2. Fire hydrant flushing shall be undertaken only on an emergency basis.

3. Sanitary sewer line flushing and testing shall not be restricted except on a voluntary basis.

(b) Domestic Type Use.

1. Residential type domestic use shall be voluntarily reduced to 50 gallons per person per day.

2. Domestic type use in industrial and commercial establishments shall be voluntarily reduced.

(c) Water Utility Use.

1. Initial pressure at the point of use (meter) shall be reduced to levels no greater than 45 pounds per square inch. Upon reduction of pressure, the utility shall notify the appropriate fire-fighting agencies and make arrangements for direct communication when additional pressure is required.

2. New water line flushing and disinfection shall be restricted to the hours of 7:00 p.m. to 7:00 a.m. seven days per week.

3. As may be appropriate the utility shall institute additional voluntary conservation measures such as reclaiming of backwash water, improving and accelerating leak detection surveys and repair programs, installing and calibrating meters, and stabilizing and equalizing system pressures.

(d) Power Production Use. Water used for power production shall be voluntarily reduced.

(e) Commercial and Industrial Process Use.

1. Commercial car washes shall be restricted as follows:

a. For washes servicing passenger vehicles and mobile equipment weighing less than 10,000 pounds,

i. Use in excess of 75 gallons per wash shall be prohibited; and

ii. Use equal to or less than 75 gallons per wash shall be voluntarily reduced;

b. For washes servicing mobile equipment weighing 10,000 pounds or more,

i. Use in excess of 150 gallons per wash shall be prohibited; and

ii. Use equal to or less than 150 gallons per wash shall be voluntarily reduced.

2. Water used for commercial and industrial processes shall be voluntarily reduced.

3. Water use for cleaning, adjusting and repair of irrigation systems by a licensed person or entity shall be restricted as follows:

a. Projects one irrigated acre or greater in size shall be limited to one hour per acre per week,

b. Projects less than one irrigated acre in size shall be limited to 10 minutes per zone per week.

4. Water use for pesticide application under the supervision of a licensed pest control operator shall be voluntarily reduced. Under the provisions of this subparagraph, the applicator must be on the premises when water is applied outside of the hours allowed for irrigation.

5. Water use for well development under the supervision of a licensed well contractor shall be voluntarily reduced.

6. Water use for mobile equipment washing by a licensed person or entity shall be voluntarily reduced.

(f) Diversion and Impoundment into Non-District Facilities. Water used for diversion and impoundment into non-District facilities shall be voluntarily reduced; however, the diversion of surface water from sources in the Lake Okeechobee Region as depicted on Figure 21-4 and described in subsection 40E-21.691(3), F.A.C., shall be subject to the restrictions described in subparagraph (2)(a)6., below.

(2) Agriculture.

(a) Agricultural Use.

1. Overhead irrigation shall be restricted to the hours of 2:00 p.m. to 10:00 a.m.

2. Low volume irrigation hours shall not be restricted.

3. All irrigation systems shall be operated in a manner that will maximize the percentage of water withdrawn and held which is placed in the root zone of the crop and will minimize the amount of water which is withdrawn and released or lost to the user but is not immediately available for other users.

4. Users having access to more than one source class shall maximize the use of the lesser or least restricted source class.

5. Overhead irrigation for field grown citrus nursery stock moisture stress reduction shall be allowed daily for 10 minutes per irrigation zone from 11:30 a.m. to 12:00 p.m. and from 1:30 p.m. to 2:00 p.m.

6. The District's allocation determination for agricultural irrigation within the entire Lake Okeechobee Region as depicted on Figure 21-4 will be based on 30% cutbacks to the calculated 1 in 10 supplemental crop demands calculated on a weekly basis. The entire Lake Okeechobee Region supplemental crop demands will be distributed among the sub-basins depicted in Figure 21-4 based on a grouping of crop types, irrigation methods (e.g. flood irrigated crops versus micro irrigated crops), the associated acreage totals as identified in the individual water use permits combined with the associated 1 in 10 evapotranspiration demands of the crops. An additional amount of water from Lake Okeechobee will be added to the weekly allocation as necessary to account for conveyance losses that occur through seepage and free surface evaporation from the Central and Southern Florida Flood Control System Project canals. The share of the entire Lake Okeechobee Region irrigation allocation available to each sub-basin may be further adjusted to prioritize water deliveries among crops, as long as the sum of the sub-basin allocations does not exceed the weekly allocation for the entire Lake Okeechobee Region and that equity among users and sub-basins is assured. Such adjustments shall be based upon irrigation efficiency, potential for economic loss, and acreage irrigated as opposed to non-irrigated acreage. Withdrawals by each permitted user within the Lake Okeechobee Region as described in subsection 40E-21.691(3), F.A.C., shall be limited to an amount that represents each user's share of their sub-basin weekly allocation based on their permitted crop type and irrigated acreage. The District shall provide the users with the data necessary to calculate their weekly allotment of water.

(b) Livestock Use. Livestock water use shall be voluntarily reduced.

(c) Aquacultural Use. Aquacultural water use shall be voluntarily reduced.

(d) Soil Flooding.

1. Soil flooding for vegetable seed planting, rice planting, burning of sugarcane prior to harvest and to permit harvesting of sod shall be voluntarily reduced.

2. Soil flooding for all other purposes shall be prohibited.

(e) Freeze Protection. Water use for freeze protection shall be restricted to situations in which official weather forecasting services predict temperatures likely to cause permanent damage to crops.

(3) Nursery/Urban Irrigation/Recreation.

(a) Nursery Use.

1. Low volume irrigation uses and low volume hand watering shall be voluntarily reduced.

2. Overhead irrigation uses shall be restricted as follows:

a. Inside – 8:00 a.m. to 8:00 p.m., seven days per week.

b. Outside – 7:00 p.m. to 7:00 a.m., on odd numbered days.

c. Outside overhead irrigation for containerized nursery stock moisture stress reduction on stock grown in containers up to and including one gallon in size shall be allowed daily for 10 minutes per irrigation zone from 11:30 a.m. to 12:00 p.m., 1:30 p.m. to 2:00 p.m. and 3:30 p.m. to 4:00 p.m.

3. Flood irrigation systems shall be restricted to 6 days per month.

(b) Landscape Irrigation – New Installation.

1. For installations which have been in place for less than 30 days, and

a. less than 5 irrigated acres in size, water use for irrigation shall be restricted to the hours of 2:00 a.m. to 8:00 a.m., Monday, Wednesday, Thursday and Friday,

b. 5 irrigated acres or greater in size, water use for irrigation shall be restricted to the hours of 12:01 a.m. to 8:00 a.m. Monday, Wednesday, Thursday and Friday.

2. Low volume irrigation and low volume hand watering of new landscaping shall be voluntarily reduced.

3. Cleaning and adjusting of new irrigation systems shall be restricted to 10 minutes per zone on a one time basis.

(c) Landscape Irrigation – Existing Installation.

1. For existing installations less than 5 irrigated acres in size, water use for irrigation shall be restricted to the hours from 4:00 a.m. to 8:00 a.m. for all types of irrigation, except low volume irrigation, and 5:00 p.m. to 7:00 p.m. for low volume hand watering, two days per week.

a. Installations with odd addresses shall be permitted to irrigate on Wednesday and Saturday.

b. Installations with even addresses or no address shall be permitted to irrigate on Thursday and Sunday.

2. For existing installations 5 irrigated acres or greater in size, water use for irrigation shall be restricted to the hours from 12:01

a.m. to 8:00 a.m., two days per week.

a. Installations with odd addresses shall be permitted to irrigate on Wednesday and Saturday.

b. Installations with even addresses or no address shall be permitted to irrigate on Thursday and Sunday.

3. Water use for cleaning, adjusting and repair of existing irrigation systems shall be limited to ten minutes per zone per week.

4. Low volume irrigation uses shall be voluntarily reduced.

(d) Recreation Area Use.

1. Landscape irrigation for new and existing recreation areas shall be restricted to the hours prescribed for new and existing landscape irrigation in paragraphs (b) and (c) respectively.

2. Irrigation of seeded and/or sprigged recreation areas that have been in place for less than thirty days shall be allowed daily for 5 minutes per irrigation zone from 11:30 a.m. to 12:00 p.m., 1:30 p.m. to 2:00 p.m. and 3:30 p.m. to 4:00 p.m.

3. Watering of pervious non-vegetated recreational/sporting surfaces shall be restricted to ten minutes of application prior to each recreational/sporting event. Low volume watering shall be used.

(e) Golf Course Use.

1. Irrigation of greens and tees shall be voluntarily reduced and shall be accomplished during non-daylight hours.

2. Irrigation of fairways, roughs and nonplaying areas on the first nine holes of the course shall be restricted to the hours of 12:01 a.m. to 8:00 a.m. on Wednesday and Saturday.

3. Irrigation of fairways, roughs and nonplaying areas on the last nine holes of the course shall be restricted to the hours of 12:01 a.m. to 8:00 a.m. on Thursday and Sunday.

4. Irrigation of seeded and/or sprigged areas that have been in place for less than thirty days shall be allowed daily for 5 minutes per irrigation zone from 11:30 a.m. to 12:00 p.m., 1:30 p.m. to 2:00 p.m. and 3:30 p.m. to 4:00 p.m.

(f) Water Based Recreation Use.

1. Water based recreation water use shall be voluntarily reduced.

2. Draining of facilities into sewers or onto impervious surfaces shall be prohibited.

3. Existing facilities shall not be refilled except for makeup water, unless the facility is leaking more than one inch of water a day. If a facility is leaking more than one inch of water a day and is in need of repair, it may be drained onto a pervious surface for repairs and subsequently refilled.

(4) Miscellaneous.

(a) Cooling and Air Conditioning Use. The use of water for cooling and air conditioning shall be restricted to that amount of water necessary to maintain a minimum temperature of 78 degrees Fahrenheit.

(b) Dewatering Use. Discharge of fresh water to tide from dewatering shall be prohibited.

(c) Navigation Use.

1. The District shall request the U.S. Army Corps of Engineers to restrict its lockages to maintain acceptable chloride concentrations upstream of the locks and to conserve water.

2. In the case of the Franklin Lock and Dam, the District shall request the U. S. Army Corps of Engineers to restrict lockages to once every four hours if:

a. Chloride levels upstream of S-79 are 180 parts per million or higher, and

b. A rainfall in excess of one inch in 24 hours is not predicted in the surface water use basin within the next 48 hours.

3. If the restrictions imposed in subparagraph 2. are insufficient to stop the rising chloride levels, the District shall request the U.S. Army Corps of Engineers to further restrict lockages to once every four hours, twice per week.

4. If the restrictions imposed in subparagraphs 2. and 3. are still insufficient to stop the rising chloride levels, the District shall request the U.S. Army Corps of Engineers to prohibit lockages.

(d) Other Outside Uses.

1. Washing or cleaning streets, driveways, sidewalks, or other impervious areas with water shall be prohibited.

2. Outside pressure cleaning shall be restricted to only low volume pressure cleaning, seven days a week.

3. Mobile equipment washing with water shall be restricted to the hours and days prescribed for existing landscape irrigation in subparagraph (3)(c)1., using only low volume mobile equipment washing methods and shall be conducted over a pervious surface or in an area that immediately drains to a pervious surface. Rinsing and flushing of boats after saltwater use shall be limited to 15 minutes once a day for each boat.

4. Washing boats that serve as a primary residence shall be restricted to the hours and days prescribed for existing landscape

irrigation in subparagraph (3)(c)1. Boats with an odd slip number shall be permitted to be washed on Wednesday and Saturday. Boats with an even slip number or no slip number shall be permitted to be washed on Thursday and Sunday.

(e) Aesthetic Use.

1. Non-recirculating outside aesthetic uses of water shall be prohibited.

2. Water use for outside aesthetic purposes by facilities that recirculate water shall be voluntarily reduced and must meet the following criteria:

a. Draining of water from outside aesthetic facilities into sewers or onto impervious surfaces is prohibited.

b. Outside aesthetic facilities shall not be operated when wind conditions cause water to be lost from the recirculating capacity of the facility.

c. Outside aesthetic facilities that leak water shall not be operated.

d. Outside aesthetic facilities that lose water due to an overflow shall not be operated.

3. Inside aesthetic uses of water shall be voluntarily reduced.

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.042, 373.0421, 373.175, 373.246 FS. History–New 5-31-82, Amended 1-26-86, 2-14-91, 9-10-01, 11-19-07.

40E-21.541 Phase III Extreme Water Shortage.

The following restrictions shall apply when a Phase III shortage is declared by the District.

(1) Essential/Domestic/Utility/Commercial.

(a) Essential Use.

1. The use of water for firefighting, safety, sanitation, health and medical purposes and other essential uses shall not be restricted.

2. Fire hydrant flushing shall be undertaken only on an emergency basis.

3. Sanitary sewer line flushing and testing shall not be restricted except on a voluntary basis.

(b) Domestic Type Use.

1. Residential type domestic use shall be voluntarily reduced to 40 gallons per person per day.

2. Domestic type use in industrial and commercial establishments shall be voluntarily reduced.

(c) Water Utility Use.

1. Initial pressure at the point of use (meter) shall be reduced to levels no greater than 45 pounds per square inch. Voluntary initial pressure reductions below 45 psi shall be made consistent with the utility's ability to maintain adequate service and fire flow pressures. Upon reduction of pressure, the utility shall notify the appropriate fire-fighting agencies and make arrangements for direct communication when additional pressure is required.

2. New water line flushing and disinfection shall be restricted to the hours of 7:00 p.m. to 7:00 a.m. seven days per week.

3. As may be appropriate the utility shall institute additional voluntary conservation measures such as reclaiming of backwash water, improving and accelerating leak detection surveys and repair programs, installing and calibrating meters, and stabilizing and equalizing system pressures.

(d) Power Production Use.

Water used for power production shall be voluntarily reduced.

(e) Commercial and Industrial Process Use.

1. Commercial car washes shall be restricted as follows:

a. For washes servicing passenger vehicles and mobile equipment weighing less than 10,000 pounds,

i. Use in excess of 75 gallons per wash shall be prohibited,

ii. Use equal to or less than 75 gallons but more than 50 gallons per wash shall be restricted to the hours of 8:00 a.m. through 3:00 p.m., and

iii. Use equal to or less than 50 gallons per wash shall be voluntarily reduced;

b. For washes servicing mobile equipment weighing 10,000 pounds or more,

i. Use in excess of 150 gallons per wash shall be prohibited,

ii. Use equal to or less than 150 gallons but more than 100 gallons per wash shall be restricted to the hours of 8:00 a.m. through 3:00 p.m., and

iii. Use equal to or less than 100 gallons per wash shall be voluntarily reduced.

2. Water used for commercial and industrial processes shall be voluntarily reduced.

3. Water use for cleaning, adjusting and repair of irrigation systems by a licensed person or entity shall be restricted as follows:

a. Projects one irrigated acre or greater in size shall be limited to one hour per acre per week,

b. Projects less than one irrigated acre in size shall be limited to 10 minutes per zone per week.

4. Water use for pesticide application under the supervision of a licensed pest control operator shall be voluntarily reduced. Under the provisions of this subparagraph, the applicator must be on the premises when water is applied outside of the hours allowed for irrigation.

5. Water use for well development under the supervision of a licensed well contractor shall be voluntarily reduced.

6. Water use for mobile equipment washing by a licensed person or entity shall be voluntarily reduced.

(f) Diversion and Impoundment into Non-District Facilities. Water used for diversion and impoundment into non-District facilities shall be voluntarily reduced; however, the diversion of surface water from sources in the Lake Okeechobee Region as depicted on Figure 21-4 and described in subsection 40E-21.691(3), F.A.C., shall be subject to the restrictions described in subparagraph (2)(a)6., below.

(2) Agriculture.

(a) Agricultural Use.

1. Overhead irrigation shall be restricted to the hours of 7:00 p.m. to 7:00 a.m.

2. Low volume irrigation hours shall not be restricted.

3. All irrigation systems shall be operated in a manner that will maximize the percentage of water withdrawn and held which is placed in the root zone of the crop and will minimize the amount of water which is withdrawn and released or lost to the user but is not immediately available for other users.

4. Users having access to more than one source class shall maximize the use of the lesser or least restricted source class.

5. The District's allocation determination for agricultural irrigation within the entire Lake Okeechobee Region as depicted on Figure 21-4 will be based on 45% cutbacks to the calculated 1 in 10 supplemental crop demands calculated on a weekly basis. The entire Lake Okeechobee Region supplemental crop demands will be distributed among the sub-basins depicted in Figure 21-4 based on a grouping of crop types, irrigation methods (e.g. flood irrigated crops versus micro irrigated crops), the associated acreage totals as identified in the individual water use permits combined with the associated 1 in 10 evapotranspiration demands of the crops. An additional amount of water from Lake Okeechobee will be added to the weekly allocation as necessary to account for conveyance losses that occur through seepage and free surface evaporation from the Central and Southern Florida Flood Control System Project canals. The share of the entire Lake Okeechobee Region irrigation allocation available to each sub-basin may be further adjusted to prioritize water deliveries among crops, as long as the sum of the sub-basin allocations does not exceed the weekly allocation for the entire Lake Okeechobee Region and that equity among users and sub-basins is assured. Such adjustments shall be based upon irrigation efficiency, potential for economic loss, and acreage irrigated as opposed to non-irrigated acreage. Withdrawals by each user within the Lake Okeechobee Region as described in subsection 40E-21.691(3), F.A.C., shall be limited to an amount that represents each user's share of their sub-basin weekly allocation based on their permitted crop type and irrigated acreage. The District shall provide the users with the data necessary to calculate their weekly allotment of water.

6. Overhead irrigation for field grown citrus nursery stock moisture stress reduction shall be allowed daily for 10 minutes per irrigation zone from 11:30 a.m. to 12:00 p.m., 1:30 p.m. to 2:00 p.m. and 3:30 p.m. to 4:00 p.m.

(b) Livestock Use. Livestock water use shall be voluntarily reduced.

(c) Aquacultural Use. Aquacultural water use shall be voluntarily reduced.

(d) Soil Flooding.

1. Soil flooding for vegetable seed planting, rice planting, burning of sugarcane prior to harvest and to permit harvesting of sod shall be voluntarily reduced.

2. Soil flooding for all other purposes shall be prohibited.

(e) Freeze Protection. Water use for freeze protection shall be restricted to situations in which official weather forecasting services predict temperatures likely to cause permanent damage to crops.

(3) Nursery/Urban Irrigation/Recreation.

(a) Nursery Use.

1. Low volume irrigation uses and low volume hand watering shall be voluntarily reduced.

2. Overhead irrigation uses shall be restricted as follows:

a. Inside – 8:00 a.m. to 8:00 p.m., on odd numbered days.

b. Outside – 12:01 a.m. to 7:00 a.m., on odd numbered days.

c. Outside overhead irrigation for containerized nursery stock moisture stress reduction on stock grown in containers up to and including one gallon in size shall be allowed daily for 10 minutes per irrigation zone from 11:30 a.m. to 12:00 p.m., 1:30 p.m. to 2:00 p.m. and 3:30 p.m. to 4:00 p.m.

3. Flood irrigation systems shall be restricted to 4 days per month.

(b) Landscape Irrigation – New Installation.

1. For installations which have been in place for less than 30 days, and

a. Less than 5 irrigated acres in size, water use for irrigation shall be restricted to the hours of 2:00 a.m. to 7:00 a.m., Monday, Wednesday and Friday,

b. 5 irrigated acres or greater in size, water use for irrigation shall be restricted to the hours of 12:01 a.m. to 7:00 a.m. Monday, Wednesday and Friday.

2. Low volume irrigation and low volume hand watering of new landscaping shall be voluntarily reduced.

3. Cleaning and adjusting of new irrigation systems shall be restricted to 10 minutes per zone on a one time basis.

(c) Landscape Irrigation – Existing Installation.

1. For existing installations less than 5 irrigated acres in size, water use for irrigation shall be restricted to the hours from 4:00 a.m. to 7:00 a.m. for all types of irrigation, except low volume irrigation, and 5:00 p.m. to 7:00 p.m. for low volume hand watering only, one day per week.

a. Installations with odd addresses shall be permitted to irrigate on Saturday.

b. Installations with even addresses or no address shall be permitted to irrigate on Sunday.

2. For existing installations 5 irrigated acres or greater in size, water use for irrigation shall be restricted to the hours from 12:01 a.m. to 7:00 a.m., one day per week.

a. Installations with odd addresses shall be permitted to irrigate on Saturday.

b. Installations with even addresses or no address shall be permitted to irrigate on Sunday.

3. Water use for cleaning, adjusting and repair of existing irrigation systems shall be limited to ten minutes per zone per week.

4. Low volume irrigation uses shall be voluntarily reduced.

(d) Recreation Area Use.

1. Landscape irrigation for new and existing recreation areas shall be restricted to the hours prescribed for new and existing landscape irrigation in paragraphs (b) and (c) respectively.

2. Watering of pervious non-vegetated recreational/sporting surfaces shall be restricted to ten minutes of application prior to each recreational/sporting event. Low volume watering shall be used.

(e) Golf Course Use.

1. Irrigation of greens shall be voluntarily reduced and shall be accomplished during non-daylight hours.

2. Irrigation of tees shall be restricted to non-daylight hours three days per week. The front nine holes shall be restricted to Monday, Wednesday and Saturday and the back nine holes shall be restricted to Tuesday, Thursday and Sunday.

3. Irrigation of fairways, roughs and nonplaying areas on the first nine holes of the course shall be restricted to the hours of 12:01 a.m. to 7:00 a.m. on Saturday.

4. Irrigation of fairways, roughs and nonplaying areas on the last nine holes of the course shall be restricted to the hours of 12:01 a.m. to 7:00 a.m. on Sunday.

(f) Water Based Recreation Use.

1. Water based recreation water use shall be voluntarily reduced.

2. Draining of facilities into sewers or onto impervious surfaces shall be prohibited.

3. Existing facilities shall not be refilled except for makeup water, unless the facility is leaking more than one inch of water a day. If the facility is leaking more than one inch of water a day and is in need of repair, it may be drained onto a pervious surface for repairs and subsequently refilled.

(4) Miscellaneous.

(a) Cooling and Air Conditioning Use. The use of water for cooling and air conditioning shall be restricted to that amount of water necessary to maintain a minimum temperature of 78 degrees Fahrenheit.

(b) Dewatering Use. Discharge of fresh water to tide from dewatering shall be prohibited.

(c) Navigation Use.

1. The District shall request the U. S. Army Corps of Engineers to restrict its lockages to maintain acceptable chloride concentrations upstream of the locks and to conserve water.

2. In the case of the Franklin Lock and Dam, the District shall request the U. S. Army Corps of Engineers to restrict lockages to once every four hours if:

a. Chloride levels upstream of S-79 are 180 parts per million or higher, and

b. A rainfall in excess of one inch in 24 hours is not predicted in the surface water use basin within the next 48 hours.

3. If the restrictions imposed in subparagraph 2. are insufficient to stop the rising chloride levels, the District shall request the U.S. Army Corps of Engineers to further restrict lockages to once every four hours, twice per week.

4. If the restrictions imposed in subparagraphs 2. and 3. are still insufficient to stop the rising chloride levels, the District shall request the U.S. Army Corps of Engineers to prohibit lockages.

(d) Other Outside Uses.

1. Washing or cleaning streets, driveways, sidewalks, or other impervious areas with water shall be prohibited.

2. Outside pressure cleaning shall be restricted to only low volume pressure cleaning, Monday through Friday.

3. Mobile equipment washing with water shall be restricted to the hours and days prescribed for existing landscape irrigation in subparagraph (3)(c)1., using only low volume mobile equipment washing methods and shall be conducted over a pervious surface or in an area that immediately drains to a pervious surface. Rinsing and flushing of boats after saltwater use shall be limited to 15 minutes once a day for each boat.

4. Washing boats that serve as a primary residence shall be restricted to the hours and days prescribed for existing landscape irrigation in paragraph (3)(c)1. Boats with an odd slip number shall be permitted to be washed on Saturday. Boats with an even slip number or no slip number shall be permitted to be washed on Sunday.

(e) Aesthetic Use.

1. Outside aesthetic uses of water shall be prohibited.

2. Inside aesthetic uses of water shall be prohibited.

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.042, 373.0421, 373.175, 373.246 FS. History–New 5-31-82, Amended 1-26-86, 2-14-91, 9-10-01, 11-19-07.

40E-21.551 Phase IV Critical Water Shortage.

The following restrictions shall apply when a Phase IV shortage is declared by the District.

(1) Essential/Domestic/Utility/Commercial.

(a) Essential Use.

1. The use of water for firefighting, safety, sanitation, health and medical purposes and other essential uses shall not be restricted.

2. Fire hydrant flushing shall be undertaken only on an emergency basis.

3. Sanitary sewer line flushing and testing shall be undertaken only on an emergency basis.

(b) Domestic Type Use.

1. Residential type domestic use shall be voluntarily reduced to 30 gallons per person per day.

2. Domestic type use in industrial and commercial establishments shall be voluntarily reduced to the minimum levels necessary to preserve public health and safety.

(c) Water Utility Use.

1. Initial pressure at the point of use (meter) shall be reduced to levels no greater than 45 pounds per square inch. Voluntary initial pressure reductions below 45 psi shall be made consistent with the utility's ability to maintain adequate service and fire flow pressures. Upon reduction of pressure, the utility shall notify the appropriate fire-fighting agencies and make arrangements for direct communication when additional pressure is required.

2. New water line flushing and disinfection shall be restricted to the hours of 7:00 p.m. to 7:00 a.m. seven days per week.

3. As may be appropriate the utility shall institute additional conservation measures such as reclaiming of backwash water, improving and accelerating leak detection surveys and repair programs, installing and calibrating meters, and stabilizing and equalizing system pressures.

(d) Power Production Use. Water used for power production shall be voluntarily reduced.

(e) Commercial and Industrial Process Use.

1. Commercial car washes shall be restricted as follows:

a. For washes servicing passenger vehicles and mobile equipment weighing less than 10,000 pounds,

i. Use in excess of 75 gallons per wash shall be prohibited,

ii. Use equal to or less than 75 gallons but more than 50 gallons per wash shall be restricted to the hours of 8:00 a.m. through 3:00 p.m., and

iii. Use equal to or less than 50 gallons per wash shall be voluntarily reduced;

b. For washes servicing mobile equipment weighing 10,000 pounds or more,

i. Use in excess of 150 gallons per wash shall be prohibited,

ii. Use equal to or less than 150 gallons but more than 100 gallons per wash shall be restricted to the hours of 8:00 a.m. through 3:00 p.m., and

iii. Use equal to or less than 100 gallons per wash shall be voluntarily reduced.

2. Water used for commercial and industrial processes shall be voluntarily reduced.

3. Water use for cleaning, adjusting and repair of irrigation systems by a licensed person or entity shall be restricted as follows:

a. Projects one irrigated acre or greater in size shall be limited to one hour per acre per week.

b. Projects less than one irrigated acre in size shall be limited to 10 minutes per zone per week.

4. Water use for pesticide application under the supervision of a licensed pest control operator shall be voluntarily reduced. Under the provisions of this subparagraph, the applicator must be on the premises when water is applied outside of the hours allowed for irrigation.

5. Water use for well development under the supervision of a licensed well contractor shall be voluntarily reduced.

6. Water use for mobile equipment washing by a licensed person or entity shall be voluntarily reduced.

(f) Diversion and Impoundment into Non-District Facilities. Water used for diversion and impoundment into non-District facilities shall be voluntarily reduced; however, the diversion of surface water from sources in the Lake Okeechobee Region as depicted on Figure 21-4 and described in subsection 40E-21.691(3), F.A.C., shall be subject to the restrictions described in subparagraph (2)(a)6., below.

(2) Agriculture.

(a) Agricultural Use.

1. Overhead irrigation shall be restricted to the hours of 7:00 p.m. to 7:00 a.m.

2. Low volume irrigation hours shall not be restricted.

3. All irrigation systems shall be operated in a manner that will maximize the percentage of water withdrawn and held which is placed in the root zone of the crop and will minimize the amount of water which is withdrawn and released or lost to the user but is not immediately available for other users.

4. Users having access to more than one source class shall maximize the use of the lesser or least restricted source class.

5. The District's allocation determination for agricultural irrigation within the entire Lake Okeechobee Region as depicted on Figure 21-4 will be based on 60% cutbacks to the calculated 1 in 10 supplemental crop demands calculated on a weekly basis. The entire Lake Okeechobee Region supplemental crop demands will be distributed among the sub-basins depicted in Figure 21-4 based on a grouping of crop types, irrigation methods (e.g. flood irrigated crops versus micro irrigated crops), the associated acreage totals as identified in the individual water use permits combined with the associated 1 in 10 evapotranspiration demands of the crops. An additional amount of water from Lake Okeechobee will be added to the weekly allocation as necessary to account for conveyance losses that occur through seepage and free surface evaporation from the Central and Southern Florida Flood Control System Project canals. The share of the entire Lake Okeechobee Region irrigation allocation available to each sub-basin may be further adjusted to prioritize water deliveries among crops, as long as the sum of the sub-basin allocations does not exceed the weekly allocation for the entire Lake Okeechobee Region and that equity among users and sub-basins is assured. Such adjustments shall be based upon irrigation efficiency, potential for economic loss, and acreage irrigated as opposed to non-irrigated acreage. Withdrawals by each user within the Lake Okeechobee Region as described in subsection 40E-21.691(3), F.A.C., shall be limited to an amount that represents each user's share of their sub-basin weekly allocation based on their permitted crop type and irrigated acreage. The District shall provide the users with the data necessary to calculate their weekly allotment of water.

6. Overhead irrigation for field grown citrus nursery stock moisture stress reduction shall be allowed daily for 10 minutes per irrigation zone from 11:30 a.m. to 12:00 p.m., 1:30 p.m. to 2:00 p.m. and 3:30 p.m. to 4:00 p.m.

(b) Livestock Use. Livestock water use shall be voluntarily reduced.

(c) Aquacultural Use. Aquacultural water use shall be voluntarily reduced.

(d) Soil Flooding.

1. Soil flooding for vegetable seed planting, rice planting, burning of sugarcane prior to harvest and to permit harvesting of sod shall be voluntarily reduced.

2. Soil flooding for all other purposes shall be prohibited.

(e) Freeze Protection. Water use for freeze protection shall be restricted to situations in which official weather forecasting services predict temperatures likely to cause permanent damage to crops.

(3) Nursery/Urban Irrigation/Recreation.

(a) Nursery Use.

1. Low volume irrigation uses and low volume hand watering shall be voluntarily reduced.

2. Overhead irrigation uses shall be restricted as follows:

a. Inside – 8:00 a.m. to 4:00 p.m., on odd numbered days.

b. Outside – 2:00 a.m. to 7:00 a.m., on odd numbered days.

c. Outside overhead irrigation for containerized nursery stock moisture stress reduction on stock grown in containers up to and including one gallon in size shall be allowed daily for 10 minutes per irrigation zone from 11:30 a.m. to 12:00 p.m., 1:30 p.m. to 2:00 p.m. and 3:30 p.m. to 4:00 p.m.

3. Flood irrigation systems shall be restricted to 2 days per month.

(b) Landscape Irrigation – New Installation.

1. For installations which have been in place for less than 30 days, and

a. Less than 5 irrigated acres in size, water use for irrigation shall be restricted to the hours of 6:00 a.m. to 7:00 a.m., Saturday.

b. 5 irrigated acres or greater in size, water use for irrigation shall be restricted to the hours of 4:00 a.m. to 7:00 a.m., Saturday.

2. Low volume irrigation and low volume hand watering of new landscaping shall be restricted to Monday, Wednesday and Friday.

3. Cleaning and adjusting of new irrigation systems shall be prohibited.

(c) Landscape Irrigation – Existing Installation.

1. For existing installations less than 5 irrigated acres in size, water use for irrigation shall be restricted to the hours from 6:00 a.m. to 7:00 a.m. for all types of irrigation, except low volume irrigation, and 5:00 p.m. to 7:00 p.m. for low volume hand watering only, one day per week.

a. Installations with odd addresses shall be permitted to irrigate on Saturday.

b. Installations with even addresses or no address shall be permitted to irrigate on Sunday.

2. For existing installations 5 irrigated acres or greater in size, water use for irrigation shall be restricted to the hours from 4:00 a.m. to 7:00 a.m., one day per week.

a. Installations with odd addresses shall be permitted to irrigate on Saturday.

b. Installations with even addresses or no address shall be permitted to irrigate on Sunday.

3. Low volume irrigation uses shall be restricted to Monday, Wednesday and Friday.

(d) Recreation Area Use.

1. Landscape irrigation for new and existing recreation areas shall be restricted to the hours prescribed for new and existing landscape irrigation in paragraphs (b) and (c) respectively.

2. Watering of pervious non-vegetated recreational/sporting surfaces shall be restricted to ten minutes of application prior to each recreational/sporting event. Low volume watering shall be used.

(e) Golf Course Use.

1. Irrigation of greens shall be voluntarily reduced and shall be accomplished during non-daylight hours.

2. Irrigation of tees shall be restricted to non-daylight hours one day per week. The front nine holes shall be restricted to Saturday and the back nine holes shall be restricted to Sunday.

3. Irrigation of fairways, roughs and nonplaying areas on the first nine holes of the course shall be restricted to the hours of 4:00 a.m. to 7:00 a.m. on Saturday.

4. Irrigation of fairways, roughs and nonplaying areas on the last nine holes of the course shall be restricted to the hours of 4:00 a.m. to 7:00 a.m. on Sunday.

(f) Water Based Recreation Use. Water based recreation water use shall be restricted, as follows:

1. Draining of facilities into sewers or onto impervious surfaces shall be prohibited.

2. Filling of new or existing facilities shall be prohibited.

3. Use of makeup water shall be prohibited.

(4) Miscellaneous.

(a) Cooling and Air Conditioning Use.

1. The use of water for cooling and air conditioning shall be restricted to that amount of water necessary to maintain a minimum temperature of 78 degrees Fahrenheit.

2. Cooling and air conditioning systems shall not discharge water to tide.

3. Reuse of water shall be required.

(b) Dewatering Use. Discharge of fresh water to tide from dewatering shall be prohibited.

(c) Navigation Use.

1. The District shall request the U.S. Army Corps of Engineers to restrict its lockages to maintain acceptable chloride concentrations upstream of the locks and to conserve water.

2. In the case of the Franklin Lock and Dam, the District shall request the U.S. Army Corps of Engineers to restrict lockages to once every four hours if:

a. Chloride levels upstream of S-79 are 180 parts per million or higher, and

b. A rainfall in excess of one inch in 24 hours is not predicted in the surface water use basin within the next 48 hours.

3. If the restrictions imposed in subparagraph 2. are insufficient to stop the rising chloride levels, the District shall request the U.S. Army Corps of Engineers to further restrict lockages to once every four hours, twice per week.

4. If the restrictions imposed in subparagraphs 2. and 3. are still insufficient to stop the rising chloride levels, the District shall request the U.S. Army Corps of Engineers to prohibit lockages.

(d) Other Outside Uses.

1. Washing or cleaning streets, driveways, sidewalks, or other impervious areas with water shall be prohibited.

2. Outside pressure cleaning shall be restricted to only low volume pressure cleaning, Monday and Wednesday.

3. Mobile equipment washing with water shall be restricted to the hours and days prescribed for existing landscape irrigation in subparagraph (3)(c)1., using only low volume mobile equipment washing methods and shall be conducted over a pervious surface or in an area that immediately drains to a pervious surface. Rinsing and flushing of boats after saltwater use shall be limited to 15 minutes once a day for each boat.

4. Washing boats that serve as a primary residence shall be restricted to the hours and days prescribed for existing landscape irrigation in subparagraph (3)(c)1. Boats with an odd slip number shall be permitted to be washed on Saturday. Boats with an even slip number or no slip number shall be permitted to be washed on Sunday.

(e) Aesthetic Use.

1. Outside aesthetic uses of water shall be prohibited.

2. Inside aesthetic uses of water shall be prohibited.

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.175, 373.246 FS. History–New 5-31-82, Amended 1-26-86, 2-14-91, 11-19-07.

40E-21.611 Classification System.

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.175, 373.246 FS. History–New 5-31-82, Repealed by Section 3, Chapter 2012-31, Laws of Florida, 5-27-12.

40E-21.631 Source Classes.

Source classes are generally divided into surface water use basins and groundwater sources. A water user may be assigned any combination of both surface water use basin and groundwater source classes.

(1) Surface Water Use Basins. Surface waters are classified by surface water use basin. Descriptions of the boundaries of the surface water use basins are found in Rule 40E-21.691, F.A.C. The surface water use basins are grouped by region as follows (see Figure 21-1):

(a) Water Conservation Area/Everglades National Park (see Figure 21-2).

1. The surface water use basins in this area are directly supplied with surface water from the Water Conservation Areas and Everglades National Park. The following surface water use basins are included in the area:

2. Water Conservation Areas/Everglades National Park Water Use Basin

(b) Lower East Coast (see Figure 21-3) The water use basins in this area are directly supplied with surface water from the Water Conservation Areas or the M Canal. The following surface water use basins are included in the area:

1. Interior Palm Beach County Water Use Basin.
2. Loxahatchee River Water Use Basin.
3. C-18 Water Use Basin.
4. North Palm Beach County Water Use Basin.
5. M Canal Water Use Basin.
6. Water Conservation Area 1 West Palm Beach Canal Water Use Basin.
7. Water Conservation Area 2 Water Use Basin.
8. Water Conservation Area 3 Water Use Basin.
9. South Dade Water Use Basin.

(c) Lake Okeechobee (see Figure 21-4) The surface water use basins in this area are directly supplied with surface water from Lake Okeechobee. The following surface water use basins are included in the area:

1. Everglades Agricultural Area Water Use Basin.
2. Caloosahatchee River Water Use Basin.
3. St. Lucie River Water Use Basin.
4. Lakeshore Perimeter Water Use Basin.

(d) Upper East Coast (see Figure 21-5) The surface water use basins in this area are directly supplied from local surface waters. The following surface water use basins are included in the area:

1. St. Lucie County Agricultural Area Water Use Basin.
2. Coastal St. Lucie County Water Use Basin.
3. Port St. Lucie Water Use Basin.
4. Northwest Martin County Water Use Basin.
5. South Coastal Martin County Water Use Basin.
6. North Coastal Martin County Water Use Basin.
7. West Coastal Martin County Water Use Basin.
8. Stuart Peninsula Water Use Basin.
9. Interior Martin County Water Use Basin.
10. Northwest Loxahatchee River Water Use Basin.

(e) Kissimmee (see Figure 21-6) The surface water use basins in this area are directly supplied with surface water from the West Chain of Lakes, the Upper Chain of Lakes and the Kissimmee River. The following surface water use basins are included in the area:

1. West Chain of Lakes Water Use Basin.
2. Upper Chain of Lakes Water Use Basin.
3. Kissimmee River Valley Water Use Basin.
4. Taylor Creek-Nubbin Slough Water Use Basin.

(f) Indian Prairie (see Figure 21-7) The surface water use basins in this area are directly supplied with surface water from Lake Istokpoga and Fisheating Creek or associated surface water bodies. The following surface water use basins are included in the area:

1. Indian Prairie Water Use Basin.
2. Fisheating Creek Water Use Basin.

(g) Lower West Coast (see Figure 21-8) The surface water use basins in this area are directly supplied from local surface waters. The following surface water use basins are included in the area:

1. Caloosahatchee River Watershed – North, Water Use Basin.
2. Caloosahatchee River Watershed – South, Water Use Basin.
3. South Hendry County/L-28 Gap Water Use Basin.
4. Big Cypress Preserve Water Use Basin.

5. Fakahatchee North Water Use Basin.
6. Fakahatchee South Water Use Basin.
7. Coastal Collier County Water Use Basin.

(2) Groundwater Sources. Groundwater sources are classified based upon the available hydrologic information, and the restricted area may include aquifers underlying all or part of a county, municipality, surface water basin or utility service area, as follows:

(a) Water table aquifers. Groundwaters directly recharged by surface waters and rainfall are classified according to the surface water use basin within which they are located. The titles and boundaries described in subsection (1) shall apply.

(b) Confined and semiconfined aquifers. Groundwaters not directly recharged by surface waters and rainfall are classified as follows:

1. Potable Floridan Aquifer.
2. Non-Potable Floridan Aquifer.
3. Sandstone Aquifer.
4. Upper Hawthorn Aquifer.
5. Suwannee Aquifer.
6. Lower Hawthorn Aquifer.
7. Other artesian or leaky artesian aquifers.

(c) Figures 21-2 through 21-8 list the water table, confined and semiconfined aquifers generally found within each surface water use basin. Adjacent areas which are supplied from a restricted groundwater source may also be included in the restricted area.

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.175, 373.246 FS. History–New 5-31-82, Amended 1-26-86, 2-14-91.

40E-21.651 Use Classes.

Use classes are generally grouped by related uses. The four major groupings are: Essential/Domestic/Utility/Commercial, Agriculture, Nursery/Urban Irrigation/Recreation and Miscellaneous. Neither the order of listing of the major groupings nor the order of listing within each major grouping is intended to establish relative priorities of water use. A user may be assigned one or more use class regardless of the groupings in this rule.

Each water user shall be given one or more of the following use classes:

(1) Essential/Domestic/Utility/Commercial.

(a) “Essential use” means use of water strictly for fire fighting, safety, sanitation, health and medical purposes and the use of water to satisfy federal, state or local public health and safety requirements.

(b) “Domestic type use” means any use of water for personal needs or for household purposes such as drinking, bathing, heating, cooking, sanitation or cleaning, whether the use occurs in a residence or in a commercial or industrial establishment.

(c) “Water utility use” means water used for withdrawal, treatment, transmission and distribution by potable water systems.

(d) “Power production use” means the use of water for steam generation and the use of water for cooling and for replenishment of cooling reservoirs.

(e) “Commercial and industrial process use” means the use of water integral to the production of the primary goods or services provided by a business establishment.

(f) “Diversion and impoundment into non-District facilities” means the diversion or extraction of water into non-District impoundments and delivery systems designed for purposes of, including but not limited to, maintaining control elevations in order to provide for groundwater recharge, and to provide water for reasonable-beneficial uses.

(2) Agriculture.

(a) “Agricultural use” means the use of water for the commercial production of crops or the growing of farm products including but not limited to vegetables, citrus and tropical fruits, pasture, nursery stock, sugar cane, rice and sod.

(b) “Livestock use” means the use of water for drinking by or washing of livestock.

(c) “Aquacultural use” means the use of water for the spawning, cultivating, harvesting or marketing of domesticated fin-fish, shellfish, crustaceans, frogs, turtles, alligators and other aquatic organisms that have a sport or other economic value.

(d) “Soil flooding” means use of water for raising of water levels on agricultural lands for purposes not directly related to crop growth including but not limited to soil preservation crop harvesting and pest control.

(e) “Freeze protection” means the periodic and infrequent use of water to protect agricultural and nursery crops from permanent

damage due to low temperatures. This action would be taken in response to forecasts of freezing temperatures by official weather forecasting services.

(3) Nursery/Urban Irrigation/Recreation.

(a) "Nursery use" means the use of water on premises on or in which is nursery stock grown, propagated or held for sale or distribution or sold or reshipped.

(b) "Landscape irrigation – new installation" means the outside watering or sprinkling of shrubbery, trees, lawns, grass, ground covers, plants, vines, gardens and other such flora which have been planted for less than 30 days and are situated in such diverse locations as residential landscaping, parks, cemeteries, public, commercial and industrial establishments, public medians and rights of way.

(c) "Landscape irrigation – existing installation" means the outside watering or sprinkling of shrubbery, trees, lawns, grass, ground covers, plants, vines, gardens and other such flora which are planted and established and are situated in such diverse locations as residential landscapings, recreation areas, cemeteries, public, commercial and industrial establishments, public medians and rights of way.

(d) "Recreation area use" means the use of water for the maintenance and support of intensive recreational areas such as but not limited to playgrounds, football, baseball, and soccer fields, polo fields, tennis courts, race tracks and school playgrounds.

(e) "Golf course use" means water used to irrigate an establishment designed and used for playing golf.

(f) "Water based recreation use" means water used for public or private spas, swimming pools and wading pools, including water slides. This term does not include pools specifically maintained to provide habitat for aquatic life.

(4) Miscellaneous.

(a) "Cooling and air conditioning use" means the use of water for industrial cooling or for air conditioning.

(b) "Dewatering use" means the removal of water from a specific area to facilitate mining or construction.

(c) "Navigation use" means water discharged from ground or surface sources either to tidewater or to downstream lakes or reaches of rivers or canals for the purpose of permitting or promoting boating activity.

(d) "Other outside uses" means the use of water outdoors for the maintenance, cleaning and washing of structures and mobile equipment including automobiles and the washing of streets, driveways, sidewalks and similar areas.

(e) "Aesthetic use" means the use of water for fountains, waterfalls, and landscape lakes and ponds where such uses are entirely ornamental and decorative and serve no other functional purpose.

(5) The Board may establish such additional use classifications as it deems necessary.

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.175, 373.246 FS. History–New 5-31-82, Amended 2-14-91, 8-14-03.

40E-21.671 Method of Withdrawal Classes.

Each water user may be identified by one or more of the following method of withdrawal classes:

(1) Surface waters:

(a) Pump.

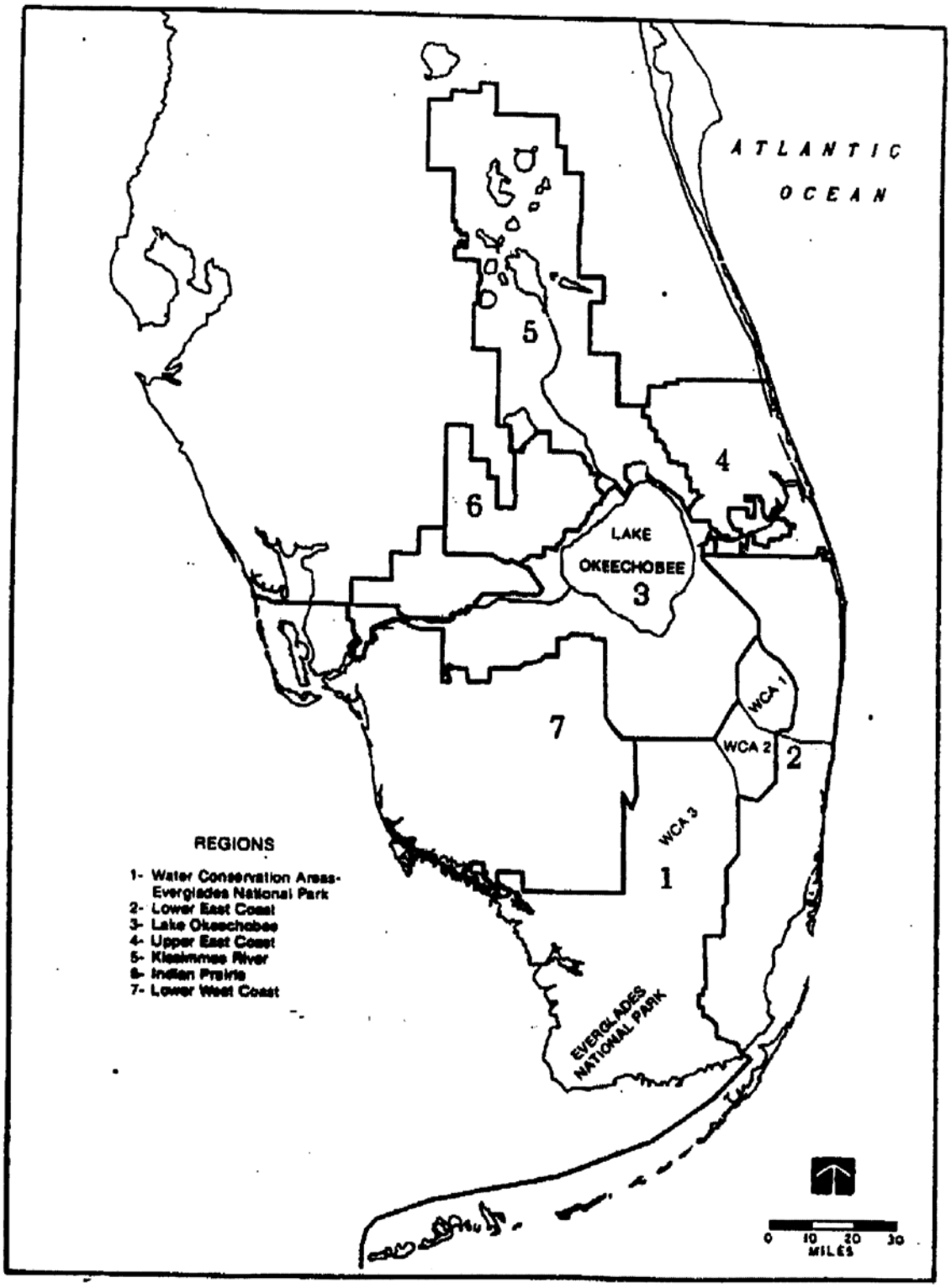
(b) Gravity flow.

(2) Ground waters:

(a) Artesian well.

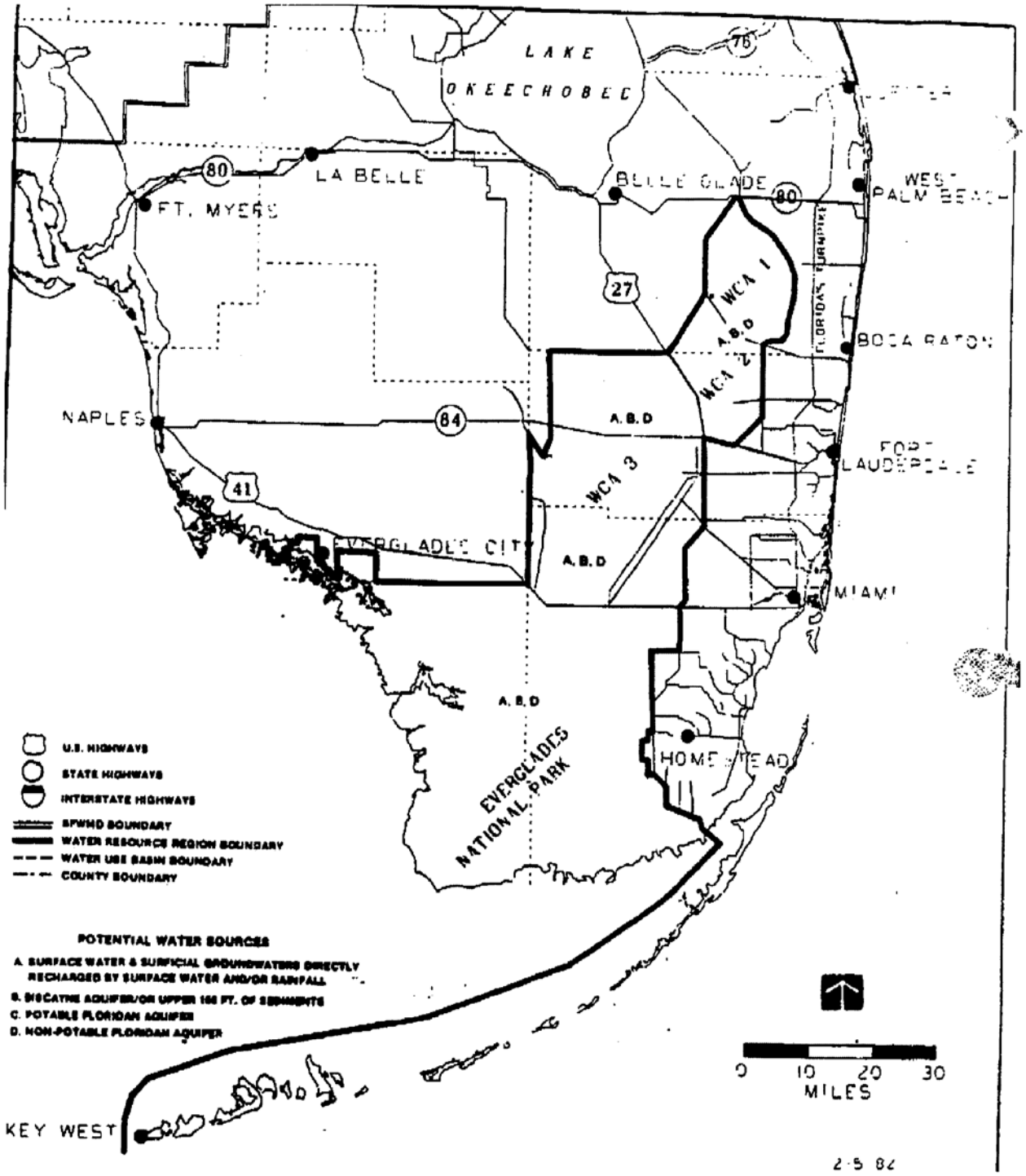
(b) Pumped well.

(c) Infiltration gallery.



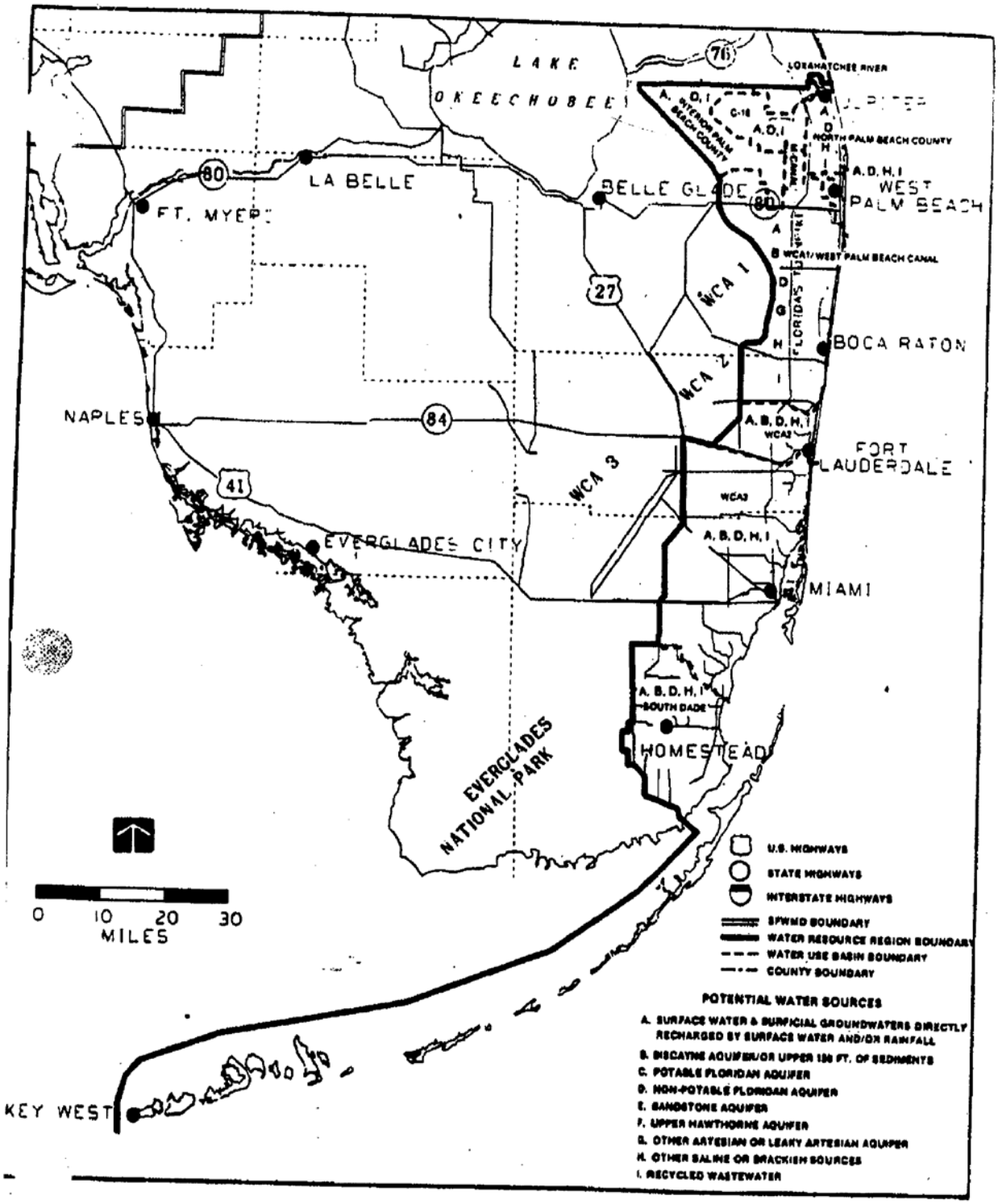
WATER SHORTAGE PLAN REGIONS

FIGURE 21-1



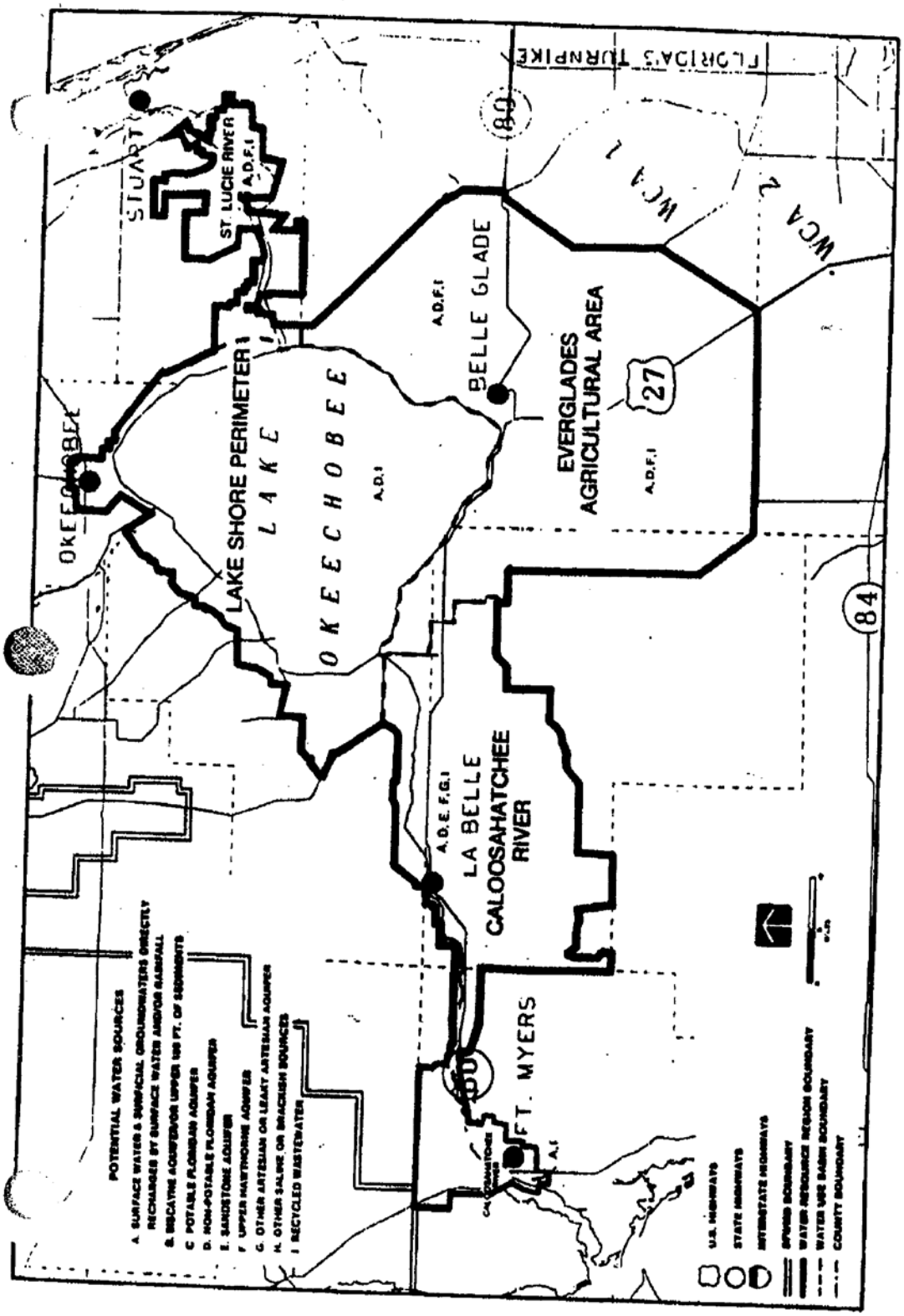
WATER CONSERVATION AREAS - EVERGLADES NATIONAL PARK REGION

FIGURE 21-2



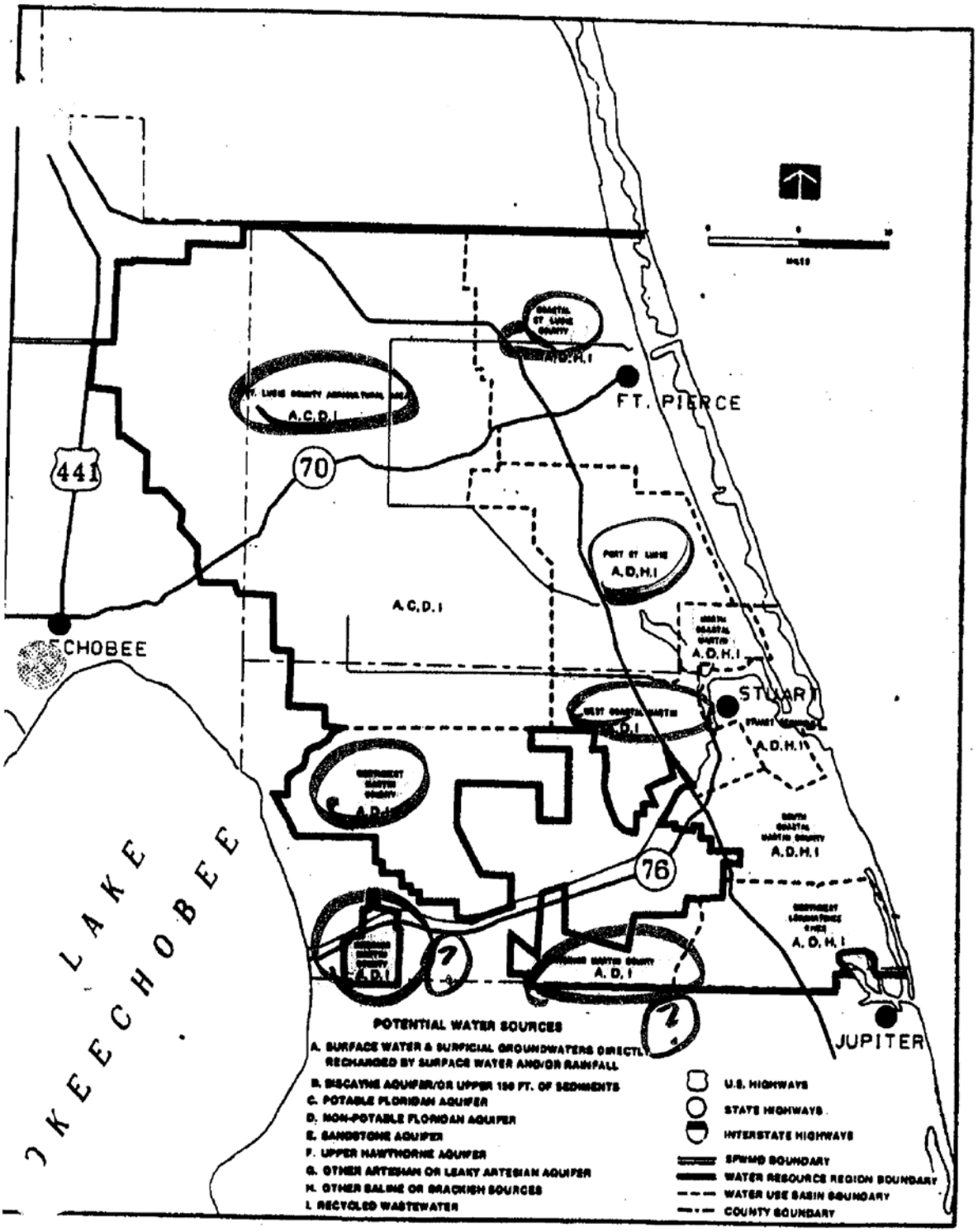
LOWER EAST COAST REGION

FIGURE 21-3



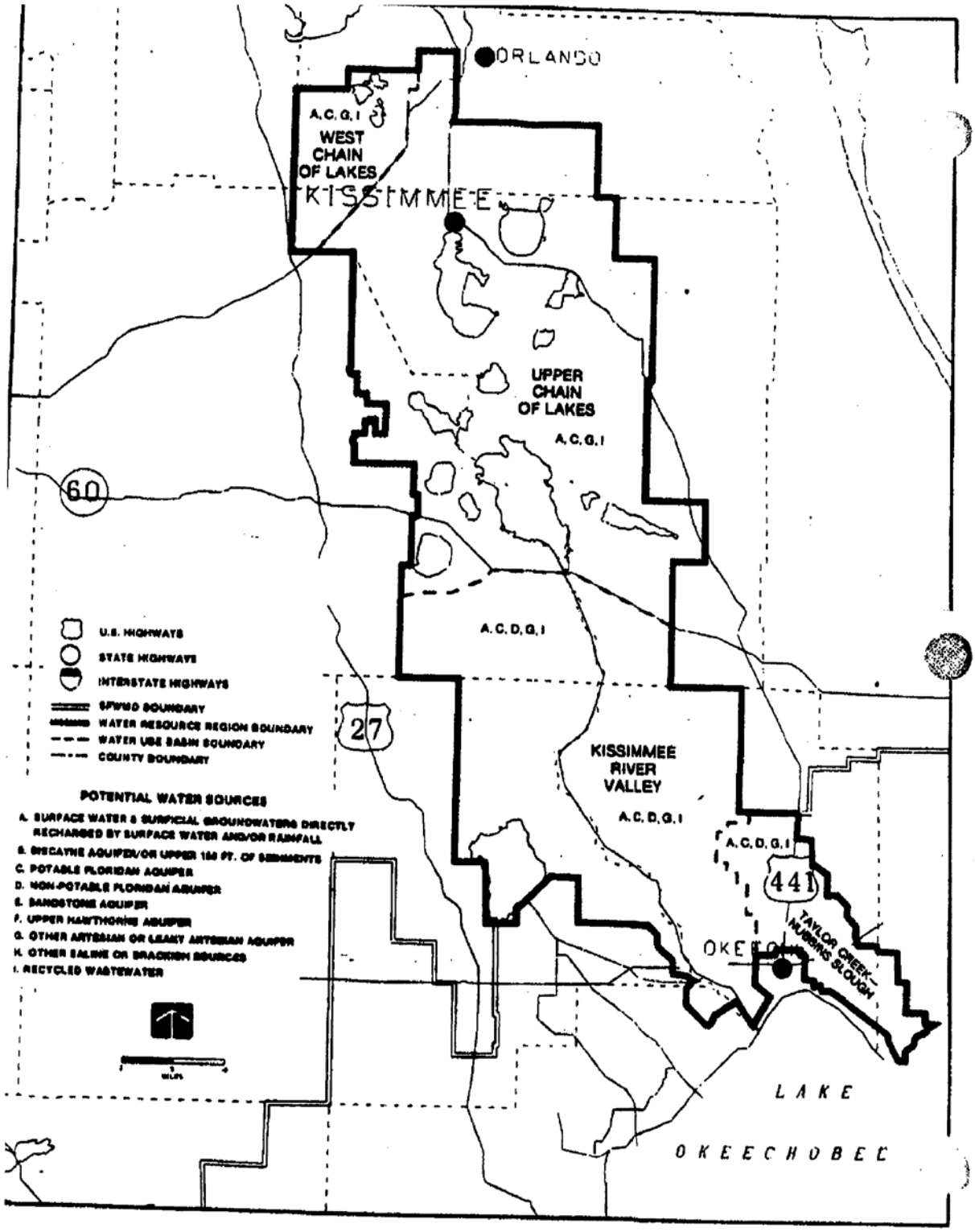
LAKE OKEECHOBEE REGION

FIGURE 21-4

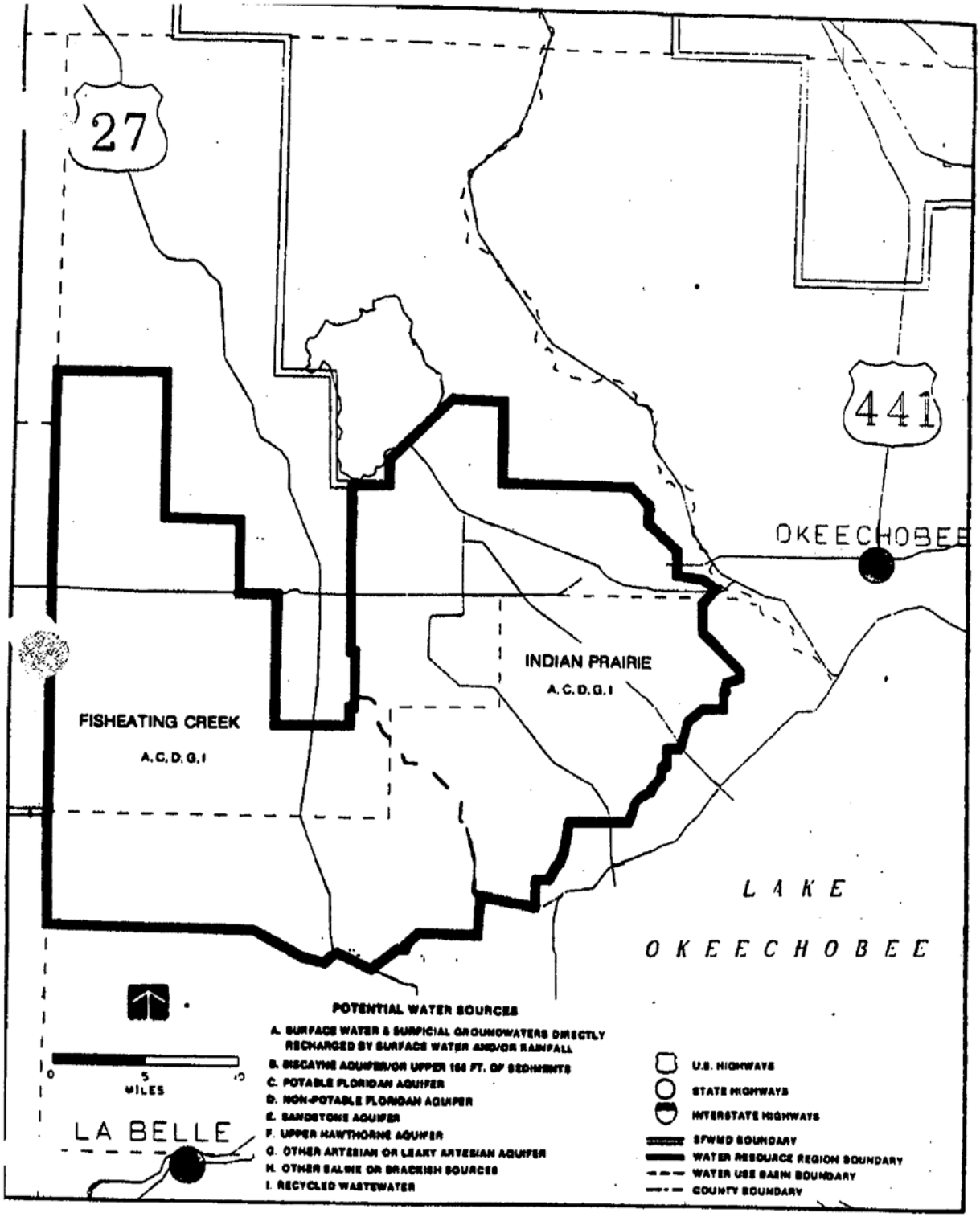


UPPER EAST COAST REGION

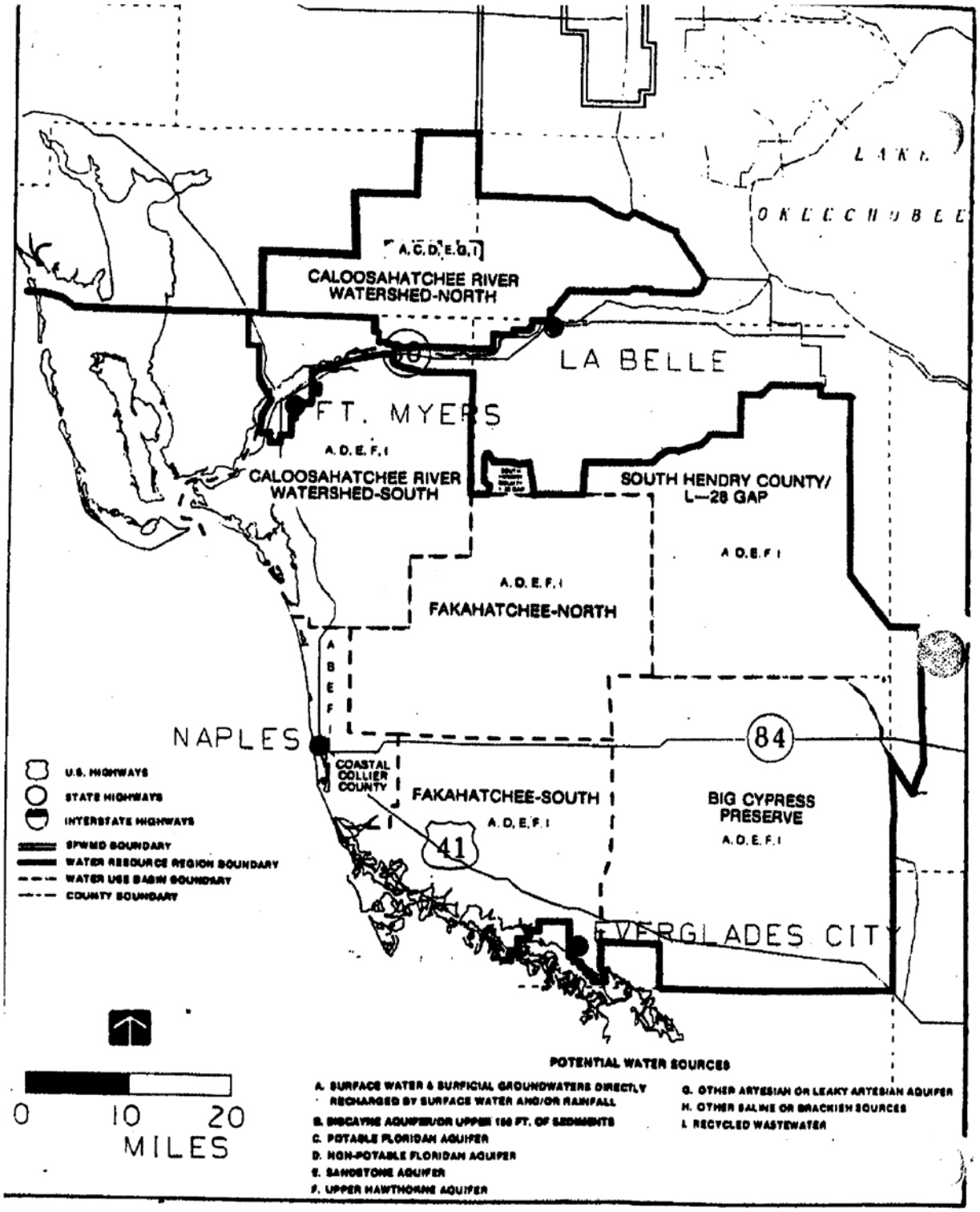
FIGURE 21-5



KISSIMMEE RIVER REGION
FIGURE 21-6



INDIAN PRAIRIE REGION
FIGURE 21-7



LOWER WEST COAST REGION

FIGURE 21-8

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.175, 373.246 FS. History–New 5-31-82.

40E-21.691 Surface Water Use Basin Descriptions.

This rule contains descriptions of the boundaries of the surface water use basins listed in Rule 40E-21.631, F.A.C.

(1) Water Conservation Areas/Everglades National Park Water Conservation Areas/Everglades National Park Water Use Basin, described as:

Palm Beach County (See Figure 21-13)

A parcel of land in Palm Beach County bounded as follows:

On the East by the centerlines of South Florida Water Management District's Levee 40 and South Florida Water Management District's Levee 36; On the South by the Palm Beach-Broward County line; On the West by the centerlines of South Florida Water Management District's Levee 6 and South Florida Water Management District's Levee 7; And, on the North by the centerline of South Florida Water Management District's Levee 7 Extension.

Broward County (See Figure 21-12)

Beginning at the intersection of the centerline of South Florida Water Management District's Levee 28 and the Broward-Palm Beach County line; Thence, Easterly along said Broward-Palm Beach County line to the centerline of South Florida Water Management District's Levee 36; Thence, Southerly, Southwesterly, Northwesterly, Southwesterly and Southerly along said centerline of Levee 36 and South Florida Water Management District's Levees 35A, 35, 37 and 33 to the Broward-Dade County line; Thence, Westerly, Northerly and Westerly along said Broward-Dade County line to the Broward-Collier County line; Thence, Northerly along said Broward-Collier County line to the centerline of South Florida Water Management District's Levee 28 Interceptor; Thence, Southeasterly along said centerline of Levee 28 Interceptor to the centerline of South Florida Water Management District's Levee 28; Thence, Northeasterly and Northerly along said centerline of Levee 28 to the Point of Beginning.

Dade County (See Figure 21-11)

All that part of Dade County lying Westerly of the following specifically described line:

Beginning at the intersection of the centerline of South Florida Water Management District's Levee 37 and the Dade-Broward County line; Thence, Southerly and Southwesterly along said centerline of Levee 37 and the centerline of South Florida Water Management District's Levees 30 and 31 North to the North line of Section 2, Township 55 South, Range 38 East; Thence, Westerly along the section lines to the Northwest corner of Section 6, Township 55 South, Range 37 East; Thence, Southerly along the section lines to the Northeast corner of Section 24, Township 57 South, Range 37 East; Thence, Westerly to the Northwest corner of said Section 24; Thence, Southerly along the section lines to the Southwest corner of Section 36, Township 57 South, Range 37 East; Thence, Easterly to the Southeast corner of said Section 36; Thence, Southerly along the section lines to the Southwest corner of Section 7, Township 58 South, Range 38 East; Thence, Easterly along the South line of said Section 7 to the centerline of South Florida Water Management District's Canal 111; Thence, Southeasterly, Southerly and Southeasterly along said centerline of Canal 111 to the centerline of State Road 5 (U. S. Highway 1); Thence, Southerly along said centerline of State Road 5 (U. S. Highway 1) to Florida Bay, the Dade County line and the end of the specifically described line.

Monroe County (See Figure 21-10)

Beginning at the Northeast corner of Monroe County; Thence, Westerly along the Monroe-Collier County line to the Easterly shore of the Gulf of Mexico; Thence, Southerly along said shore to the Monroe-Dade County line; Thence, Northerly along said County line to the Point of Beginning.

Collier County (See Figure 21-25)

All that part of the Everglades National Park lying within Collier County.

(2) Lower East Coast.

(a) Interior Palm Beach County Water Use Basin, described as:

Palm Beach County (See Figure 21-13)

Beginning at the intersection of the centerline of South Florida Water Management District's Levee 8 North Tieback with the Palm Beach-Martin County line; Thence, Easterly along said County line to the centerline of County Road 711; Thence, Southerly along said centerline of County Road 711 to the centerline of State Road 706; Thence, Westerly along said centerline of State Road 706 and its Westerly extension to the West line of Section 33, Township 40 South, Range 40 East; Thence, Southwesterly to the Southwest corner of Section 5, Township 41 South, Range 40 East; Thence, Southwesterly to the Northeast corner of Section 13, Township 41 South, Range 39 East; Thence, Westerly along the section line to the north-south one-quarter section line of said

Section 13; Thence, Southerly along said north-south one-quarter section line to the South line of said Section 13; Thence, Southeasterly to the Southwest corner of Section 2, Township 42 South, Range 40 East; Thence, Easterly along the section lines to the Northeast corner of Section 12, Township 42 South, Range 40 East; Thence, Southerly along the section line to the Southeast corner of said Section 12; Thence, Easterly along the section lines to the north-south one-quarter section line of Section 17, Township 42 South, Range 41 East; Thence, Southerly along said north-south one-quarter section line to the South line of said Section 17; Thence, Easterly along the section lines to the Northeast corner of Section 24, Township 42 South, Range 41 East; Thence, Southerly along the section lines to the centerline of State Road 80; Thence, Westerly along said centerline of State Road 80 to the centerline of Folsom Road; Thence, Northerly along said centerline of Folsom Road to the South line of the Northwest one-quarter of Section 22, Township 43 South, Range 41 East; Thence, Easterly along said south line to the Southeast corner of the Northwest one-quarter of said Section 22; Thence, Northerly along the East line of said Northwest one-quarter of Section 22 to the Northeast corner of said Northwest one-quarter of Section 22; Thence, Westerly along the North line of said Section 22 to the Southeast corner of Section 16, Township 43 South, Range 41 East; Thence, Northerly along the section line to the Northeast corner of said Section 16; Thence, Westerly along the section line to the Southeast corner of Section 8, Township 43 South, Range 41 East; Thence, Northerly along the section lines to the centerline of the "M" Canal; Thence, Westerly and Southwesterly along said centerline of the "M" Canal and the centerline of South Florida Water Management District's Levee 8 Tieback Borrow Canal and its Southerly extension to the centerline of South Florida Water Management District's Levee 8; Thence, Northwesterly, Westerly and Northerly along said centerline of Levee 8 and the centerline of Levee 8 North Tieback to the Point of Beginning.

(b) Loxahatchee River Water Use Basin, described as:

Palm Beach County (See Figure 21-13)

Beginning at the intersection of the centerline of County Road 711 and the Palm Beach-Martin County line; Thence, Easterly, Northerly and Easterly along said County line to the centerline of the Loxahatchee River; Thence, Southeasterly along said centerline of the Loxahatchee River to the centerline of the Southwest Fork of the Loxahatchee River; Thence, Southwesterly along said centerline of the Southwest Fork of the Loxahatchee River to the Easterly right of way line of South Florida Water Management District's Canal 18; Thence, Northwesterly along said right of way line to the Northwesterly right of way line of said Canal 18; Thence, Southwesterly along the Northwesterly and Westerly right of way line of said Canal 18 to the North line of Section 19, Township 41 South, Range 42 East; Thence, Westerly along the section lines to the Northwest corner of Section 21, Township 41 South, Range 41 East; Thence, Northerly along the section line to the Southwest corner of Section 9, Township 41 South, Range 41 East; Thence, Easterly along the section line to the north-south one-quarter section line of said Section 9; Thence, Northerly along the north-south one-quarter section lines to the centerline of State Road 706; Thence, Westerly along said centerline of State Road 706 to the centerline of County Road 711; Thence, Northerly along said centerline of County Road 711 to the Point of Beginning.

(c) C-18 Water Use Basin, described as:

Palm Beach County (See Figure 21-13)

Beginning at the intersection of the centerline of County Road 711 and the centerline of State Road 706; Thence, Easterly along said centerline of State Road 706 to the north-south one-quarter section line of Section 4, Township 41 South, Range 41 East; Thence, Southerly along the north-south one-quarter section line to the South line of Section 9, Township 41 South, Range 41 East; Thence, Westerly along the section line to the Northeast corner of Section 17, Township 41 South, Range 41 East; Thence, Southerly along the section line to the Southeast corner of said Section 17; Thence, Easterly along the section lines to the Westerly right of way line of South Florida Water Management District's Canal 18; Thence, Northerly and Northeasterly along said right of way line to the Southwest Fork of the Loxahatchee River; Thence, Southeasterly along said Canal 18 right of way line to the Southeasterly right of way line of said Canal 18; Thence, Southwesterly along said right of way line to the centerline of Florida's Turnpike; Thence, Southeasterly along said centerline of Florida's Turnpike to the West line of Section 15, Township 41 South, Range 42 East; Thence, Southerly along the section lines to the Southeast corner of Section 21, Township 41 South, Range 42 East; Thence, Westerly along the section line to the Southwest corner of said Section 21; Thence, Southerly along the section lines to the centerline of South Florida Water Management District's Canal 18; Thence, Southeasterly along said centerline to the Northeast one-quarter right of way line of the Seaboard Coastline Railroad; Thence, Northwesterly along said Northeasterly right of way line to the West line of Section 7, Township 42 South, Range 42 East; Thence, Southerly along the section lines to the Southeast corner of Section 13, Township 42 South, Range 41 East; Thence, Westerly along the section lines to the north-south one-quarter section line of Section 17, Township 42 South, Range 41 East; Thence, Northerly along said north-south one-quarter section line to the North line of said Section 17; Thence, Westerly along the section lines to the Southeast corner of Section 12, Township 42 South,

Range 40 East; Thence, Northerly along the section line to the Northeast corner of said Section 12; Thence, Westerly along the section lines to the Southwest corner of Section 2, Township 42 South, Range 40 East; Thence, Northwesterly to the Southwest corner of the East one-half of Section 13, Township 41 South, Range 39 East; Thence, Northerly along the West line of the East one-half of said section 13 to the Northwest corner of the East one-half of said Section 13; Thence, Easterly along the section line to the Northeast corner of said Section 13; Thence, Northeasterly to the Northeast corner of Section 7, Township 41 South, Range 40 East; Thence, Northeasterly to the intersection of the West line of Section 33, Township 40 South, Range 40 East with the centerline of State Road 706; Thence Easterly along said centerline of State Road 706 to the Point of Beginning.

(d) North Palm Beach County Water Use Basin, described as:

Palm Beach County (See Figure 21-13)

All that part of Palm Beach County lying Easterly and Northerly of the following specifically described line:

From the Northwest corner of Section 27, Township 40 South, Range 42 East on the Palm Beach-Martin County line bear Easterly along said County line to the centerline of the Loxahatchee River and the Point of Beginning. Thence, Southeasterly along said centerline of the Loxahatchee River to the centerline of the Southwest Fork of the Loxahatchee River; Thence, Southwesterly along said centerline of the Southwest Fork of the Loxahatchee River to the Easterly right of way line of South Florida Water Management District's Canal 18; Thence, Southeasterly along said right of way line to the Southeasterly right of way line of said Canal 18; Thence, Southwesterly along said right of way line to the centerline of Florida's Turnpike; Thence, Southeasterly along said centerline of Florida's Turnpike to the West line of Section 15, Township 41 South, Range 42 East; Thence, Southerly along the section lines to the Southeast corner of Section 21, Township 41 South, Range 42 East; Thence, Westerly along the section line to the Southwest corner of said Section 21; Thence, Southerly along the section lines to the centerline of South Florida Water Management District's Canal 18; Thence, Southeasterly along said centerline to the Northeasterly right of way line of the Seaboard Coastline Railroad; Thence, Southeasterly along said right of way line to the West line of Section 22, Township 42 South, Range 42 East; Thence, Southerly along the section lines to the Northeast corner of the Southeast one-quarter of Section 4, Township 43 South, Range 42 East and the Corporate City Limit Line of the City of West Palm Beach; Thence, Easterly along said Corporate City Limit Line and along the Northerly Corporate City Limit Line of the Town of Palm Beach to the Westerly shore of the Atlantic Ocean, and the end of the specifically described line.

Martin County (See Figure 21-14)

Beginning at the intersection of the centerline of Country Club Drive with the Martin-Palm Beach County line; Thence, Northwesterly along said centerline to the North line of the South one-half of the Northwest one-quarter of the Southwest one-quarter of the Southwest one-quarter of Section 23, Township 40 South, Range 42 East; Thence, Westerly along said line and along the North line of the South one-half of the North one-half of the South one-half of the Southeast one-quarter of Section 22, Township 40 South, Range 42 East, to the centerline of the Loxahatchee River; Thence, Northwesterly along said centerline to the north line of the South one-half of the North one-half of the Southeast one-quarter of said Section 22; Thence, Easterly along said line to the centerline of said Country Club Drive; Thence, Northwesterly along said centerline to the West line of the East one-quarter of the Northeast one-quarter of said Section 22; Thence, Northerly along said West line to the Northwest corner of the Southeast one-quarter of the Northeast one-quarter of said Section 22; Thence, Easterly along the one-quarter one-quarter section lines to the Northeast corner of the Southwest one-quarter of the Northwest one-quarter of Section 23, Township 40 South, Range 42 East; Thence, Southerly along the East line of said Southwest one-quarter of the Northwest one-quarter of Section 23 to the South line of the North one-half of said Section 23; Thence, Easterly along said line to the centerline of the North Fork of the Loxahatchee River; Thence, Southeasterly along said centerline to the Martin-Palm Beach County line; Thence, Westerly along said County line to the Point of Beginning.

And also;

All the South one-half of the Southeast one-quarter of Section 24, Township 40 South, Range 42 East; And the Southeast one-quarter of the Southwest one-quarter of said Section 24; And the West three-quarters of the Southwest one-quarter of the Southwest one-quarter of Section 19, Township 40 South, Range 43 East.

(e) M Canal Water Use Basin, described as:

Palm Beach County (See Figure 21-13)

All the lands lying within the Corporate Limits of the Town of Palm Beach and the City of West Palm Beach.

(f) Water Conservation Area 1/West Palm Beach Canal Water Use Basin, described as:

Broward County (See Figure 21-12)

All that part of Broward County lying Easterly and Northerly of the following specifically described line:

Beginning at the intersection of the Broward-Palm Beach County line and the centerline of South Florida Water Management District's Levee 36; Thence, Southerly along said centerline of Levee 36 to the centerline of South Florida Water Management District's Canal 14 (Cypress Creek); Thence, Easterly, Southerly, Southeasterly and Northeasterly along said centerline of Canal 14 (Cypress Creek) to the centerline of the Intracoastal Waterway; Thence, East to the Atlantic Ocean and the end of the specifically described line.

Palm Beach County (See Figure 21-13)

Beginning at the intersection of the centerline of South Florida Water Management District's Levee 36 and the Palm Beach-Broward County line; Thence, Easterly along said County line to the Westerly shore of the Atlantic Ocean; Thence, Northerly along said shoreline to the South Palm Beach-Town of Palm Beach Corporate Limits; Thence, Westerly and Northerly along said Town of Palm Beach Corporate Limits to the Corporate Limits of the City of Lake Worth; Thence, Easterly and Northerly along said Corporate Limits of the City of Lake Worth to the Corporate Limits of the Town of Palm Beach; Thence, Westerly and Northerly along the Corporate Limits of the Town of Palm Beach to the Corporate Limits of the City of West Palm Beach; Thence, Westerly, Northerly and Westerly along said Corporate Limits to the Northwest corner of Section 19, Township 43 South, Range 42 East; Thence, Southerly along the section lines to the centerline of State Road 80; Thence, Westerly along said centerline of State Road 80 to the centerline of Folsom Road; Thence, Northerly along said centerline of Folsom Road to the South line of the Northwest one-quarter of Section 22, Township 43 South, Range 41 East; Thence, Easterly along said South line to the Southeast corner of the Northwest one-quarter of said Section 22; Thence, Northerly along the East line of said Northwest one-quarter of Section 22 to the Northeast corner of said Northwest one-quarter of Section 22; Thence, Westerly along the North line of said Section 22 to the Southeast corner of Section 16, Township 43 South, Range 41 East; Thence, Northerly along the section line to the Northeast corner of said Section 16; Thence, Westerly along the section line to the Southeast corner of Section 8, Township 43 South, Range 41 East; Thence, Northerly along the section lines to the centerline of the "M" Canal; Thence, Westerly and Southwesterly along said centerline of the "M" Canal and the centerline of South Florida Water Management District's Levee 8 Tieback Borrow Canal and its Southerly extension to the centerline of South Florida Water Management District's Levee 8; Thence, Southerly, Southeasterly and Southerly along said centerline of Levee 8 and the centerlines of South Florida Water Management District's Levees 40 and 36 to the Point of Beginning.

(g) Water Conservation Area 2 Water Use Basin, described as:

Broward County (See Figure 21-12)

Beginning at the intersection of the centerline of South Florida Water Management District's Canal 14 (Cypress Creek) and the centerline of South Florida Water Management District's Levee 36; Thence, Easterly, Southerly, Southeasterly and Northeasterly along said centerline of Canal 14 (Cypress Creek) to the centerline of the Intracoastal Waterway; Thence, East to the Atlantic Ocean; Thence, Southerly along the Atlantic Ocean to the Fort Lauderdale-Hollywood Corporate Boundary line; Thence, Westerly along said Corporate Boundary line to the centerline of the Intracoastal Waterway; Thence, Northerly along said centerline of the Intracoastal Waterway to the centerline of the New River; Thence, Westerly and Southwesterly along said centerline of the New River and the centerline of the South Fork of the New River to the centerline of the North New River Canal; Thence, Northwesterly along said centerline of the North New River Canal to the Southerly extension of the centerline of South Florida Water Management District's Levee 35A; Thence, Northeasterly and Northerly along said centerline of said Southerly extension and the centerline of South Florida Water Management District's Levees 35A and 36 to the Point of Beginning.

(h) Water Conservation Area 3 Water Use Basin, described as:

Broward County (See Figure 21-12)

All that part of Broward County lying Easterly and Southerly of the following specifically described line:

Beginning at the intersection of the Broward-Dade County line and the centerline of South Florida Water Management District's Levee 33; Thence, Northerly, Northeasterly and Southeasterly along said centerline of Levee 33 and the centerline of South Florida Water Management District's Levees 37 and 35 to the centerline of South Florida Water Management District's Levee 35A; Thence, Southerly along the Southerly extension of said Levee 35A to the centerline of South Florida Water Management District's North New River Canal; Thence, Southeasterly along said centerline of the North New River Canal to the centerline of the South Fork of the New River; Thence, Northeasterly and Easterly along said centerline of the South Fork of the New River and the New River to the centerline of the Intracoastal Waterway; Thence, Southerly along said centerline of the Intracoastal Waterway to the Fort

Lauderdale-Hollywood Corporate Boundary line; Thence, Easterly along said Corporate Boundary line to the Atlantic Ocean and the end of the specifically described line.

Dade County (See Figure 21-11)

All that part of Dade County lying Easterly of the following specifically described line:

Beginning at the intersection of the centerline of South Florida Water Management District's Levee 37 and the Dade-Broward County line; Thence, Southerly along said centerline of Levee 37 and the centerline of South Florida Water Management District's Levees 30 and 31 North to the centerline of South Florida Water Management District's Canal 1 West; Thence, Easterly and Southeasterly along said centerline of Canal 1 West to the East line of Section 11, Township 56 South, Range 39 East; Thence, Southerly along said line to the Southwest corner of Section 12, Township 56 South, Range 39 East; Thence, Easterly to the Southeast corner of said Section 12; Thence, Southerly along the West line of Section 18, Township 56 South, Range 40 East to the South line of the North one-half of said Section 18; Thence, Easterly along the one-quarter section lines to the centerline of State Road 821; Thence, Southerly along said centerline of State Road 821 to the South line of Section 17, Township 56 South, Range 40 East; Thence, Easterly along said section lines to the waters of Biscayne Bay and the end of the specifically described line.

Broward County (See Figure 21-12)

All that part of Broward County lying Easterly and Southerly of the following specifically described line:

Beginning at the intersection of the Broward-Dade County line and the centerline of South Florida Water Management District's Levee 33; Thence, Northerly, Northeasterly and Southeasterly along said centerline of Levee 33 and the centerline of South Florida Water Management District's Levees 37 and 35 to the centerline of South Florida Water Management District's Levee 35A; Thence, Southerly along the Southerly extension of said Levee 35A to the centerline of South Florida Water Management District's North New River Canal; Thence, Southeasterly along said centerline of the North New River Canal to the centerline of the South Fork of the New River; Thence, Northeasterly and Easterly along said centerline of the South Fork of the New River and the New River to the centerline of the Intracoastal Waterway; Thence, Southerly along said centerline of the Intracoastal Waterway to the Fort Lauderdale-Hollywood Corporate Boundary line; Thence, Easterly along said Corporate Boundary line to the Atlantic Ocean and the end of the specifically described line.

(i) South Dade Water Use Basin, described as:

Dade County (See Figure 21-11)

Beginning at the Northwest corner of Section 6, Township 55 South, Range 38 East; Thence, Southerly along the section lines to the Northeast corner of Section 24, Township 58 South, Range 37 East; Thence, Westerly to the Northwest corner of said Section 24; Thence, Southerly along the section lines to the Southwest corner of Section 36, Township 58 South, Range 37 East; Thence, Easterly to the Southeast corner of said Section 36; Thence, Southerly along the section lines to the Southwest corner of Section 7, Township 58 South, Range 38 East; Thence, Easterly along the section lines to the centerline of South Florida Water Management District's Canal 111; Thence, Southeasterly, Southerly and Southeasterly along said centerline of Canal 111 to the centerline of State Road 5 (U.S. Highway 1); Thence, Southerly along said centerline of State Road 5 (U.S. Highway 1) to the Dade-Monroe County line and Florida Bay; Thence, Northeasterly along the Dade-Monroe County line to the Western shore of Little Card Sound; Thence, Northeasterly and Northerly along the Western shore of Little Card Sound and Biscayne Bay to the south line of Section 14, Township 56 South, Range 40 East; Thence, Westerly along the section lines to the centerline of State Road 821; Thence, Northerly along said centerline of State Road 821 to the South line of the North one-half of Section 17, Township 56 South, Range 40 East; Thence, Westerly along the one-quarter section lines to the Southwest corner of the Northwest one-quarter of said Section 18; Thence, Northerly to the Southeast corner of Section 12, Township 56 South, Range 39 East; Thence, Westerly along the South line of said Section 12 to the Southwest corner of said Section 12; Thence, Northerly along the West line of said Section 12 to the centerline of South Florida Water Management District's Canal 1 West; Thence, Northwesterly and Westerly along said centerline of Canal 1 West to the centerline of South Florida Water Management District's Levee 31 North; Thence, Northerly along said centerline of Levee 31 North to the North line of Section 2, Township 55 South, Range 38 East; Thence, Westerly along the section lines to the Point of Beginning.

Monroe County (See Figure 21-10)

All of the Florida Keys lying within Monroe County.

(3) Lake Okeechobee.

(a) Everglades Agricultural Area Water Use Basin, described as:

Palm Beach County (See Figure 21-13)

Beginning at the intersection of the Palm Beach-Martin County line and the centerline of South Florida Water Management District's Levee D-9; Thence, Easterly along said County line to the centerline of South Florida Water Management District's Levee 8 Tieback; Thence, Southerly along said centerline of Levee 8 Tieback to the centerline of Levee 8; Thence, Easterly, Southeasterly and Southerly along said centerline of Levee 8 to the Easterly extension of the centerline of South Florida Water Management District's Levee 7; Thence, Westerly and Southwesterly along said centerline of Levee 7 and the centerline of South Florida Water Management District's Levee 6 and its Southerly extension to the intersection thereof with the Palm Beach-Broward County line; Thence, Easterly along said Palm Beach-Broward County line to the Palm Beach-Hendry County line; Thence, Northerly along said Palm Beach-Hendry County line to the intersection thereof with the centerline of South Florida Water Management District's Levee D-2; Thence, Southeasterly, Northeasterly and Northerly along said Centerline of Levee D-2 and the centerline of South Florida Water Management District's Levee D-9 to the Point of Beginning.

Glades County (See Figure 21-21)

Beginning at the intersection of the centerline of State Road 25 (U.S. Highway 27) and the Glades-Hendry County line; Thence, Northerly along said centerline of State Road 25 and the Northerly extension thereof to the intersection thereof with the centerline of South Florida Water Management District's Levee D-3; Thence, southeasterly along said centerline of Levee D-3 and the centerline of South Florida Water Management District's Levee D-1 to the intersection thereof with the Glades-Hendry County line; Thence, Southeasterly and Westerly along said county line to the Point of Beginning.

Hendry County (See Figure 21-24)

Beginning at the intersection of the Easterly right of way line of State Road 25 (U.S. Highway 27) and the Hendry-Glades County line; Thence, Southerly and Easterly along the Easterly and Northerly right of way line of said State Road 25 to the intersection thereof with the Westerly line of Section 12, Township 43 South, Range 33 East; Thence, Southerly along the section lines to the intersection thereof with the Northerly right of way line of South Florida Water Management District's Levee 1; Thence, Easterly and Southerly along said Northerly right of way line and the Easterly right of way line of South Florida Water Management District's Levee 2 and Levee 3 to the Hendry-Palm Beach County line; Thence, Northerly along the Hendry-Palm Beach County line to the intersection thereof with the Southerly right of way line of South Florida Water Management District's Levee D-2; Thence, Northwesterly along said Southerly right of way line of Levee D-2 and along the Southerly right of way line of South Florida Water Management District's Levee D-1 to the intersection thereof with the Hendry-Glades County line; Thence, Southerly and Westerly along said Hendry-Glades County line to the Point of Beginning.

(b) Caloosahatchee River Water Use Basin, described as:

Glades County (See Figure 21-21)

Beginning at the intersection of the centerline of State Road 25 (U.S. Highway 27) and the Glades-Hendry County line; Thence, Westerly, Northerly and Westerly along said county line to the intersection thereof with the centerline of State Road 29; Thence, Northeasterly along said centerline of State Road 29 to the intersection thereof with the centerline of State Road 78; Thence, Easterly and Northeasterly along said centerline of State Road 78 to the intersection thereof with the centerline of State Road 25 (U.S. Highway 27); Thence, Easterly along said centerline of State Road 25 to the intersection thereof with the centerline of South Florida Water Management District's Canal 43; Thence, Northeasterly along said centerline of Canal 43 to Structure 77; Thence, southeasterly along the centerline of South Florida Water Management District's Levee D-3 to the intersection thereof with the Northerly extension of the centerline of State Road 25 (U.S. Highway 27); Thence, Southerly along said centerline of State Road 25 to the Point of Beginning.

Hendry County (See Figure 21-24)

Beginning at the intersection of the Westerly right of way line of State Road 25 (U.S. Highway 27) and the Hendry-Glades County line; Thence, Southerly and Easterly along the Westerly and Southerly right of way line of said State Road 25 to the intersection thereof with the Westerly line of Section 12, Township 43 South, Range 33 East; Thence, Southerly along the section lines to the intersection thereof with the Northeast corner of Section 11, Township 44 South, Range 33 East; Thence, Westerly along the section lines to the Northwest corner of Section 7, Township 44 South, Range 33 East; Thence, Southwesterly to the Southwest corner of Section 12, Township 44 South, Range 32 East; Thence, Westerly along the section lines to the Easterly right of way line of State Road 833; Thence, Southerly along said line to the intersection thereof with the Northerly right of way line of State Road 832; Thence, Westerly along said line to the intersection thereof with the centerline of the Keri Grade; Thence, Southwesterly along said Keri Grade to the intersection thereof with the West line of Section 11, Township 45 South, Range 31 East; Thence, Southerly along

the section lines to the Northeast corner of the South one-half of Section 15, Township 45 South, Range 31 East; Thence, Southwesterly to the Southwest corner of said Section 15; Thence, Westerly along the section lines to the intersection thereof with the centerline of the Seaboard Coastline Railroad; Thence, Southerly along said line to the Hendry-Collier County line; Thence; Westerly along said Countyline to the Southeast corner of Section 36, Township 45 South, Range 28 East; Thence, Northerly along the section lines to the Southeast corner of Section 24, Township 45 South, Range 28 East; Thence Northwesterly to the Northwest corner of the East one-half of Section 24, Township 45 South, Range 28 East; Thence, Westerly along the centerline of Church Road to the Southeast corner of Section 17, Township 45 South, Range 28 East; Thence, Northwesterly to the Northeast corner of the Southwest one-quarter of said Section 17; Thence, Southerly along the section lines to the Northwest corner of the south one-half of Section 29, Township 45 South, Range 28 East; Thence, Southeasterly to the Southeast corner of Section 32, Township 45 South, Range 28 East and the Hendry-Collier County line; Thence, Westerly along said Hendry-Collier County line to the Hendry-Lee County line; Thence, Northerly along said County line to the centerline of State Road 78; Thence, Easterly, Northerly, Easterly and Northerly along said line to the intersection thereof with the Hendry-Glades County line; Thence, Easterly along said line to the Point of Beginning.

Lee County (See Figure 21-23)

Beginning at the intersection of the centerline of U.S. Highway 41 (Cleveland Avenue) with the centerline of North Airport Road; Thence, Southerly along the centerline of U.S. Highway 41 to the South line of Section 2, Township 45 South, Range 24 East; Thence, Westerly along said line to the Southwest corner of the Southeast one-quarter of said Section 2; Thence, Northerly to the center of said Section 2; Thence, Westerly along the East-West 1/4 line to the centerline of Sunrise Drive; Thence, Northerly along said centerline to the centerline of Davis Drive; Thence, Westerly along said centerline to the centerline of State Road 867 (McGregor Boulevard); Thence, Northeasterly along said centerline to the centerline of Vesper Drive; Thence, Westerly along said centerline and its Westerly extension to the centerline of the Okeechobee Waterway; Thence, Northeasterly along said centerline to the centerline of State Road 45 (U.S. 41); Thence, Northwesterly along said centerline to the centerline of State Road 78A; Thence, Westerly along said centerline to the centerline of Yellow Fever Creek; Thence, Northwesterly along said centerline to the intersection thereof with the West line of Section 3, Township 44 South, Range 24 East; Thence, Northerly along the section lines to the Southeast corner of Section 16, Township 43 South, Range 24 East; Thence, Westerly along the section line to the Southwest corner of said Section 16; Thence, Northerly along the section lines to the Northwest corner of Section 9, Township 43 South, Range 24 East; Thence, Easterly along the section lines to the Northeast corner of Section 8, Township 43 South, Range 26 East; Thence, Southerly along the section line to the intersection thereof with the centerline of State Road 78; Thence, Easterly along said centerline to the Lee-Hendry County line; Thence, Southerly along said County line to the Southeast corner of Section 36, Township 43 South, Range 27 East; Thence, Westerly along the section lines to the Southwest corner of Section 32, Township 43 South, Range 27 East; Thence, Northwesterly in a straight line to the Southwest corner of Section 26, Township 43 South, Range 26 East; Thence, Northerly along the section lines to the centerline of the Okeechobee Waterway; Thence, Southwesterly along said centerline to the Northerly extension of the centerline of Prospect Avenue; Thence, Southerly along said centerline to the centerline of Glenwood Avenue; Thence, Easterly along said centerline to the Centerline of State Road 80 B (Ortiz Avenue); Thence, Southerly along said centerline to the centerline of Ballard Road; Thence, Westerly along said centerline to the West line of Section 16, Township 44 South, Range 25 East; Thence, Southerly along said line to the centerline of State Road 82 (Anderson Avenue); Thence, Westerly along said centerline to the center of Ford Street; Thence, Southerly along said centerline to the centerline of Hanson Street; Thence, Westerly along said centerline to the centerline of the Seaboard Coastline Railroad; Thence, Southerly along said centerline to the centerline of North Airport Road; Thence, Westerly along said centerline to the Point of Beginning.

Collier County (See Figure 21-25)

Beginning at the Northwest corner of Section 5, Township 46 South, Range 29 East on the Collier-Hendry County line; Thence, Southerly along the section line to the Southwest corner of said Section 5; Thence, Easterly along the section line to the Southeast corner of said Section 5; Thence, Northerly along the section line to the Northwest corner of the Southwest one-quarter of Section 4, Township 46 South, Range 29 East; Thence, Easterly along the one-quarter section line to the Northeast corner of the Southwest one-quarter of said Section 4; Thence, Southeasterly to the Southeast corner of said Section 4; Thence, Southeasterly to the Southeast corner of Section 10, Township 46 South, Range 29 East; Thence, continue Southeasterly along the extension of said line to the centerline of the Seaboard Coastline Railroad; Thence, Northerly along said centerline of the Seaboard Coastline Railroad to the Collier-Hendry County line; Thence, Westerly along said County line to the Point of Beginning.

(c) St. Lucie River Water Use Basin, described as:

Martin County (See Figure 21-14)

Beginning at the Southeast corner of Section 25, Township 40 South, Range 37 East on the Martin-Palm Beach County line; Thence, Westerly along said County line to the centerline of South Florida Water Management District's Levee D-9; Thence, Northerly along said centerline to the centerline of the Okeechobee Waterway (Canal 44); Thence, Easterly along said centerline to the centerline of South Florida Water Management District's Levee 65; Thence, Northwesterly along said centerline to the South line of the North one-half of Section 22, Township 39 South, Range 37 East; Thence, Easterly along said line to the Southeast corner of the Northeast one-quarter of said Section 22; Thence, Northerly along the section line to the Northwest corner of Section 23, Township 39 South, Range 37 East; Thence, Easterly along the section lines to the Northeast corner of the Northwest one-quarter of Section 20, Township 39 South, Range 38 East; Thence, Southerly along the one-quarter section lines to the center of Section 29, Township 39 South, Range 38 East; Thence, Easterly to the Southeast corner of the Northeast one-quarter of said Section 29; Thence, Southerly along the section line to the Southeast corner of said Section 29; Thence, Westerly along the section line to the Northwest corner of the Northeast one-quarter of the Northeast one-quarter of Section 32, Township 39 South, Range 38 East; Thence, Southerly along the one-quarter one-quarter section line to the Southwest corner of the Northeast one-quarter of the Northeast one-quarter of said Section 32; Thence, Easterly along the one-quarter one-quarter section line to the Southeast corner of the Northeast one-quarter of the Northeast one-quarter of said Section 32; Thence, Southerly along the section line to the Northeast corner of the Northeast one-quarter of the Southeast one-quarter of said Section 32; Thence, Easterly along the one-quarter section line to the Southeast corner of the Southwest one-quarter of the Northwest one-quarter of Section 33, Township 39 South, Range 38 East; Thence, Northerly along the one-quarter one-quarter section line to the Northeast corner of the Northwest one-quarter of the Northwest one-quarter of said Section 33; Thence, Easterly along the section line to the Northeast corner of said Section 33; Thence, Southerly along the section line to the North line of the South one-half of the Southwest one-quarter of Section 34, Township 39 South, Range 38 East; Thence, Easterly along said line to the Northeast corner of the South one-half of the Southwest one-quarter of said Section 34; Thence, Southerly along the one-quarter section line to the South line of said Section 34; Thence, Easterly along said line to the Southeast corner of said Section 34; Thence, Southerly along the section line to the Southwest corner of the North one-half of the Northwest one-quarter of the Northwest one-quarter of Section 2, Township 40 South, Range 38 East; Thence, Easterly along said line to the Southeast corner of the North one-half of the Northwest one-quarter of the Northwest one-quarter of said Section 2; Thence, Southerly along the one-quarter one-quarter section line to the Northwest corner of the Southeast one-quarter of the Northwest one-quarter of said Section 2; Thence, Easterly along the one-quarter one-quarter section line to the Northeast corner of the Southeast one-quarter of the Northwest one-quarter of said Section 2; Thence, Southerly along the one-quarter section line to the center of said Section 2; Thence, Easterly along the one-quarter section lines to the East one-quarter corner of Section 1, Township 40 South, Range 38 East; Thence, Southerly along the section lines to the North right of way line of the Okeechobee Waterway (Canal 44); Thence, Easterly and Northeasterly along said right of way line to the East line of Section 4, Township 39 South, Range 40 East; Thence, Northerly along the section lines to the Northeast corner of Section 33, Township 39 South, Range 39 East; Thence, Westerly approximately 1.8 miles along the section lines to the centerline of a canal running to the Northwest; Thence, Northwesterly along said centerline to its intersection with the West line of Section 18, Township 39 South, Range 39 East; Thence, Northerly along the section lines to the Northwest corner of Section 6, Township 39 South, Range 39 East; Thence, Easterly along the section lines to the Northwest corner of the Northeast one-quarter of Section 2, Township 39 South, Range 39 East; Thence, Southerly along the one-quarter section line to the Southwest corner of the Southeast one-quarter of Section 11, Township 39 South, Range 39 East; Thence, Easterly along the section lines to the Southeast corner of Section 12, Township 39 South, Range 39 East; Thence, Northerly along the section lines to the Northeast corner of Section 25, Township 38 South, Range 39 East; Thence, Westerly along the section lines to the Southwest corner of Section 23, Township 38 South, Range 39 East; Thence, Northerly along the section line to the Northwest corner of said Section 23; Thence, Easterly along the section lines to the Southeast corner of the Southwest one-quarter of Section 17, Township 38 South, Range 40 East; Thence, Southerly along the one-quarter Section line to the Southwest corner of the Southeast one-quarter of Section 20, Township 38 South, Range 40 East; Thence, Easterly along the section line to the Southeast corner of said Section 20; Thence, Southerly along the section line approximately 2.5 miles to a canal running to the Southeast; Thence, Southeasterly along the centerline of said canal to the intersection with the North line of the South one-half of Section 15, Township 39 South, Range 40 East; Thence, Easterly along said line approximately 0.6 mile to the centerline of the canal running to the North; Thence, Northerly along said centerline to the North line of the South one-half of Section 10, Township 39 South, Range 40 East; Thence, Easterly along said line to the Southeast corner of the Northeast one-quarter of said Section 10; Thence, Northerly along said section line to the Northwest corner of Section 11, Township 39 South,

Range 40 East; Thence, Easterly along the section line to the Southeast corner of Tract 61, Section 2, Township 39 South, Range 40 East, Palm City Farms, as recorded in Plat Book 1, Page 42, Palm Beach County, Florida, Public Records; Thence, Northerly along the East line of said Tract 61 to the Northeast corner thereof; Thence, Westerly along the Tract lines to the centerline of Hog Creek; Thence, Northeasterly along said centerline to the East line of Tract 51, of said Plat; Thence, Northerly along said Tract line to the Southeast corner of Tract 46; Thence, Westerly along the South line of said Tract to the Southwest corner thereof; Thence, Northerly along the West line of said Tract to the Northwest corner thereof; Thence, Easterly along the North line of Tracts 46 and 47 to the Westerly line of St. Lucie Inlet Farms, as recorded in Plat Book 1, page 98, Palm Beach County, Florida, Public Records; Thence, Northerly along said Westerly line to the North line of said Plat; Thence, Northeasterly along said Northerly line to the West line of Tract 11, Commissioners Plat of the Miles or Hanson Grant, as recorded in Plat Book 1, Page 11, Palm Beach County, Florida, Public Records; Thence, Northwesterly along said Tract line to the North line of said Plat; Thence, Northeasterly along said North line to the Westerly right of way line of Florida's Turnpike; Thence, Southeasterly along said right of way line to the Northwesterly right of way line of the Okeechobee Waterway (Canal 44); Thence, Southwesterly along said right of way line to the South line of Section 12, Township 39 South, Range 40 East; Thence, Westerly along the section lines to the Northwest corner of Section 14, Township 39 South, Range 40 East; Thence, Southerly along the West line of said Section 14, to the South line of the North one-half of the North one-half of said Section 14; Thence, Easterly along said line to the Southeasterly right of way line of the Okeechobee Waterway (C-44); Thence, Northeasterly along said right of way line to the North line of Section 13, Township 39 South, Range 40 East; Thence, Easterly along said line to the Northeast corner of the Northwest one-quarter of said Section 13; Thence, Southerly along the one-quarter section line to the center of said Section 13; Thence, Easterly along the one-quarter section lines to the West line of the East one-half of the Northeast one-quarter of Section 18, Township 39 South, Range 41 East; Thence, Northerly along said West line to the North line of the South one-half of the Northeast one-quarter of the Northeast one-quarter of said Section 18; Thence, Easterly along said line and along the North line of the South one-half of the North one-half of the Northwest one-quarter of Section 17, Township 39 South, Range 41 East; to the East line of said Northwest one-quarter; Thence, Southerly along said East line to the center of said Section 17; Thence, Westerly along the South line of the Northwest one-quarter of said Section 17 to the Southwest corner of said Northwest one-quarter; Thence, Southerly along the section line to the Southwest corner of said Section 17; Thence, Easterly along the South line of said Section 17 to the Northeast corner of the Northwest one-quarter of Section 20, Township 39 South, Range 41 East; Thence, Southerly along the one-quarter section line to the center of said Section 20; Thence, Easterly along the one-quarter section lines to the East line of the West one-half of the Southwest one-quarter of Section 22, Township 39 South, Range 41 East; Thence, Southerly along said line to the South line of said Section 22; Thence, Westerly along the section lines to the Northwest corner of the Northeast one-quarter of Section 28, Township 39 South, Range 41 East; Thence, Southerly along the one-quarter section lines to the Southeast corner of the Southwest one-quarter of Section 33, Township 39 South, Range 41 East; Thence, Westerly along the section lines to the Northeast corner of the Northwest one-quarter of Section 6, Township 40 South, Range 41 East; Thence, Southerly along the one-quarter section line to the Northeast corner of the Northwest one-quarter of Section 7, Township 40 South, Range 41 East; Thence, Westerly along the section lines to the Northeast corner of the Northwest one-quarter of Section 10, Township 40 South, Range 40 East; Thence, Southerly along the one-quarter section lines approximately 2.0 miles to the centerline of a levee running to the Northwest; Thence, Northwesterly along said centerline to the West line of Section 18, Township 40 South, Range 40 East; Thence, Northerly along the section lines to the centerline of State Road 76; Thence, Southwesterly along said centerline approximately 1.9 miles to a drainage canal running to the Southeast; Thence, Southeasterly along the centerline of said canal to the north-south one-quarter section line of Section 2, Township 40 South, Range 39 East; Thence, Southerly along the one-quarter section lines to the centerline of State Road 710; Thence, Northwesterly along said centerline to the East line of Section 16, Township 40 South, Range 39 East; Thence, Southerly along the section lines to the Southwest corner of the Northwest one-quarter of Section 27, Township 40 South, Range 39 East; Thence, Easterly along the one-quarter section line to the Northwest corner of the Southwest one-quarter of Section 26, Township 40 South, Range 39 East; Thence, Southerly along the section line to the Martin-Palm Beach County line; Thence, Westerly along said County line to the Southeast corner of Section 28, Township 40 South, Range 38 East; Thence, Northerly along the section lines to the Northeast corner of Section 9, Township 40 South, Range 38 East; Thence, Westerly along the section lines to the East line of the West one-half of the East one-half of Section 5, Township 40 South, Range 38 East; Thence, Northerly along said line to the Northwest corner of the Northeast one-quarter of the Northeast one-quarter of said Section 5; Thence, Westerly along the section line to the Northeast corner of the Northwest one-quarter of said Section 5; Thence, Southerly along the one-quarter section line to the Northeast corner of the Northwest one-quarter of Section 8, Township 40 South, Range 38 East; Thence, Westerly to the Northwest corner of said Section 8;

Thence, Southerly along the section lines to the Southeast corner of the Northeast one-quarter of Section 18, Township 40 South, Range 38 East; Thence, Westerly along the one-quarter section line to the Northwest corner of the Southwest one-quarter of said section 18; Thence, Southerly along the section lines to the Martin-Palm Beach County line and the Point of Beginning.

(d) Lakeshore Perimeter Water Use Basin, described as:

Glades County (See Figure 21-21)

Beginning at the Northeast corner of Section 1, Township 38 South, Range 33 East in the North boundary line of Glades County; Thence, Southwesterly to the Southwest corner of the Northwest one-quarter of said Section 1; Thence, Southerly along the West line of Sections 1 and 12, Township 38 South, Range 33 East to the Northwest corner of Section 13, Township 38 South, Range 33 East; Thence, Southeasterly to the Southeast corner of said Section 13; Thence, Southeasterly to the southeast corner of Section 19, Township 38 South, Range 34 East; Thence, Southerly to the intersection thereof with the Southerly right of way line of South Florida Water Management District's Levee 59; Thence, Southwesterly along the Southeasterly right of way lines of South Florida Water Management District's Levees 59, 60 and 61 to the intersection thereof with the Southerly right of way line of South Florida Water Management District's Levee 50; Thence, Westerly along said right of way line to the intersection thereof with the East line of Section 26, Township 40 South, Range 31 East; Thence, Southerly along the section lines to the intersection thereof with the North right of way line of South Florida Water Management District's Levee D-3; Thence, Westerly and Southwesterly along said right of way line of Levee D-3 and the Northwesterly right of way line of South Florida Water Management District's Levee 43 and its Southerly extension to the intersection thereof with the centerline of State Road 25 (U.S. Highway 27); Thence, Southeasterly and Easterly along said centerline of State Road 25 to the intersection thereof with the centerline of South Florida Water Management District's Canal 43; Thence, Northeasterly along said centerline of Canal 43 to Structure 77; Thence, Northwesterly and Northerly along the centerline of Levee D-3 to the intersection thereof with the centerline of State Road 78; Thence, Northerly along said centerline of State Road 78 to the intersection thereof with the centerline of South Florida Water Management District's Levee 50; Thence, Northeasterly along the centerline of said Levee 50 and South Florida Water Management District's Levees 49 and 48 and the Northerly extension thereof to the intersection thereof with the Glades-Okeechobee County line; Thence, Northwesterly along said County line to the Glades-Highlands County line; Thence Westerly along said Glades-Highlands County line to the Point of Beginning.

Okeechobee County (See Figure 21-16)

All that part of Okeechobee County lying Northerly of South Florida Water Management District's Levee D-4 and Southerly of the following specifically described line:

Beginning at the intersection of the Okeechobee-St. Lucie County line and the centerline of South Florida Water Management District's Levee 64 Remainder; Thence, Northwesterly along the centerline of said Levee 64 Remainder and the centerline of South Florida Water Management District's Levee 63 South and South Florida Water Management District's Levee 63 North to the West line of Section 32, Township 37 South, Range 36 East; Thence, Southerly along said line to the Southeast corner of the Northeast one-quarter of Section 31, Township 37 South, Range 36 East; Thence, Westerly to the center of said Section 31; Thence, Northerly to the Northeast corner of the Northwest one-quarter of said Section 31; Thence, Westerly to the Northwest corner of said Section 31; Thence, Northerly to the Northeast corner of the Southeast one-quarter of Section 25, Township 37 South, Range 35 East; Thence, Westerly to the Northwest corner of the Southwest one-quarter of said section 25; Thence Northerly along the section lines to the Northwest corner of section 13, Township 37 South, Range 35 East; Thence, Westerly to the centerline of Hamrick Road; Thence, Northerly along said centerline to the North line of the South one-half of Section 11, Township 37 South, Range 35 East; Thence, Westerly along the one-quarter section lines to the Southwest corner of the Northwest one-quarter of Section 9, Township 37 South, Range 35 East; Thence, Southerly to the Southwest corner of said Section 9; Thence, Westerly along the section lines to the Southwest corner of Section 7, Township 37 South, Range 35 East; Thence, Southerly along the section lines to the Southwest corner of Section 30, Township 37 South, Range 35 East; Thence, Southeasterly to the Southwest corner of Section 32, Township 37 South, Range 35 East; Thence, Southwesterly to the Northwest corner of Section 18, Township 38 South, Range 35 East; Thence, Southerly along the section line to the Okeechobee-Glades County line and the end of the specifically described line.

Palm Beach County (See Figure 21-13)

All that part of Palm Beach County lying lakeward of the centerlines of South Florida Water Management District's Levees D-2 and D-9; Less, however, the waters of Lake Okeechobee.

Martin County (See Figure 21-14)

All that part of Martin County lying Northeasterly of South Florida Water Management District's Levee 47 and Southwesterly of the

following specifically described line:
Beginning at the intersection of the centerline of South Florida Water Management District's Levee 64 and the West line of Section 19, Township 38 South, Range 37 East on the Martin-Okeechobee County line; Thence, Southeasterly along said centerline of Levee 64 and the centerline of South Florida Water Management District's Levee 65 and its extension to the centerline of the Okeechobee Waterway (Canal 44); Thence, Westerly along said centerline to Lake Okeechobee and the end of the specifically described line.

(4) Upper East Coast.

(a) St. Lucie County Agricultural Area Water Use Basin, described as:

St. Lucie County (See Figure 21-15)

Beginning at the Northeast corner of Section 1, Township 34 South, Range 38 East on the St. Lucie-Indian River County line; Thence, Southerly along the section lines to the Northwest corner of Section 19, Township 34 South, Range 39 East; Thence, Easterly along the section lines to the north-south one-quarter section line of said Section 19; Thence, Southerly along the north-south one-quarter section lines to the centerline of State Road 68; Thence, Easterly along said centerline of State Road 68 to the East section line of Section 7, Township 35 South, Range 39 East; Thence, Southerly along the section line to the Northwest corner of Section 17, Township 35 South, Range 39 East; Thence, Easterly along the section line to the north-south one-quarter section line of said Section 17; Thence, Southerly along the north-south one-quarter section lines to the Northwest corner of the Southeast one-quarter of said Section 29; Township 35 South, Range 39 East; Thence, Easterly to the Northeast corner of the Southeast one-quarter of said section 29; Thence, Southerly along the section lines to the Southeast corner of Section 5, Township 36 South, Range 39 East; Thence, Westerly along the section lines to the north-south one-quarter section line of Section 7, Township 36 South, Range 39 East; Thence, Southerly along the north-south one-quarter section lines to the South line of Section 18, Township 36 South, Range 39 East; Thence, Easterly along the section lines to the Northeast corner of Section 22, Township 36 South, Range 39 East; Thence, Southerly along the section lines to the Northwest corner of Section 25, Township 36 South, Range 39 East; Thence, Southeasterly to the Southeast corner of said Section 25; Thence, Southerly along the section lines to the Southeast corner of Section 35, Township 37 South, Range 39 East on the St. Lucie-Martin County line; Thence, Westerly along said St. Lucie-Martin County line to the Southeast corner of Section 33, Township 37 South, Range 37 East; Thence, Northerly along the section line to the Northeast corner of said Section 33; Thence, Westerly along the section line to the Northwest corner of said Section 33; Thence, Northerly along the section lines to the Northeast corner of Section 17, Township 37 South, Range 37 East; Thence, Westerly along the section lines to the Northwest corner of Section 18, Township 37 South, Range 37 East on the St. Lucie-Okeechobee County line; Thence, Northerly along said St. Lucie-Okeechobee County line to the St. Lucie-Indian River County line; Thence, Easterly along said St. Lucie-Indian River County line to the Point of Beginning.

Okeechobee County (See Figure 21-16) All that part of Okeechobee County lying Easterly of the following specifically described line:

Beginning at the Southeast corner of Section 1, Township 34 South, Range 36 East and the Okeechobee-St. Lucie County line; Thence, Westerly along the section lines to the Northwest corner of Section 10, Township 34 South, Range 36 East; Thence, Southerly to the Northeast corner of Section 16, Township 34 South, Range 36 East; Thence, Westerly along the section lines to the Northwest corner of Section 18, Township 34 South, Range 36 East; Thence, Southerly to the Northeast corner of Section 13, Township 34 South, Range 35 East; Thence, Westerly to the Northwest corner of said Section 13; Thence, Southerly along the section lines to the Southwest corner of Section 36, Township 34 South, Range 35 East; Thence, Westerly along the section lines to the centerline of State Road 15 (U. S. Highway 441); Thence, Southerly along said centerline to the North line of the South one-half of Section 15; Township 35 South, Range 35 East; Thence, Easterly along the one-quarter section lines to the center of Section 13, Township 35 South, Range 35 East; Thence, Southerly to the Southwest corner of the Southeast one-quarter of Section 25, Township 35 South, Range 35 East; Thence, Easterly to the Southeast corner of said Section 25; Thence, Southeasterly to the Northeast corner of Section 6, Township 36 South, Range 36 East; Thence, Southerly along the section lines to the Southwest corner of Section 8, Township 36 South, Range 36 East; Thence, Easterly to the Southeast corner of said Section 8; Thence, Southeasterly to the Southeast corner of Section 16, Township 36 South, Range 36 East; Thence, Southerly to the Southwest corner of Section 22, Township 36 South, Range 36 East; Thence, Southeasterly to the Southeast corner of Section 27, Township 36 South, Range 36 East; Thence, Southerly along the section lines to the Southwest corner of Section 2, Township 37 South, Range 36 East; Thence, Easterly along the section lines to the Okeechobee-St. Lucie County line and the end of the specifically described line.

Martin County (See Figure 21-14) Beginning at the Northwest corner of Section 3, Township 38 South, Range 37 East on the Martin-St. Lucie County line; Thence, Southerly along the section lines to the Southwest corner of Section 10, Township 38 South,

Range 37 East; Thence, Easterly along the section lines to the Southeast corner of Section 11, Township 38 South, Range 37 East; Thence, Southerly along the section lines to the Southwest corner of Section 13, Township 38 South, Range 37 East; Thence, Easterly along the section lines to the Southeast corner of Section 14, Township 38 South, Range 39 East; Thence, Northerly along the section lines to the Martin-St. Lucie County line; Thence, Westerly along the said County line to the Point of Beginning.

(b) Coastal St. Lucie County Water Use Basin, described as:

St. Lucie County (See Figure 21-15)

All that part of St. Lucie County lying Easterly and Northerly of the following specifically described line:
Beginning at the Northeast corner of Section 1, Township 34 South, Range 38 East on the St. Lucie-Indian River County line; Thence, Southerly along the section lines to the Northwest corner of Section 19, Township 34 South, Range 39 East; Thence, Easterly along the section line to the north-south one-quarter section line of said Section 19; Thence, Southerly along the north-south one-quarter section lines to the centerline of State Road 68; Thence, Easterly along said centerline of State Road 68 to the East section line of Section 7, Township 35 South, Range 39 East; Thence, Southerly along the section line to the Northwest corner of Section 17, Township 35 South, Range 39 East; Thence, Easterly along the section line to the north-south one-quarter section line of said Section 17; Thence, Southerly along the north-south one-quarter section lines to the Northwest corner of the Southeast one-quarter of Section 29, Township 35 South, Range 39 East; Thence, Easterly to the Northeast corner of the Southeast one-quarter of said Section 29; Thence, Southerly along the section lines to the centerline of State Road 712; Thence, Easterly along said centerline of State Road 712 to the centerline of State Road 5 (U. S. Highway 1); Thence, Southerly along said centerline of State Road 5 (U. S. Highway 1) to the South line of Section 10, Township 36 South, Range 40 East; Thence, Easterly along the section lines and its Easterly extension to the centerline of the Intracoastal Waterway; Thence, Southeasterly along said centerline of the Intracoastal Waterway to the St. Lucie-Martin County line; Thence, Easterly along said St. Lucie-Martin County line to the Atlantic Ocean and the end of the specifically described line.

(c) Port St. Lucie Water Use Basin, described as:

St. Lucie County (See Figure 21-15)

Beginning at the Southeast corner of Section 35, Township 37 South, Range 39 East on the St. Lucie-Martin County line; Thence, Northerly along the section lines to the Southeast corner of Section 25, Township 36 South, Range 39 East; Thence, Northwesterly to the Northwest corner of said Section 25; Thence, Northerly along the section lines to the Northeast corner of Section 22, Township 36 South, Range 39 East; Thence, Westerly along the section lines to the north-south one-quarter section line of Section 18, Township 36 South, Range 39 East; Thence, Northerly along the north-south one-quarter section lines to the North line of Section 7, Township 36 South, Range 39 East; Thence, Easterly along the section lines to the Southeast corner of Section 5, Township 36 South, Range 39 East; Thence, Northerly along the section line to the center line of State Road 712; Thence, Easterly along said centerline of State Road 712 to the centerline of State Road 5 (U. S. Highway 1); Thence, Southerly along said centerline of State Road 5 (U. S. Highway 1) to the South line of Section 10, Township 36 South, Range 40 East; Thence, Easterly along the section lines and its Easterly extension to the centerline of the Intracoastal Waterway; Thence, Southeasterly along said centerline of the Intracoastal Waterway to the St. Lucie-Martin County line; Thence, Westerly, Southerly and Westerly along said County line to the Point of Beginning.

(d) Northwest Martin County Water Use Basin, described as:

Martin County (See Figure 21-14)

Beginning at the Northeast corner of Section 24, Township 38 South, Range 37 East; Thence, Southwesterly to the Southwest corner of Section 34, Township 38 South, Range 37 East; Thence, Southerly along the section line to the Southeast corner of Section 4, Township 39 South, Range 37 East; Thence, Westerly along the section line to the centerline of South Florida Water Management District's Levee 65; Thence, Southeasterly along said centerline to the South line of the North one-half of Section 22, Township 39 South, Range 37 East; Thence, Easterly along said line to the Southeast corner of the Northeast one-quarter of said Section 22; Thence, Northerly to the Northwest corner of Section 23, Township 39 South, Range 37 East; Thence, Easterly along the section lines to the Northeast corner of the Northwest one-quarter of Section 20, Township 39 South, Range 38 East; Thence, Southerly along the one-quarter section lines to the center of Section 29, Township 39 South, Range 38 East; Thence, Easterly to the Southeast corner of the Northeast one-quarter of said Section 29; Thence, Southerly along the section line to the Southeast corner of said Section 29; Thence Westerly along the section line to the Northwest corner of the Northeast one-quarter of the Northeast one-quarter of Section 32, Township 39 South, Range 38 East; Thence, Southerly along the one-quarter one-quarter section line to the Southwest corner of the Northeast one-quarter of the Northeast one-quarter of said Section 32; Thence, Easterly along the one-quarter one-

quarter section line to the Southeast corner of the Northeast one-quarter of the Northeast one-quarter of said Section 32; Thence, Easterly along the one-quarter section line to the Southeast corner of the Southwest one-quarter of the Northwest one-quarter of Section 33, Township 39 South, Range 38 East; Thence, Northerly along the one-quarter one-quarter section line to the Northeast corner of the Northwest one-quarter of the Northwest one-quarter of said Section 33; Thence, Easterly along the section line to the Northeast corner of said Section 33; Thence, Southerly along the section line to the North line of the South one-half of the Southwest one-quarter of Section 34, Township 39 South, Range 38 East; Thence, Easterly along said line to the Northeast corner of the South one-half of the Southwest one-quarter of said Section 34; Thence, Southerly along the one-quarter section line to the South line of said Section 34; Thence, Easterly along said line to the Southeast corner of said Section 34; Thence, Southerly along the section line to the Southwest corner of the North one-half of the Northwest one-quarter of the Northwest one-quarter of Section 2, Township 40 South, Range 38 East; Thence, Easterly along said line to the Southeast corner of the North one-half of the Northwest one-quarter of the Northwest one-quarter of said Section 2; Thence, Southerly along the one-quarter one-quarter section line to the Northwest corner of the Southeast one-quarter of the Northwest one-quarter of said Section 2; Thence, Easterly along the one-quarter one-quarter section line to the Northeast corner of the Southeast one-quarter of the Northwest one-quarter of said Section 2; Thence, Southerly along the one-quarter section line to the center of said Section 2; Thence, Easterly along the one-quarter section lines to the East one-quarter corner of Section 1, Township 40 South, Range 38 East; Thence, Southerly along the section lines to the North right of way line of Okeechobee Waterway (Canal 44); Thence, Easterly and Northeasterly along said right of way line to the East line of Section 4, Township 39 South, Range 40 East; Thence, Northerly along the section lines to the Northeast corner of Section 33, Township 39 South, Range 39 East; Thence, Westerly approximately 1.8 miles along the section lines to the centerline of a canal running to the Northwest; Thence, Northwesterly along said centerline to its intersection with the West line of Section 18, Township 39 South, Range 39 East; Thence, Northerly along the section lines to the Northwest corner of Section 6, Township 39 South, Range 39 East; Thence, Easterly along the section lines to the Northwest corner of the Northeast one-quarter of Section 2, Township 39 South, Range 39 East; Thence, Southerly along the one-quarter section line to the Southwest corner of the Southeast one-quarter of Section 11, Township 39 South, Range 39 East; Thence, Easterly along the section lines to the Southeast corner of Section 12, Township 39 South, Range 39 East; Thence, Northerly along the section lines to the Northeast corner of Section 25, Township 38 South, Range 39 East; Thence, Westerly along the section lines to the Southwest corner of Section 23, Township 38 South, Range 39 East; Thence, Northerly along the section line to the Northwest corner of said Section 23; Thence, Westerly along the section lines to the Point of Beginning.

(e) South Coastal Martin County Water Use Basin, described as:

Martin County (See Figure 21-14)

Beginning at the intersection of the centerline of State Road 5 (U.S. Highway 1) with the centerline of Cove Road; Thence, Southwesterly along the centerline of Cove Road to the centerline of Florida's Turnpike; Thence, Northwesterly along said centerline to the Southeasterly right of way line of the Okeechobee Waterway (C-44); Thence, Southwesterly along said right of way line to the South line of Section 12, Township 39 South, Range 40 East; Thence, Westerly along the section lines to the Northwest corner of Section 14, Township 39 South, Range 40 East; Thence, Southerly along the West line of said Section 14, to the South line of the North one-half of the North one-half of said Section 14; Thence, Easterly along said line to the Southeasterly right of way line of the Okeechobee Waterway (C-44); Thence, Northeasterly along said right of way line to the South line of the North one-half of the Northwest one-quarter of the Northwest one-quarter of Section 13, Township 39 South, Range 40 East; Thence, Easterly along said line to the West line of the Northeast one-quarter of the Northwest one-quarter of said Section 13; Thence, Northerly along said line to the Northwest corner of said Northeast one-quarter of the Northwest one-quarter of said Section 13; Thence, Easterly along the section line to the Northeast corner of the Northwest one-quarter of said Section 13; Thence, Southerly along the one-quarter section line to the center of said Section 13; Thence, Easterly along the one-quarter section lines to the West line of the East one-half of the Northeast one-quarter of Section 18, Township 39 South, Range 41 East; Thence, Northerly along said line to the North line of the South one-half of the Northeast one-quarter of the Northeast one-quarter of said Section 18; Thence, Easterly along said line and along the North line of the South one-half of the North one-half of the Northwest one-quarter of Section 17, Township 39 South, Range 41 East to the East line of said Northwest one-quarter; Thence, Southerly along said East line to the center of said Section 17; Thence, Westerly along the South line of the Northwest one-quarter of said Section 17 to the Southwest corner of said Northwest one-quarter; Thence, Southerly along the section line to the Southwest corner of said Section 17; Thence, Easterly along the South line of said Section 17 to the intersection with the centerline of State Road 711; Thence, Southerly along said centerline to the South line of the Northeast one-quarter of Section 20, Township 39 South, Range 41 East; Thence, Easterly along the one-quarter section

lines to the East line of the West one-half of the Southwest one-quarter of Section 22, Township 39 South, Range 41 East; Thence, Southerly along said line to the South line of said Section 22; Thence, Westerly along the section lines to the Northwest corner of the Northeast one-quarter of Section 28, Township 39 South, Range 41 East; Thence, Southerly along the one-quarter section line to the intersection with the centerline of State Road 708; Thence, Easterly along said centerline to the centerline of Powerline Avenue; Thence, Southerly along said centerline to the South line of the North one-half of Section 32, Township 39 South, Range 42 East; Thence, Easterly along said line to the centerline of Flora Avenue; Thence, Northerly along said centerline to the North line of Section 33, Township 39 South, Range 42 East; Thence, Easterly along the section lines to the centerline of the Intracoastal Waterway; Thence, Southerly along said centerline to an Easterly prolongation of the east-west one-quarter section line of Section 1, Township 40 South, Range 42 East; Thence, Easterly along said prolongation to the Westerly shore of the Atlantic Ocean; Thence, Northerly along said shoreline to the centerline of the St. Lucie Inlet; Thence, Westerly along said line to the intersection with the centerline of the Intracoastal Waterway; Thence, Southeasterly along said centerline to the North Boundary line of Gomez Grant; Thence, Southwesterly along said line to the centerline of State Road 5 (U. S. Highway 1); Thence, Northwesterly along said centerline to the Point of Beginning.

(f) North Coastal Martin County Water Use Basin, described as:

Martin County (See Figure 21-14)

Beginning at the Northwest corner of Section 18, Township 37 South, Range 41 East on the Martin-St. Lucie County line; Thence, Southerly along the Martin-St. Lucie County line to the Northwest corner of Section 6, Township 38 South, Range 41 East; Thence, Easterly along the section lines to the centerline of State Road 5 (U.S. Highway 1); Thence, Northerly along said centerline to the North line of Section 32, Township 37 South, Range 41 East; Thence, Easterly along the section lines to the centerline of the Florida East Coast Railway; Thence, Southerly along said centerline to the centerline of the St. Lucie River; Thence, Easterly along said centerline to the Southerly extension of the East line of Section 34, Township 37 South, Range 41 East; Thence, Northerly along the section lines to the centerline of Palmer Street; Thence, Easterly along said centerline and its Easterly extension to the centerline of the Intracoastal Waterway; Thence, Northwesterly along said centerline to the Martin-St. Lucie County Line; Thence, Westerly along said line to the Point of Beginning.

(g) West Coastal Martin County Water Use Basin, described as:

Martin County (See Figure 21-14)

Beginning at the Northeast corner of Section 1, Township 38 South, Range 40 East, on the Martin-St. Lucie County line; Thence, Westerly along the section lines to the Northwest corner of Section 1, Township 38 South, Range 39 East; Thence, Southerly along the section lines to the Southwest corner of Section 13, Township 39 South, Range 38 East; Thence, Easterly along the section lines to the Southeast corner of the Southwest one-quarter of Section 17, Township 38 South, Range 40 East; Thence, Southerly along the one-quarter section lines to the Southwest corner of the Southeast one-quarter of Section 20, Township 38 South, Range 40 East; Thence, Easterly along the section line to the Southeast corner of said Section 20, Thence, Southerly along the section lines approximately 2.5 miles to a canal running to the Southeast; Thence, Southeasterly along the centerline of said canal to the intersection with the North line of the South one-half of Section 15, Township 39 South, Range 40 East; Thence, Easterly along said line approximately 0.6 mile to the centerline of a canal running to the North; Thence, Northerly along said centerline to the North line of the South one-half of Section 10, Township 39 South, Range 40 East; Thence, Easterly along said line to the Southeast corner of the Northeast one-quarter of said Section 10; Thence, Northerly along the section line to the Northwest corner of Section 11, Township 39 South, Range 40 East; Thence, Easterly along the section line to the Southeast corner of Tract 61, Section 2, Township 39 South, Range 40 East, Palm City Farms, as recorded in Plat Book 6, Page 42 of Palm Beach County, Florida, Public Records; Thence, Northerly along the East line of said Tract 61 to the Northeast corner of said Tract 61; Thence, Westerly along the Tract lines to the centerline of Hog Creek; Thence, Northeasterly along said centerline to the East line of Tract 51 of said Plat; Thence, Northerly along said Tract line to the Southeast corner of Tract 46; Thence, Westerly along the South line of said Tract to the Southwest corner of said Tract 46; Thence, Northerly along the West line of said Tract to the Northwest corner of said Tract 46; Thence, Easterly along the North line of Tracts 46 and 47 to the Westerly line of St. Lucie Inlet Farms, as recorded in Plat Book 1, Page 98, Palm Beach County, Florida, Public Records; Thence Northwesterly along said Westerly line to the North line of said Plat; Thence, Northeasterly along said Northerly line to the West line of Tract 11, Commissioners Plat of the Miles or Hanson Grant, as recorded in Plat Book 1, Page 11, Palm Beach County, Florida, Public Records; Thence, Northwesterly along said Tract line to the North line of said Plat; Thence, Northeasterly along said North line to the Westerly right of way line of Florida's Turnpike; Thence, Southeasterly along said right of way line to the centerline of Cove Road; Thence, Northeasterly along said centerline to the

centerline of State Road 5, (U.S. Highway 1); Thence Northwesterly along said centerline to the centerline of Indian Street; Thence, Southwesterly along said centerline to the centerline of State Road 76; Thence, Northerly along said centerline to the North boundary line of Hanson Grant; Thence, Westerly along said line to the centerline of the South Fork of the St. Lucie River; Thence, Northerly along said centerline to the centerline of State Road 5 (U.S. Highway 1); Thence, Northerly along said centerline to the North line of Section 5, Township 38 South, Range 41 East; Thence, Westerly along the section lines to the Point of Beginning.

(h) Stuart Peninsula Water Use Basin, described as:

Martin County (See Figure 21-14)

Beginning at the intersection of the centerline of State Road 5 (U.S. Highway 1) with the centerline of Cove Road; Thence, Northwesterly along the centerline of State Road 5 (U.S. Highway 1) to the centerline of Indian Street; Thence, Southwesterly along said centerline to the centerline of State Road 76; Thence, Northerly along said centerline to the North Boundary Line of Hanson Grant; Thence, Westerly along said line to the centerline of the South Fork of the St. Lucie River; Thence, Northerly along said centerline to the centerline of State Road 5 (U.S. Highway 1); Thence, Northerly along said centerline to the North line of Section 32, Township 37 South, Range 41 East; Thence, Easterly along the section lines to the centerline of the Florida East Coast Railway; Thence, Southerly along said centerline to the centerline of the St. Lucie River; Thence, Easterly along said centerline to the Southerly extension of the centerline of Section 34, Township 37 South, Range 41 East; Thence, Northerly along the section lines to the centerline of Palmer Street; Thence, Easterly along said centerline and its Easterly extension to the centerline of the Intracoastal Waterway; Thence, Northwesterly along said centerline to the Martin-St. Lucie County line; Thence, Easterly along said County line to the Western Shoreline of the Atlantic Ocean; Thence, Southeasterly along said shoreline to the centerline of the St. Lucie Inlet; Thence, Westerly along said line to the intersection with the centerline of the Intracoastal Waterway; Thence, Southeasterly along said centerline to the North Boundary line of Gomez Grant; Thence, Southwesterly along said line to the centerline of State Road 5 (U. S. Highway 1); Thence, Northwesterly along said centerline to the Point of Beginning.

(i) Interior Martin County Water Use Basin, described as:

Martin County (See Figure 21-14)

Beginning at the Southwest corner of Section 26, Township 40 South, Range 39 East on the Martin-Palm Beach County line; Thence, Northerly along the West line of said Section 26 to the Northwest corner of the Southwest one-quarter of said Section 26; Thence, Westerly along the one-quarter section line to the Southwest corner of the Northwest one-quarter of Section 27, Township 40 South, Range 39 East; Thence, Northerly along the section lines to the centerline of State Road 710; Thence, Southeasterly along said centerline to the East line of the West one-half of Section 23, Township 40 South, Range 39 East; Thence, Northerly along the one-quarter section lines to the center of Section 2, Township 40 South, Range 39 East and a canal running to the Northwest; Thence, Northwesterly along the centerline of said canal to the centerline of State Road 76; Thence, Northeasterly along said centerline to the West line of Section 31, Township 39 South, Range 40 East; Thence, Southerly along the section lines to the Northwest corner of Section 18, Township 40 South, Range 40 East; Thence, continue Southerly along the West line of said Section 18 approximately 0.2 mile to the centerline of a levee; Thence, Southeasterly along said centerline to the East line of the West one-half of Section 22, Township 40 South, Range 40 East; Thence, Northerly along the one-quarter section lines to the Northeast corner of the Northwest one-quarter of Section 10, Township 40 South, Range 40 East; Thence, Easterly along the section lines to the Northeast corner of the Northwest one-quarter of Section 7, Township 40 South, Range 41 East; Thence, Northerly along the one-quarter section line to the Northeast corner of the Northwest one-quarter of Section 6, Township 40 South, Range 41 East; Thence, Easterly along the Section lines to the centerline of County Highway 711; Thence, Southerly along said centerline to Martin-Palm Beach County line; Thence, Westerly along said County line to the Point of Beginning.

Also, begin at the Southwest corner of Section 30, Township 40 South, Range 38 East on the Martin-Palm Beach County line; Thence, Northerly along the section lines to the North line of the South one-half of Section 18, Township 40 South, Range 38 East; Thence, Easterly along the one-quarter section line to the Southeast corner of the Northeast one-quarter of said Section 18; Thence, Northerly along the section lines to the Northwest corner of Section 8, Township 40 South, Range 38 East; Thence, Easterly along the section line to the Northeast corner of the Northwest one-quarter of said Section 8; Thence, Northerly along the one-quarter section lines to the Northeast corner of the Northwest one-quarter of Section 5, Township 40 South, Range 38 East; Thence, Easterly along the section line to the East line of the West one-half of the East one-half of said Section 5; Thence, Southerly along said line to the South line of said Section 5; Thence, Easterly along the section lines to the Northeast corner of Section 9, Township 40 South, Range 38 East; Thence, Southerly along the section lines to the Southeast corner of Section 28; Township 40 South, Range 38 East to the Martin-Palm Beach County line; Thence, Westerly along said County line to the Point of Beginning.

(j) Northwest Loxahatchee River Water Use Basin, described as:

Martin County (See Figure 21-14)

All that part of Martin County lying Southerly and Easterly of the following specifically described line:

Beginning at the centerline of County Highway 711 on the Martin-Palm Beach County line; Thence, Northerly along said centerline to the North line of Section 5, Township 40 South, Range 41 East; Thence, Easterly along the section lines to the Southeast corner of the Southwest one-quarter of Section 33, Township 39 South, Range 41 East; Thence, Northerly along the one-quarter section lines to the centerline of County Highway 708; Thence, Easterly along said centerline to the centerline of Powerline Avenue; Thence, Southerly along said centerline to the South line of the North one-half of Section 32, Township 39 South, Range 42 East; Thence, Easterly along said line to the Centerline of Flora Avenue; Thence, Northerly along said centerline to the North line of Section 33, Township 39 South, Range 42 East; Thence, Easterly along the section lines to the centerline of the Intracoastal Waterway in Hobe Sound; Thence, Southerly along said centerline to an Easterly prolongation of the East-West one-quarter section line of Section 1, Township 40 South, Range 42 East; Thence, Easterly along said Easterly prolongation to the waters of the Atlantic Ocean and the end of the specifically described line.

Less, however, Beginning at the intersection of the centerline of Country Club Drive with the Martin-Palm Beach County line; Thence, Northwesterly along said centerline to the North line of the South one-half of the Northwest one-quarter of the Southwest one-quarter of the Southwest one-quarter of Section 23, Township 40 South, Range 42 East; Thence, Westerly along said line and along the North line of the South one-half of the North one-half of the South one-half of the Southwest one-quarter of Section 22, Township 40 South, Range 42 East to the centerline of the Loxahatchee River; Thence, Northwesterly along said centerline to the North line of the South one-half of the North one-half of the Southeast one-quarter of said Section 22; Thence, Easterly along said line to the centerline of said Country Club Drive; Thence, Northwesterly along said centerline to the West line of the East one-quarter of the Northeast one-quarter of said Section 22; Thence, Northerly along said West line to the Northwest corner of the Southeast one-quarter of the Northeast one-quarter of said Section 22; Thence, Easterly along the one-quarter one-quarter section lines to the Northeast corner of the Southwest one-quarter of the Northwest one-quarter of Section 23, Township 40 South, Range 42 East; Thence, Southerly along the East line of said Southwest one-quarter of the Northwest one-quarter of Section 23 to the South line of the North one-half of said Section 23; Thence, Easterly along said line to the centerline of the North Fork of the Loxahatchee River; Thence, Southeasterly along said centerline to the Martin-Palm Beach County line; Thence, Westerly along said County line to the Point of Beginning.

And also;

All the South one-half of the Southeast one-quarter of Section 24, Township 40 South, Range 42 East; And the Southeast one-quarter of the Southwest one-quarter of said Section 24; And the West three-quarters of the Southwest one-quarter of the Southwest one-quarter of Section 19, Township 40 South, Range 43 East.

(5) Kissimmee.

(a) West Chain of Lakes Water Use Basin, described as:

Orange County (See Figure 21-17)

Beginning at the intersection of the centerline of Interstate 4 (State Road 400) with the Orange-Osceola County line; Thence, Westerly along said County line to the Southwest corner of Orange County; Thence Northerly along the Lake-Orange County line, also being the Range line between Ranges 26 and 27 East, to the Northwest corner of Section 18, Township 23 South, Range 27 East; Thence, Easterly along the section lines to the Southwest corner of Section 12, Township 23 South, Range 27 East; Thence, Northerly along the section lines to the Northwest corner of Section 1, Township 23 South, Range 27 East; Thence, Easterly along the Township line between Townships 22 and 23 South to the intersection with the centerline of State Road 435; Thence, Southerly along said centerline to the centerline of Conroy Road; Thence, Westerly along said centerline to the centerline of State Road 439 (Turkey Lake Road); Thence, Southerly along said centerline to the intersection with the centerline of Interstate 4 (State Road 400) in Section 11, Township 24 South, Range 28 East; Thence, Southwesterly along said centerline to the Point of Beginning.

Osceola County (See Figure 21-18) Beginning at the intersection of the centerline of Interstate 4 (State Road 400) with the Osceola-Orange County line; Thence, Southwesterly along said centerline to the Osceola-Polk County line; Thence, Westerly and Northerly along said County line to the Osceola-Orange County line; Thence, Easterly along said County line to the Point of Beginning.

(b) Upper Chain of Lakes Water Use Basin, described as:

Orange County (See Figure 21-17)

Beginning at the intersection of the centerline of Interstate 4 (State Road 400) with the Orange-Osceola County line; Thence,

Northeasterly along said centerline to the intersection with the centerline of State Road 439 (Turkey Lake Road) in Section 11, Township 24 South, Range 28 East; Thence, Northerly along said centerline to the centerline of Conroy Road; Thence, Easterly along said centerline to the intersection with the centerline of State Road 435; Thence, Northerly along said centerline to the Northwest corner of Section 6, Township 23 South, Range 28 East; Thence, Northerly along the section lines to the Northwest corner of Section 30, Township 22 South, Range 29 East; Thence, Easterly along the section lines to the Westerly right of way line of U. S. Highway 441; Thence, Southerly along the Westerly right of way line to the intersection with the Northerly right of way line of State Road 528A; Thence, Easterly along the Northerly right of way line to the intersection with the Northerly right of way line of State Road 528, also known as the Bee Line Expressway; Thence, Easterly along the Northerly right of way line of State Road 528 to the intersection with the Range line between Ranges 31 and 32 East; Thence, Southerly along said Range line to the Orange-Osceola County line; Thence, Westerly along the Orange-Osceola County line to the Point of Beginning.

Polk County (See Figure 21-19)

Beginning at the intersection of the West line of Section 30, Township 31 South, Range 29 East with the centerline of State Road 630; Thence, North along the Range line between Ranges 28 and 29 East; in Townships 32 and 31 South, to the Northwest corner of Section 7, Township 31 South, Range 29 East; Thence, East along the section line to the Northeast corner of Section 7, Township 31 South, Range 29 East; Thence, North along the section lines to the Northwest corner of Section 17, Township 30 South, Range 29 East; Thence, East along the section line to the Northeast corner of the West one-half of Section 17, Township 30 South, Range 29 East; Thence, North along the 1/2-section lines to the Northeast corner of the West one-half of Section 5, Township 30 South, Range 29 East; Thence, West along the section line to the Southwest corner of Section 32, Township 29 South, Range 29 East; Thence, North along the section lines to the Northeast corner of Section 19, Township 29 South, Range 29 East; Thence, West along the South boundaries of Section 18, Township 29 South, Range 29 East and Sections 13, 14, 15, 16 and 17 in Township 29 South, Range 28 East, to the Southwest corner of said Section 17; Thence, North along the section lines to the intersection with the West shoreline of Lake Pierce in Township 29 South, Range 28 East; Thence, Following the West shore of Lake Pierce to its intersection with the West line of Section 5, Township 29 South, Range 28 East; Thence, North along the section line to the Northwest corner of Section 5, Township 29 South, Range 28 East; Thence, East along the Township line to the Southwest corner of Section 33, Township 28 South, Range 28 East; Thence, North along the section line to the Northwest corner of the Southwest one-quarter of the Southwest one-quarter of Section 28, Township 28 South, Range 28 East; Thence, East along the 1/4-section line to the intersection of said 1/4-section line with Lake Pierce; Thence, follow the shoreline Northeasterly to its intersection with the 1/2-section line of Section 28, Township 28 South, Range 28 East; Thence, North on the 1/2-section line to the Northwest corner of the Southeast one-quarter of Section 28, Township 28 South, Range 28 East; Thence, East along the 1/ 2-section line to the Northeast corner of the Southeast one-quarter of Section 28, Township 28 South, Range 28 East; Thence, South along the section line to the Northwest corner of Section 3, Township 29 South, Range 28 East; Thence, East along the section line to the Northeast corner of Section 3, Township 29 South, Range 28 East; Thence, North along the section line to the Northwest corner of Section 23, Township 28 South, Range 28 East; Thence, West along the section line to the Southwest corner of Section 16, Township 28 South, Range 28 East; Thence, North along the section line to the Northwest corner of Section 16, Township 28 South, Range 28 East; Thence, West along the section line to the Southwest corner of Section 8, Township 28 South, Range 28 East; Thence, North along the section line to the Northwest corner of Section 5, Township 28 South, Range 28 East; Thence, West along the Township line to the intersection of said Township line with Lake Marion; Thence, following the South shoreline of Lake Marion to its intersection again with said Township line; Thence, West along the Township line to the Southeast corner of Section 36, Township 27 South, Range 27 East; Thence, North along the Range line between Ranges 27 and 28 East to the intersection of said Range line with Lake Marion; Thence, following the West shore of Lake Marion to its intersection again with the Range line between Ranges 27 and 28 East; Thence, North along said Range line, in Townships 27 and 26 South, to the Northwest corner of Township 26 South, Range 28 East; being on the Polk-Osceola County line; Thence, Southeasterly along the Polk-Osceola County line to its intersection with the centerline of State Road 60; Thence, Westerly along said centerline to the centerline of State Road 630; Thence, Southwesterly along said centerline to the Point of Beginning.

Osceola County (See Figure 21-18)

Beginning at the intersection of the centerline of Interstate 4 (State Road 400) with the Osceola-Orange County line; Thence, Easterly along the Osceola-Orange County line, also being the Township line between Townships 24 and 25 South, to the Northeast corner of Section 5, Township 25 South, Range 32 East; Thence, Southerly along the section lines to the Southeast corner of Section 32, Township 25 South, Range 32 East; Thence, Easterly along the Township line between Townships 25 and 26 South to the

Northeast corner of Section 1, Township 26 South, Range 32 East; Thence, Southerly along the Range line between Ranges 32 and 33 East to the Southeast corner of Section 36, Township 27 South, Range 32 East; Thence, Westerly along the Township line between Townships 27 and 28 South to the Northeast corner of Section 1, Township 28 South, Range 32 East; Thence, Southerly along the Range line between Ranges 32 and 33 East to the Southeast corner of Section 36, Township 29 South, Range 32 East; Thence, Easterly along the Township line between Townships 29 and 30 South to the Northeast corner of Section 1, Township 30 South, Range 33 East; Thence, Southerly along the Range line between Ranges 33 and 34 East to the Southeast corner of Section 36, Township 30 South, Range 33 East; Thence, Westerly along the Township line between Townships 30 and 31 South to the Northeast corner of Section 4, Township 31 South, Range 33 East; Thence, Southerly along the section lines to the intersection with the centerline of State Road 60; Thence, Northwesterly along said centerline to the Intersection with the Osceola-Polk County line; Thence, Northwesterly along said County line to the intersection with the centerline of Interstate 4 (State Road 400); Thence, Northeasterly along said centerline to the Point of Beginning.

(c) Kissimmee River Valley Water Use Basin, described as:

Orange County (See Figure 21-17)

Beginning at the Southwest corner of County; Thence, Northerly along the Lake-Orange County line, also being the Range line between Ranges 26 and 27 East, to the Northwest corner of Section 18, Township 23 South, Range 27 East; Thence, Easterly along the section lines to the Southwest corner of the Section 12, Township 23 South, Range 27 East; Thence, Northerly along the section lines to the Northwest corner of Section 1, Township 23 South, Range 27 East; Thence, Easterly along the Township line between Townships 22 and 23 South to the Southwest corner of Section 31, Township 22 South, Range 29 East; Thence, Northerly along the Range line between Ranges 28 and 29 East to the Northwest corner of Section 30, Township 22 South, Range 29 East; Thence, Easterly along the section lines to the Westerly right of way line of U.S. Highway 441; Thence, Southerly along the Westerly right of way line to the intersection with the Northerly right of way line of State Road 528A; Thence, Easterly along the Northerly right of way line to the intersection with the Northerly right of way line of State Road 528, also known as the Bee Line Expressway; Thence, Easterly along the Northerly right of way line of State Road 528 to the intersection with the Range line between Township 23 South, Range 31 East and Township 23 South, Range 32 East; Thence, Southerly along the Range line between Ranges 31 and 32 East to the Orange-Osceola County line; Thence, Westerly along the Orange-Osceola County line to the Point of Beginning.

Osceola County (See Figure 21-18)

Beginning at the Southeast corner of Section 33, Township 32 South, Range 33 East on the Osceola-Okeechobee County line; Thence, Westerly along said County line to the Osceola-Polk County line; Thence, Northwesterly along said County line to the centerline of State Road 60; Thence, Southeasterly along said centerline to the West line of Section 33, Township 31 South, Range 33 East; Thence, Southerly along the section lines to the Point of Beginning.

Polk County (See Figure 21-19)

Beginning at the intersection of the West line of Section 30, Township 31 South, Range 29 East with the centerline of State Road 630; Thence, Northeasterly along said centerline to the centerline of State Road 60; Thence, Easterly along said centerline to the intersection with the Polk-Osceola County line; Thence, Southerly along said County line to the Polk-Okeechobee County line; Thence, Westerly along said County line and along the Polk-Highlands County line to the Southwest corner of Section 31, Township 32 South, Range 29 East; Thence, Northerly along the Range line between Ranges 28 and 29 East, in Townships 31 and 32 South to the Point of Beginning.

Okeechobee County (See Figure 21-16)

All that part of Okeechobee County lying Westerly of the following described line:

Beginning at the Northeast corner of Section 3, Township 33 South, Range 34 East on the Okeechobee-Osceola County line; Thence, Southerly along the section lines to the Southeast corner of Section 34, Township 34 South, Range 34 East; Thence, Easterly to the Southeast corner of Section 35, Township 34 South, Range 34 East; Thence, Southerly to the Southeast corner of Section 2, Township 35 South, Range 34 East; Thence, Westerly along the section lines to the Southwest corner of Section 3, Township 35 South, Range 34 East; Thence, Southerly to the Southwest corner of Section 10, Township 35 South, Range 34 East; Thence, Westerly to the Southwest corner of Section 9, Township 35 South, Range 34 East; Thence, Southerly along the section lines to the centerline of County Highway 68; Thence, Northeasterly along said centerline to the West line of Section 27, Township 35 South, Range 34 East; Thence, Southerly along the section lines to the Southwest corner of Section 34, Township 35 South, Range 34 East; Thence, Easterly to the Southeast corner of said Section 34; Thence, Southerly to the Southwest corner of Section 2, Township 36 South, Range 34 East; Thence, Easterly to the Southeast corner of said Section 2; Thence, Southerly along the section

lines to the Southwest corner of Section 24, Township 36 South, Range 34 East; Thence, Easterly to the Southeast corner of said Section 24; Thence, Southerly along the section lines to the Southwest corner of Section 30, Township 37 South, Range 35 East; Thence, Southeasterly to the Southwest corner of Section 32, Township 37 South, Range 35 East; Thence, Southwesterly to the Northwest corner of Section 18, Township 38 South, Range 35 East; Thence, Southerly along the section line to the Okeechobee-Glades County line and the end of the specifically described line.

Highlands County (See Figure 21-20)

Beginning at the Northeast corner of Highlands County; Thence, Southwesterly, Southerly and Southeasterly along said County line to the Southeast corner of Highlands County; Thence, Westerly along said County line to the Southeast corner of Section 36, Township 37 South, Range 33 East; Thence Northerly along the East line of said Section 36 to the South right of way line of South Florida Water Management District's Canal 41A; Thence, Northwest to the Northeast corner of Section 35, Township 37 South, Range 33 East; Thence, Westerly to the Northwest corner of the Northeast one-quarter of Section 34, Township 37 South, Range 33 East; Thence, Northerly to the Northeast corner of the Southwest one-quarter of Section 22, Township 37 South, Range 33 East; Thence, Northwesterly to the Northwest corner of Section 16, Township 37 South, Range 33 East; Thence, Northerly to the Southeast corner of Section 5, Township 37 South, Range 33 East; Thence, Northwesterly along the section line to the Northwest corner of said Section 5; Thence, Westerly along the section lines to the Northwest corner of Section 6, Township 37 South, Range 32 East; Thence, Northerly along the Range line between Ranges 31 and 32 to the Northeast corner of the South one-half of Section 12, Township 36 South, Range 31 East; Thence, Westerly along the one-quarter section lines to the centerline of State Road 621; Thence, Southwesterly, Southerly and Westerly along said centerline to the Northwest corner of Section 2, Township 37 South, Range 30 East; Thence, Westerly along the Township line to the Southwest corner of Section 34, Township 36 South, Range 30 East; Thence, North along the section line to the Northwest corner of Section 3, Township 36 South, Range 30 East; Thence, West along the Township line to the Southwest corner of Section 31, Township 35 South, Range 30 East; Thence, North along the Range line between Ranges 29 and 30 East through Townships 35, 34 and 33 South to the Northwest corner of Township 33 South, Range 30 East, being on the Highlands-Polk County line; Thence, Easterly along said County line to the Point of Beginning.

(d) Taylor Creek-Nubbin Slough Water Use Basin, described as:

Okeechobee County (See Figure 21-16)

Beginning at the Northeast corner of Section 12, Township 37 South, Range 36 East and the Okeechobee-St. Lucie County line; Thence, Southerly along said line to the centerline of South Florida Water Management District's Levee 64 Remainder; Thence, Northwesterly along the centerline of said Levee 64 Remainder and the centerline of South Florida Water Management District's Levee 63 South and South Florida Water Management District's Levee 63 North to the West line of Section 32, Township 37 South, Range 36 East; Thence, Southerly along said centerline to the Southeast corner of the Northeast one-quarter of Section 31, Township 37 South, Range 36 East; Thence, Westerly to the center of said Section 31; Thence, Northerly to the Northeast corner of the Northwest one-quarter of said Section 31; Thence, Westerly to the Northwest corner of said Section 31; Thence, Northerly to the Northeast corner of the Southeast one-quarter of Section 25, Township 37 South, Range 35 East; Thence, Westerly to the Northwest corner of the Southwest one-quarter of said Section 25; Thence, Northerly along the section lines to the Northwest corner of Section 13, Township 37 South, Range 35 East; Thence, Westerly to the centerline of Hamrick Road; Thence, Northerly along said centerline to the North line of the South one-half of the West one-half of Section 11, Township 32 South, Range 35 East; Thence, Westerly along the one-quarter section lines to the Northwest corner of the Southwest one-quarter of Section 9, Township 37 South, Range 35 East; Thence, Southerly to the Southwest corner of said Section 9; Thence, Westerly along the section lines to the Southwest corner of Section 7, Township 37 South, Range 35 East; Thence, Northerly along the section lines to the Northwest corner of Section 30, Township 36 South, Range 35 East; Thence, Westerly to the Southwest corner of Section 24, Township 36 South, Range 34 East; Thence, Northerly along the section lines to the Northwest corner of Section 12, Township 36 South, Range 34 East; Thence, Westerly to the Southwest corner of Section 2, Township 36 South, Range 34 East; Thence, Northerly to the Northwest corner of said Section 2; Thence, Westerly to the Southwest corner of Section 34, Township 35 South, Range 34 East; Thence, Northerly to the centerline of County Highway 68; Thence, Southwesterly along said centerline to the West line of Section 33, Township 35 South, Range 34 East; Thence, Northerly along the section lines to the Northwest corner of Section 16, Township 35 South, Range 34 East; Thence, Easterly to the Northeast corner of said Section 16; Thence, Northerly to the Northwest corner of Section 10, Township 35 South, Range 34 East; Thence, Easterly along the section lines to the Northeast corner of Section 11, Township 35 South, Range 34 East; Thence, Northerly to the Northwest corner of Section 1, Township 35 South, Range 34 East; Thence, Easterly along the section lines to the centerline of State Road 15 (U.S. Highway 441); Thence, Southerly along said

centerline to the North line of the South one-half of Section 15, Township 35 South, Range 35 East; Thence, Easterly along the one-quarter section lines to the center of Section 13, Township 35 South, Range 35 East; Thence, Southerly to the Southwest corner of the Southeast one-quarter of Section 25, Township 35 South, Range 35 East; Thence, Easterly to the Southeast corner of said Section 25; Thence, Southeasterly to the Northeast corner of Section 6, Township 36 South, Range 36 East; Thence, Southerly along the section lines to the Southwest corner of Section 8, Township 36 South, Range 36 East; Thence, Easterly to the Southeast corner of said Section 8; Thence, Southeasterly to the Southeast corner of Section 16, Township 36 South, Range 36 East; Thence, Southerly to the Southwest corner of Section 22, Township 36 South, Range 36 East; Thence, Southeasterly to the Southeast corner of Section 27, Township 36 South, Range 36 East; Thence, Southerly along the section lines to the Southwest corner of Section 2, Township 37 South, Range 36 East; Thence, Easterly along the section lines to the Okeechobee-St. Lucie County line and the Point of Beginning.

St. Lucie County (See Figure 21-15)

Beginning at the Southwest corner of St. Lucie County; Thence, Northerly along the St. Lucie-Okeechobee County line to the Northwest corner of Section 18, Township 37 South, Range 37 East; Thence, Easterly along the section lines to the Northeast corner of Section 17, Township 37 South, Range 37 East; Thence, Southerly along the section lines to the Northwest corner of Section 33, Township 37 South, Range 37 East; Thence, Easterly along the section line to the Northeast corner of said Section 33; Thence, Southerly along the section line to the Southeast corner of said Section 33 and the St. Lucie-Martin County line; Thence, Westerly along said County line to the Southwest corner of St. Lucie County and the Point of Beginning.

Martin County (See Figure 21-14)

Beginning at the Northwest corner of Martin County; Thence, Southerly along the Martin-Okeechobee County line to the centerline of South Florida Water Management District's Levee 64; Thence, Southeasterly along said centerline of Levee 64 and the center line of South Florida Water Management District's Levee 65 to the South line of Section 4, Township 39 South, Range 37 East; Thence, Easterly along said section line to the Southeast corner of said Section 4; Thence, Northerly along the East line of said Section 4 to the Northeast corner of said Section 4; Thence, Northeasterly to the Northeast corner of Section 24, Township 38 South, Range 37 East; Thence, Westerly along the section lines to the Southwest corner of Section 13, Township 38 South, Range 37 East; Thence, Northerly along the section line to the Northwest corner of said Section 13; Thence, Westerly along the section lines to the Southwest corner of Section 10, Township 38 South, Range 37 East; Thence, Northerly along the section lines to the Martin-St. Lucie County line; Thence, Westerly along said County line to the Point of Beginning.

(6) Indian Prairie.

(a) Indian Prairie Water Use Basin, described as:

Highlands County (See Figure 21-20)

Beginning at the Northeast corner of the Southeast one-quarter of Section 12, Township 39 South, Range 30 East; Thence, Northwesterly to the Southwest corner of the Southeast one-quarter of Section 1, Township 39 South, Range 30 East; Thence, Northerly to the Northwest corner of the Northeast one-quarter of said section 1; Thence, Northwesterly to the Southeast corner of the North one-half of Section 35, Township 38 South, Range 30 East; Thence, Westerly along the South line of the North one-half of said Section 35 to the Southwest corner of the East one-half of the Northwest one-quarter of said Section 35 and the Westerly boundary of the South Florida Water Management District; Thence, along the following three courses, being the Westerly boundary of said South Florida Water management District 1) Thence, Northerly along the West line of the East one-half of the West one-half of Sections 35, 26 and 23, Township 38 South Range 30 East to the Northwest corner of the East one-half of the West one-half of said Section 23; 2) Thence, Westerly along the Section line to the Southwest corner of Section 14, Township 38 South, Range 30 East; 3) Thence, Northerly along the West line of Sections 14, 11 and 2, Township 38 South, Range 30 East and Sections 35, 26, 23, 14, 11 and 2, township 37 South, Range 30 East to the intersection thereof with the centerline of State Road 621; Thence, Easterly, Northerly and Northeasterly along said centerline to the intersection thereof with the North line of the South one-half of Section 10, Township 36 South, Range 31 East; Thence, Easterly to the Northeast corner of the South one-half of said Section 10; Thence, Easterly to the Northwest corner of the South one-half of Section 12, Township 36 South, Range 31 East; Thence, Easterly to the Northeast corner of the South one-half of said section 12; Thence Southerly along the Range line between Ranges 31 and 32 to the Northwest corner of Section 6, Township 37 South, Range 32 East; Thence, Easterly along the Township line between Townships 36 and 37 to the Northwest corner of Section 5, Township 37 South, Range 33 East; Thence, Southeasterly to the Southeast corner of said Section 5; Thence, Southerly along the section line to the Northwest corner of Section 16, Township 37 South, Range 33 East; Thence, Southeasterly to the Southeast corner of said Section 16; Thence, Southeasterly to the Northeast corner of the

Southwest one-quarter of Section 22, Township 37 South, Range 33 East; Thence, Southerly to the Southeast corner of the Southwest one-quarter of said Section 22; Thence, Southerly to the Northwest corner of the Northeast one-quarter of Section 34, Township 37 South, Range 33 East; Thence, Easterly along the North line of Sections 34 and 35, Township 37 South, Range 33 East to the Northeast corner of said Section 35; Thence, Southeasterly to the point of intersection of the South right of way line of South Florida Water Management District's Canal 41-A and the East line of Section 36, Township 37 South, Range 33 East; Thence, Southerly along the section line to the Southeast corner of said Section 36 and the Highlands-Glades County line; Thence, Westerly, Southerly, Westerly and Southerly along the Highlands-Glades County line to the Point of Beginning.

Glades County (See Figure 21-21)

Beginning at the Northeast corner of Section 1, Township 38 South, Range 33 East, in the North boundary line of Glades County; Thence, Southwesterly to the Southwest corner of the Northwest one-quarter of said Section 1; Thence, Southerly along the West line of Sections 1 and 12, Township 38 South, Range 33 East to the Northwest corner of Section 13, Township 38 South, Range 33 East; Thence, Southeasterly to the Southeast corner of said Section 13; Thence, Southeasterly to the Southeast corner of Section 19, Township 38 South, Range 34 East; Thence, Southerly to the intersection thereof with the Southerly right of way line of South Florida Water Management District's Levee 59; Thence, Southwesterly along the Southeasterly right of way lines of South Florida Water Management District's Levees 59, 60 and 61 to the intersection thereof with the Southerly right of way line of South Florida Water Management District's Levee 50; Thence, Westerly and Northerly along said right of way line and its Northerly extension to the intersection thereof with the North line of Section 2, Township 40 South, Range 31 East; Thence, Westerly along the section line to the Southwest corner of Section 35, Township 39 South, Range 31 East; Thence, Northerly along the section line to the Northwest corner of said Section 35; Thence, Northwesterly to the Northwest corner of Section 27, Township 39 South, Range 31 East; Thence, Northwesterly to the Northwest corner of Section 21, Township 39 South, Range 31 East; Thence, Westerly along the section line to the Southwest corner of Section 17, Township 39 South, Range 31 East; Thence, Northwesterly to the Southeast corner of the Southwest one-quarter of Section 7, Township 39 South, Range 31 East; Thence, Northwesterly to the Northwest corner of the Southwest one-quarter of said Section 7 in the boundary line between Glades and Highlands Counties; Thence, Northerly along said County line to the Northwest corner of Section 6, Township 39 South, Range 31 East; Thence, Easterly, Northerly and Easterly continuing along said County line to the Point of Beginning.

(b) Fisheating Creek Water Use Basin, described as:

Highlands County (See Figure 21-20)

Beginning at the Southwest corner of Section 31, Township 39 South, Range 28 East; Thence, Northerly along the Highlands-DeSoto County line to the Northwest corner of Section 6, Township 36 South, Range 28 East; Thence, East along the North Boundary of Township 36 South to the Northeast corner of Section 1, Township 36 South, Range 28 East; Thence, South along the Range line to the Southeast corner of Section 12, Township 37 South, Range 28 East; Thence, East along the section lines to the Northeast corner of Section 15, Township 37 South, Range 29 East; Thence, South along the section lines to the Southeast corner of Section 34, Township 37 South, Range 29 East; Thence, East along the Township line to the Northeast corner of Section 1, Township 38 South, Range 29 East; Thence, South along the Range line to the Southeast corner of Section 1, Township 39 South, Range 29 East; Thence, East along the section line to the Northwest corner of Section 11, Township 39 South, Range 30 East; Thence, North along the section line to the Southwest corner of Section 35, Township 38 South, Range 30 East; Thence, East along the Township line to the Southeast corner of the West one-quarter of Section 35, Township 38 South, Range 30 East; Thence, Northerly along the West line of the East one-half of the West one-half of said Section 35 to the Southwest corner of the East one-half of the Northwest one-quarter of said Section 35; Thence, Easterly along the South line of the North one-half of said Section 35 to the Southeast corner of the North one-half of said Section 35; Thence, Southeasterly to the Northwest corner of the Northeast one-quarter of Section 1, Township 39 South, Range 30 East; Thence, Southerly to the Southwest corner of the Southeast one-quarter of said Section 1; Thence, Southeasterly to the Northeast corner of the Southeast one-quarter of Section 12, Township 39 South, Range 30 East and the Highlands-Glades County line; Thence, Southerly along said line to the Southeast corner of Section 36, Township 39 South, Range 30 East; Thence, Westerly along the Highlands-Glades County line to the Point of Beginning.

Glades County (See Figure 21-21)

Beginning at the Northwest corner of Section 6, Township 40 South Range 28 East of the Glades-Highlands County line; Thence, Easterly and Northerly along said County line to the Northwest corner of the Southwest one-quarter of Section 7, Township 39 South, Range 31 East; Thence, Southeasterly to the Southeast corner of the Southwest one-quarter of said Section 7; Thence, Southeasterly to the Southwest corner of Section 17, Township 39 South, Range 31 East; Thence, Easterly along the section line to

the Northwest corner of Section 21, Township 39 South, Range 31 East; Thence, Southeasterly to the Northwest corner of Section 35, Township 39 South, Range 31 East; Thence, Southerly along the section line to the Southwest corner of said Section 35; Thence, easterly along the North line of Section 2, Township 40 South, Range 31 East to the intersection thereof with the Northerly extension of the Southwesterly right of way line of South Florida Water Management District's Levee 50; Thence, Southerly and Easterly along said right of way line to the intersection thereof with the East line of Section 26, Township 40 South, Range 31 East; Thence, Southerly along the section lines to the intersection thereof with the North right of way line of South Florida Water Management District's Levee D-3; Thence, Westerly and Southwesterly along said right of way line of Levee D-3 and the Northwesterly right of way line of South Florida Water Management District's Levee 43 and its Southerly extension to the intersection thereof with the centerline of State Road 25 (U.S. Highway 27); Thence, Northwesterly along said centerline of State Road 25 to the intersection thereof with the centerline of State Road 29; Thence, Southwesterly along said centerline of State Road 29 to the intersection thereof with the centerline of State Road 74; Thence, Northwesterly and Westerly along said centerline of State Road 74 to the Glades-Charlotte County line; Thence, Northerly along said County line to the Point of Beginning.

(7) Lower West Coast.

(a) Caloosahatchee River Watershed – North, Water Use Basin, described as:

Lee County (See Figure 21-23)

Beginning at the intersection of the centerline of State Road 78 and the Lee-Hendry County line; Thence, Westerly along the centerline of State Road 78 to the Southeast corner of Section 8, Township 43 South, Range 26 East; Thence, Northerly along the section line to the Northeast corner of said Section 8; Thence, Westerly along the section lines to the Northwest corner of Section 9, Township 43 South, Range 24 East; Thence, Southerly along the section lines to the Southwest corner of Section 16, Township 43 South, Range 24 East; Thence, Easterly along the section line to the Southeast corner of said Section 16; Thence, Southerly along the section lines to the intersection thereof with the centerline of Yellow Fever Creek; Thence, Southeasterly along said centerline to the centerline of State Road 78A; Thence, Easterly along said centerline to the centerline of State Road 45 (U.S. 41); Thence, Southeasterly along said centerline to the centerline of the Okeechobee Waterway; Thence, Southwesterly along said centerline to the centerline of State Road 867; Thence, Southerly to Point Ybel on Sanibel Island; Thence, Southwesterly and Northwesterly along the Easterly shoreline of the Gulf of Mexico to the Lee-Charlotte County line; Thence, Easterly along said County line to the Northeast corner of Lee County; Thence, Southerly along the Lee-Hendry County line to the Point of Beginning.

Charlotte County (See Figure 21-22)

Beginning at the Southwest corner of Section 34, Township 42 South, Range 24 East; Thence, Northerly along the section lines to the Northwest corner of Section 3, Township 42 South, Range 24 East; Thence, Easterly along the Township line between Townships 41 and 42 South to the Southwest corner of Section 31, Township 41 South, Range 26 East; Thence, Northerly along the Range line between Ranges 25 and 26 East to the Northwest corner of Section 6, Township 41 South, Range 26 East; Thence, Easterly along the Township line between Townships 40 and 41 South to the Southwest corner of Section 31, Township 40 South, Range 27 East; Thence, Northerly along the Range line between Ranges 26 and 27 East to the Charlotte-DeSoto County line; Thence, Easterly along the Charlotte-DeSoto County line to the Northeast corner of Charlotte County; Thence, Southerly along the Charlotte-Glades County line to the Southeast corner of Charlotte County; Thence, Westerly along the Charlotte-Lee County line to the Point of Beginning.

Glades County (See Figure 21-21)

Beginning at the Southwest corner of Glades County; Thence, Northerly along the Glades-Charlotte County line to the centerline of State Road 74; Thence, Easterly and Southeasterly along said centerline of State Road 74 to the intersection thereof with the centerline of State Road 29; Thence, Northeasterly along said centerline of State Road 29 to the intersection thereof with the centerline of State Road 25; Thence, Southeasterly along said centerline of State Road 25 to the intersection thereof with the centerline of State Road 78; Thence, Southwesterly and Westerly along said centerline of State Road 78 to the intersection thereof with the centerline of State Road 29; Thence, Southwesterly along said centerline of State Road 29 to the Glades-Hendry County line; Thence, Westerly, Southerly and Westerly along said county line to the Point of Beginning.

Hendry County (See Figure 21-24) Beginning at the Northwest corner of Hendry County; Thence, Easterly along the Hendry-Glades County line to the intersection thereof with the centerline of State Road 78; Thence, Southerly, Westerly, Southerly and Westerly along said line to the Hendry-Glades County line; Thence, Northerly along said line to the Point of Beginning.

(b) Caloosahatchee River Watershed – South, Water Use Basin, described as:

Lee County (See Figure 21-23)

Beginning at the Northeast corner of Section 1, Township 44 South, Range 27 East on the Lee-Hendry County line; Thence, Westerly along the section lines to the Southwest corner of Section 32, Township 43 South, Range 27 East; Thence, Northwesterly in a straight line to the Southwest corner of Section 26, Township 43 South, Range 26 East; Thence, Northerly along the section lines to the centerline of the Caloosahatchee River; Thence, Westerly along said centerline to the Northerly extension of the centerline of Prospect Avenue; Thence, Southerly along said centerline to the centerline of Glenwood Avenue; Thence, Easterly along said centerline to the centerline of State Road 80 B (Ortiz Avenue); Thence, Southerly along said centerline to the centerline of Ballard Road; Thence, Westerly along said centerline to the West line of Section 16, Township 44 South, Range 25 East; Thence, Southerly along said line to the centerline of State Road 82 (Anderson Avenue); Thence, Westerly along said centerline to the centerline of Ford Street; Thence, Southerly along said centerline to the centerline of Hanson Street; Thence, Westerly along said centerline to the centerline of the Seaboard Coastline Railroad; Thence, Southerly along said centerline to the centerline of North Airport Road; Thence, Westerly along said centerline to the centerline of U.S. Highway 41 (Cleveland Avenue); Thence, Southerly along said centerline to the South line of Section 2, Township 45 South, Range 24 East; Thence, Westerly along said line to the Southwest corner of the Southeast one-quarter of said Section 2; Thence, Northerly to the center of said Section 2; Thence, Westerly along the East-West 1/4 line to the centerline of Sunrise Drive; Thence, Northerly along said centerline to the centerline of Davis Drive; Thence, Westerly along said centerline to the centerline of State Road 867 (McGregor Boulevard); Thence, Northeasterly along said centerline to the centerline of Vesper Drive; Thence, Westerly along said centerline and its Westerly extension to the centerline of the Okeechobee Waterway; Thence, Southwesterly along said centerline to the centerline of State Road 867; Thence, Easterly along said centerline to the Eastern shoreline of San Carlos Bay; Thence, Southeasterly along said shoreline and the Eastern shoreline of the Gulf of Mexico to the Lee-Collier County line; Thence, Easterly and Northerly along said line to the Lee-Hendry County line; Thence, Northerly along said line to the Point of Beginning.

(c) South Hendry County/L-28 Gap Water Use Basin, described as:

Broward County (See Figure 21-12)

Beginning at the Northwest corner of Broward County; Thence, Easterly along the Broward-Palm Beach County line to the centerline of South Florida Water Management District's Levee 28; Thence, Southerly and Southwesterly along said centerline of Levee 28 to the centerline of South Florida Water Management District's Levee 28 Interceptor; Thence, Northwesterly along said centerline of Levee 28 Interceptor to the Broward-Collier County line; Thence, Northerly along said Broward-Collier County line to the Point of Beginning.

Hendry County (See Figure 21-24)

Beginning at the Southeast corner of Hendry County; Thence, Westerly, Northerly and Westerly along the Hendry-Collier County line to the centerline of the Seaboard Coastline Railroad; Thence, Northerly along said centerline to the intersection thereof with the North line of Section 24, Township 45 South, Range 29 East; Thence, Easterly along the section lines to the Southwest corner of Section 15, Township 45 South, Range 31 East; Thence, Northeasterly to the Northeast corner of the South one-half of said Section 15; Thence, Northerly along the section lines to the centerline of the Keri Grade; Thence, Northeasterly along said Keri Grade to the intersection thereof with the Southerly right of way line of State Road 832; Thence, Easterly along said right of way line and the Easterly extension thereof to the Easterly right of way line of State Road 833; Thence, Northerly along said Easterly right of way line to the intersection thereof with the North line of Section 15, Township 44 South, Range 32 East; Thence, Easterly along the section lines to the Southwest corner of Section 12, Township 44 South, Range 32 East; Thence, Northeasterly to the Northwest corner of Section 7, Township 44 South, Range 33 East; Thence, Easterly along the North line of said Section 7 to the Northeast corner of said Section 7; Thence, Southerly along the East line of said Section 7 to the Southerly right of way line of South Florida Water Management District's Levee 1; Thence, Easterly and Southerly along said right of way line and the Westerly right of way line of South Florida Water Management District's Levee 2 and Levee 3 to the Hendry-Broward County line; Thence, Southerly along said Hendry-Broward County line to the Point of Beginning.

Also, Beginning at the Southeast corner of Section 36, Township 45 South, Range 28 East, being a point on the Hendry-Collier County line; Thence, Westerly along said County line to the Southeast corner of Section 32, Township 45 South, Range 28 East; Thence, Northwesterly to the Northwest corner of the South one-half of Section 29, Township 45 South, Range 28 East; Thence, Northerly along the section lines to the Northwest corner of the Southwest one-quarter of Section 17, Township 45 South, Range 28 East; Thence, Easterly along the one-quarter section line to the Northeast corner of the Southwest one-quarter of said Section 17; Thence, Southeasterly to the Southeast corner of Section 17 and the centerline of Church Road; Thence, Easterly along said

centerline to the Northwest corner of the East one-half of Section 24, Township 45 South, Range 28 East; Thence, Southeasterly to the Southeast corner of said Section 24; Thence, Southerly along the section lines to the Point of Beginning.

Collier County (See Figure 21-25)

All that part of Collier County lying Northeasterly of the centerline of South Florida Water Management District's Levee 28 Interceptor Canal.

(d) Big Cypress Preserve Water Use Basin, described as:

Collier County (See Figure 21-25)

Beginning at the intersection of the centerline of State Road 84 (Alligator Alley) with the centerline of State Road 29; Thence, Northerly along the centerline of State Road 29 to the South line of Section 32, Township 48 South, Range 30 East; Thence, Easterly along the section lines and along the Collier-Hendry County line to the centerline of South Florida Water Management District's L-28 Interceptor Canal; Thence, Southeasterly along said centerline to the Collier-Broward County line; Thence, Southerly along said County line to the Collier-Monroe County line; Thence, Westerly along said County line to the Southwest corner of Section 31, Township 53 South, Range 31 East; Thence, Northerly along the section lines to the Northwest corner of Section 18, Township 53 South, Range 31 East; Thence, Westerly along the section lines and their Westerly extension to the intersection with the Southerly extension of the West line of Township 52 South, Range 30 East; Thence, Northerly along said line and along the West line of said Township to the intersection with the centerline of State Road 29; Thence, Northerly along said centerline to the Point of Beginning.

(e) Fakahatchee North Water Use Basin, described as:

Collier County (See Figure 21-25)

Beginning at the Northeast corner of Section 11, Township 48 South, Range 25 East on the Collier-Lee County line; Thence, Southerly along the section lines to the centerline of County Highway 856; Thence, Easterly along said centerline and the centerline of State Road 84 (Alligator Alley) to the centerline of State Road 29; Thence, Northerly along said centerline to the South line of Section 32, Township 48 South, Range 30 East; Thence, Easterly along the section lines to the Collier-Hendry County line; Thence, Northerly and Westerly along said County line to the Collier-Lee County line; Thence, Southerly and Westerly along said County line to the Point of Beginning.

(f) Fakahatchee South Water Use Basin, described as:

Collier County (See Figure 21-25)

Beginning at the intersection of the centerline of State Road 84 (Alligator Alley) with the centerline of State Road 29; Thence, Westerly along the centerline of State Road 84 (Alligator Alley) to the centerline of County Highway 951; Thence Southerly along said centerline to the South line of Section 15, Township 51 South, Range 26 East; Thence, Westerly along the section lines to the Easterly shoreline of the Gulf of Mexico; Thence, Southeasterly along said shoreline to the intersection with the North boundary line of the Everglades National Park; Thence, along said North boundary line to the intersection with the Southerly extension of the West line of Township 52 South, Range 30 East; Thence, Northerly along said line and along the West line of said Township to the intersection with the centerline of State Road 29; Thence, Northerly along said centerline to the Point of Beginning.

(g) Coastal Collier County Water Use Basin, described as:

Collier County (See Figure 21-25)

Beginning at the Northeast corner of Section 11, Township 48 South, Range 25 East on the Collier-Lee County line; Thence, Southerly along the section lines to the centerline of County Highway 856; Thence, Easterly along said centerline to the centerline of County Highway 951; Thence, Southerly along said centerline to the South line of Section 15, Township 51 South, Range 26 East; Thence, Westerly along the section lines to the Easterly shoreline of the Gulf of Mexico; Thence, Northerly along that shoreline to the intersection with the Collier-Lee County line; Thence, Easterly along said County line to the Point of Beginning.

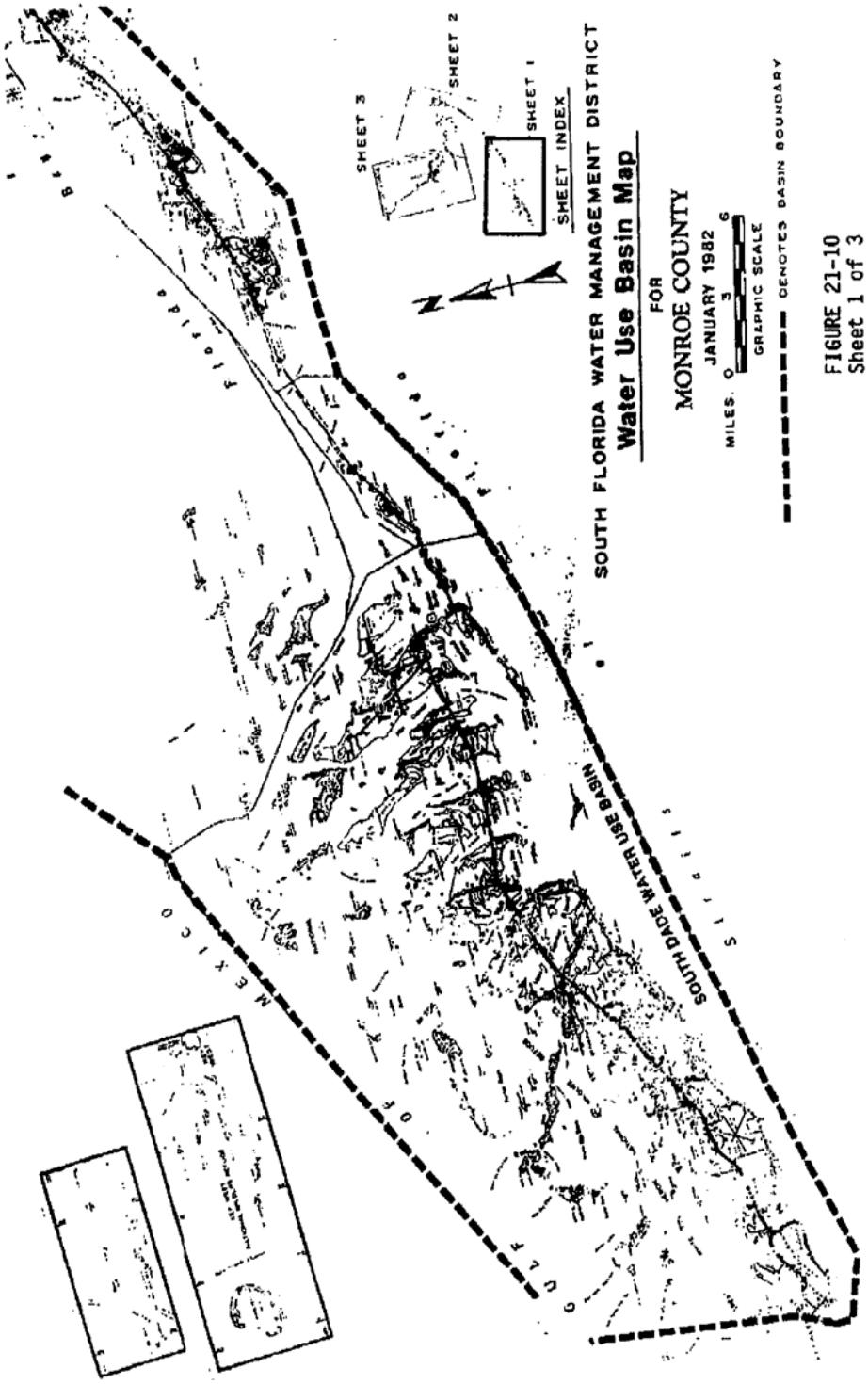


FIGURE 21-10
Sheet 1 of 3

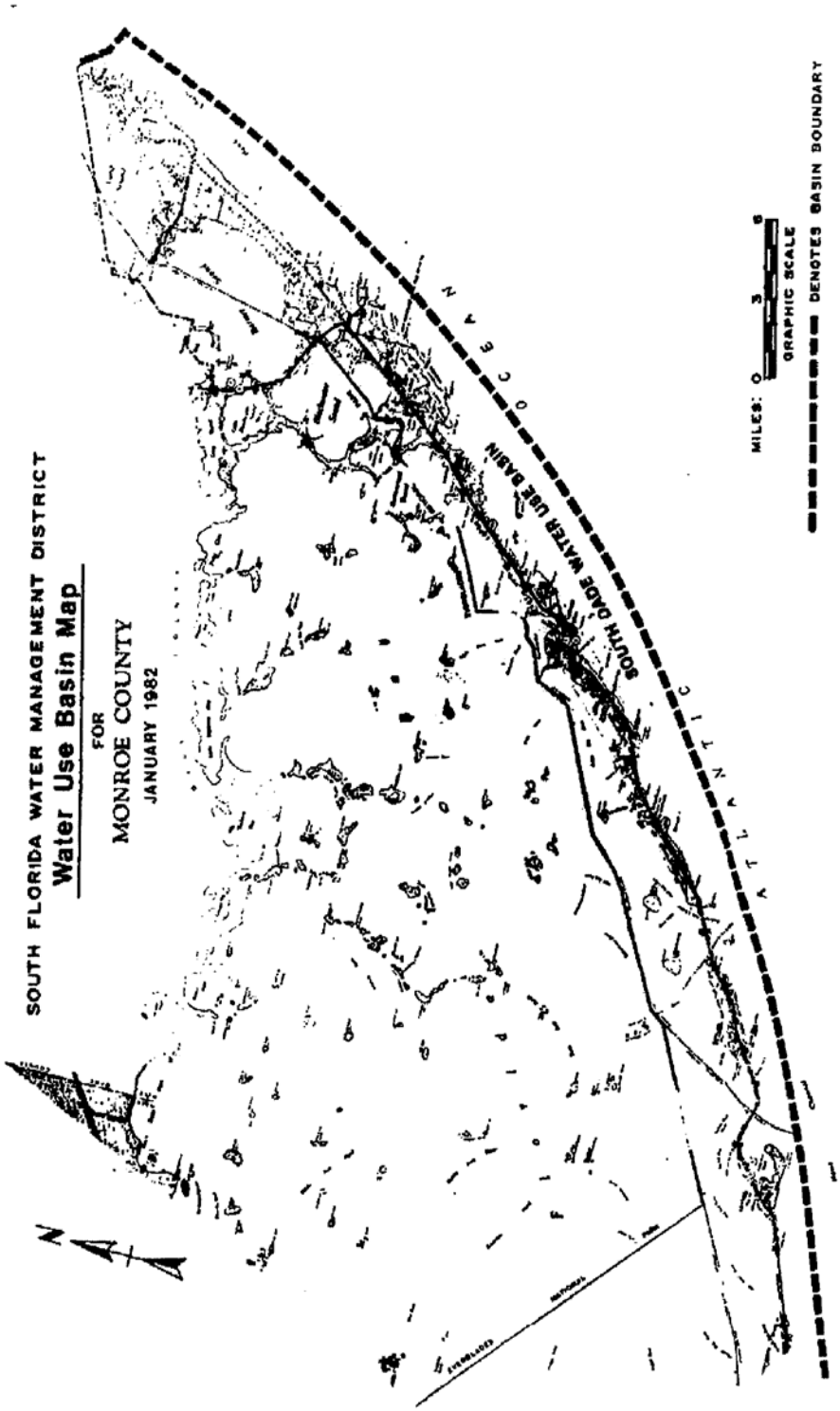
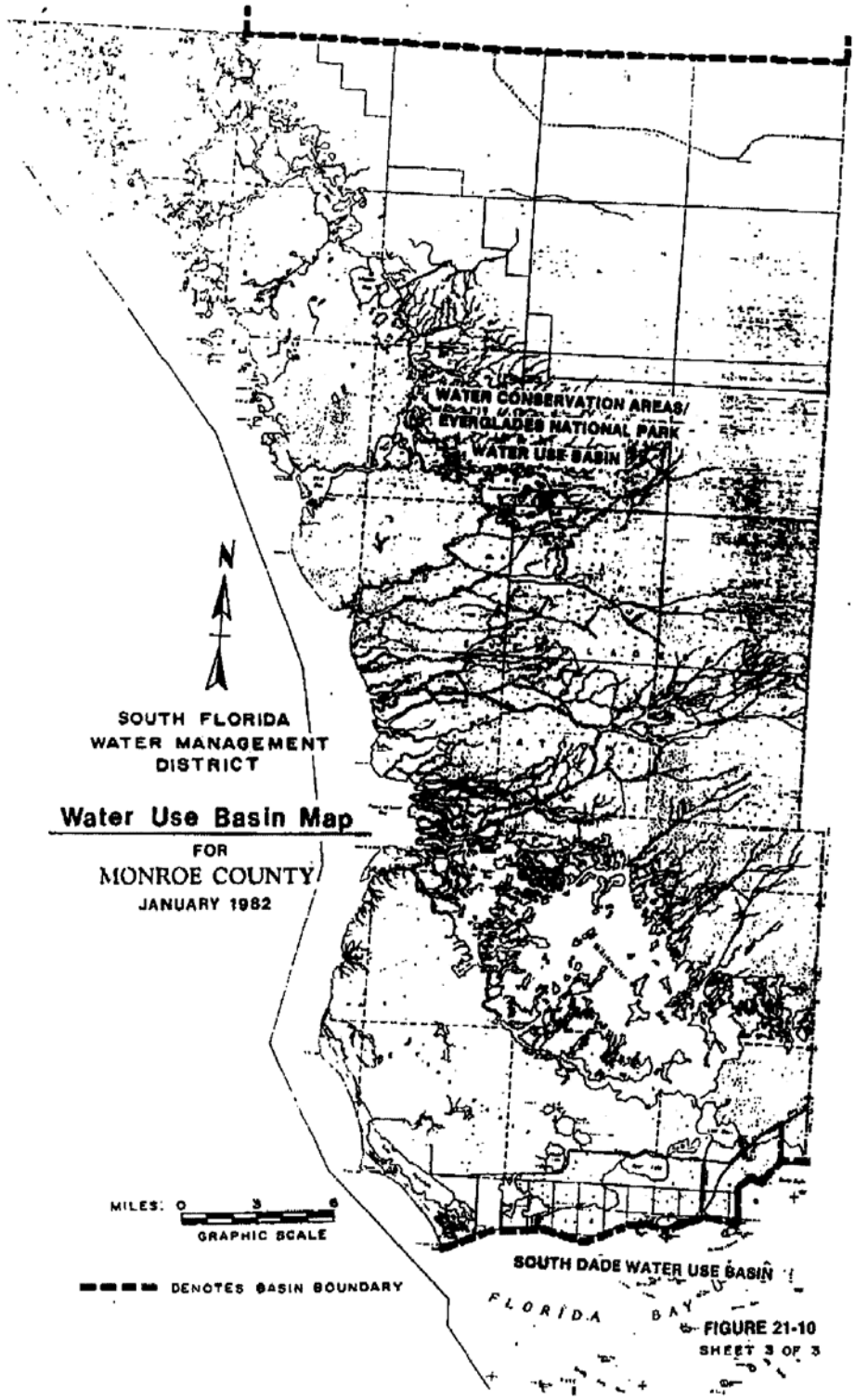


FIGURE 21-10
Sheet 2 of 3


WATER CONSERVATION AREAS/
EVERGLADES NATIONAL PARK
WATER USE BASIN
N
SOUTH FLORIDA
WATER MANAGEMENT
DISTRICT
Water Use Basin Map
FOR
MONROE COUNTY
JANUARY 1982
MILES: 0 3 6
GRAPHIC SCALE
DENOTES BASIN BOUNDARY
SOUTH DADE WATER USE BASIN
FLORIDA BAY
FIGURE 21-10
SHEET 3 OF 3

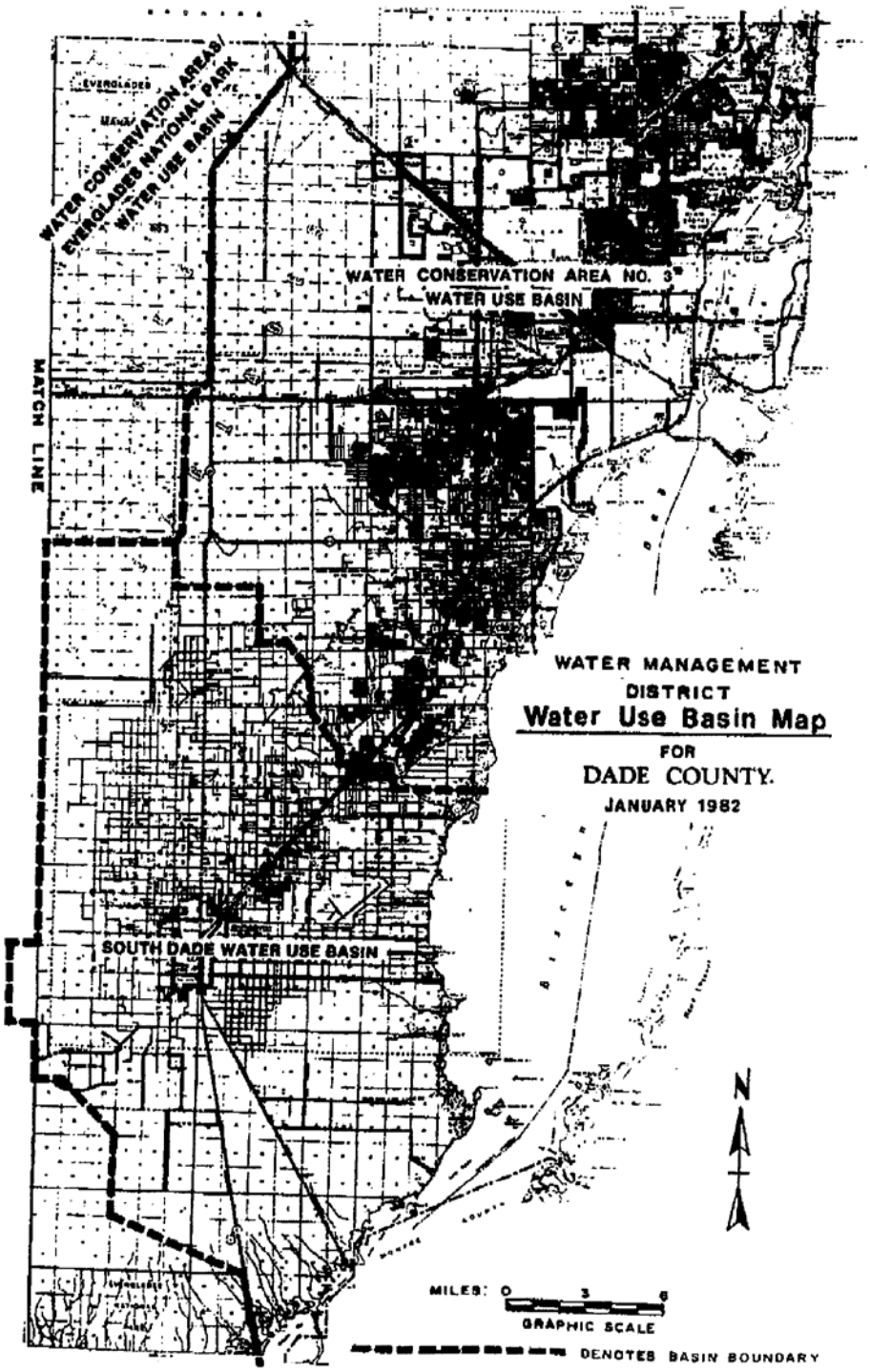
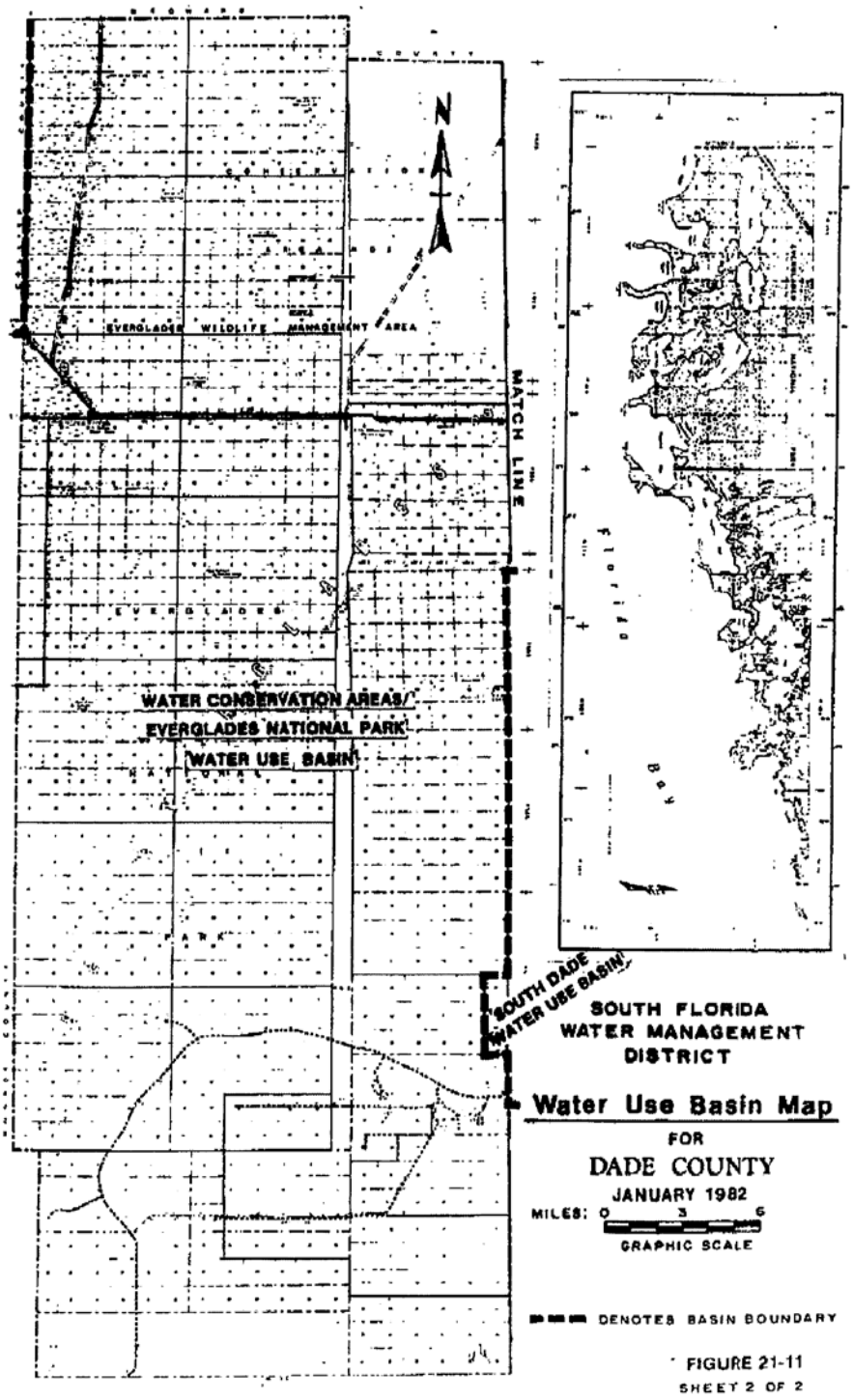


FIGURE 21-11
SHEET 1 OF 2


N
EVERGLADES WILDLIFE MANAGEMENT AREA
MATCH LINE
WATER CONSERVATION AREAS/
EVERGLADES NATIONAL PARK
WATER USE BASIN
SOUTH DADE WATER USE BASIN
SOUTH FLORIDA
WATER MANAGEMENT
DISTRICT
Water Use Basin Map
FOR
DADE COUNTY
JANUARY 1982
MILES: 0 3 6
GRAPHIC SCALE
DENOTES BASIN BOUNDARY
FIGURE 21-11
SHEET 2 OF 2

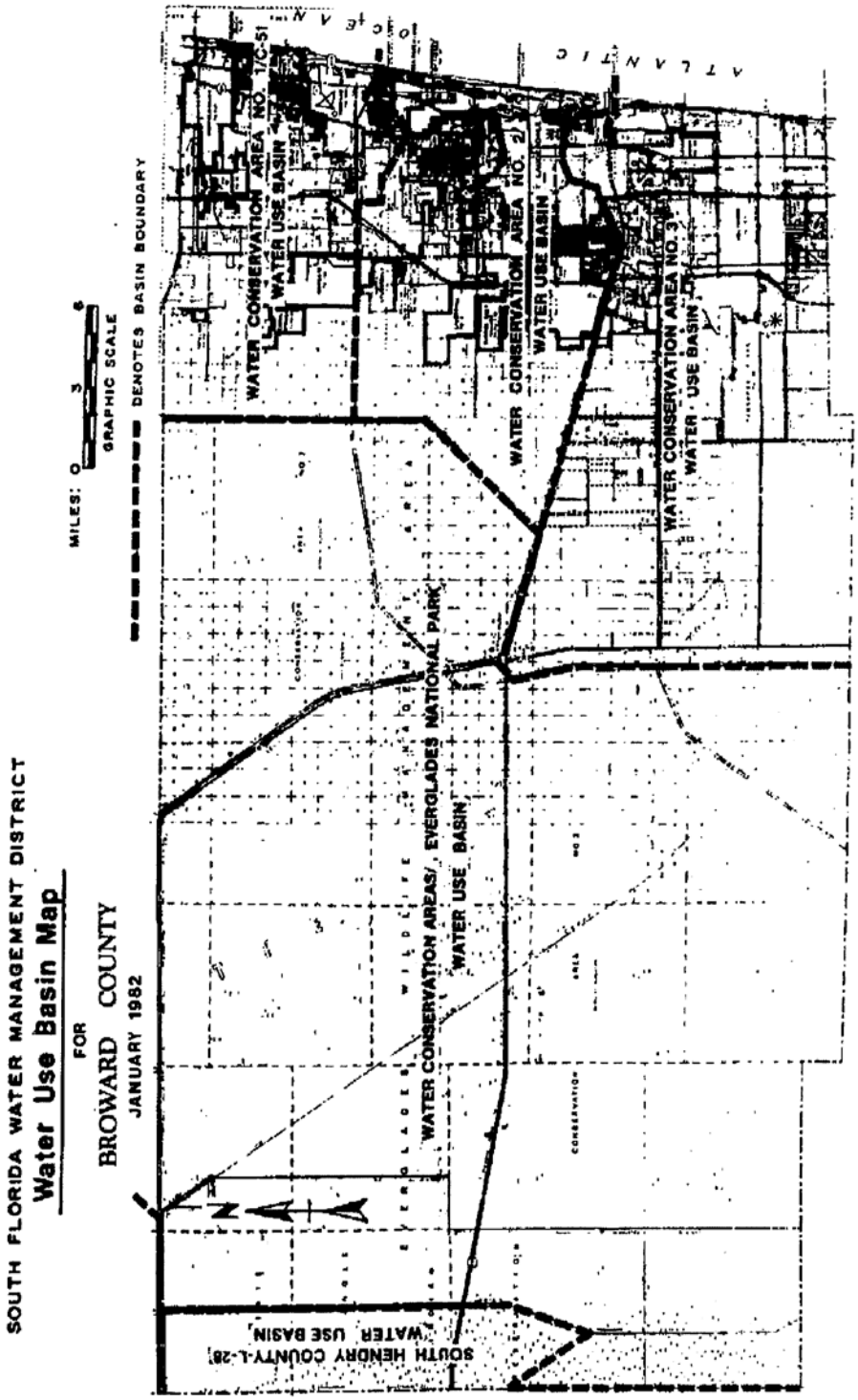
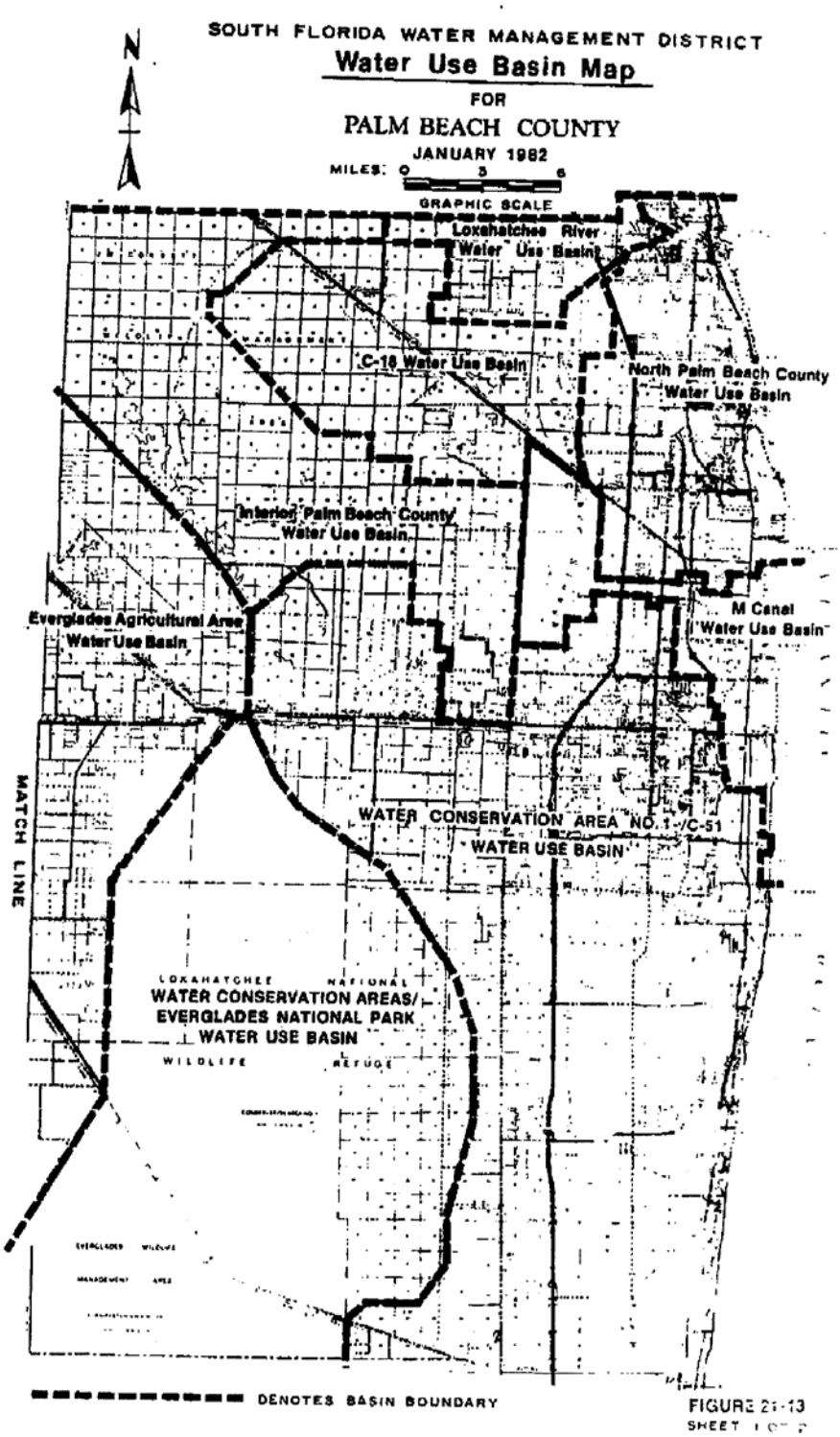
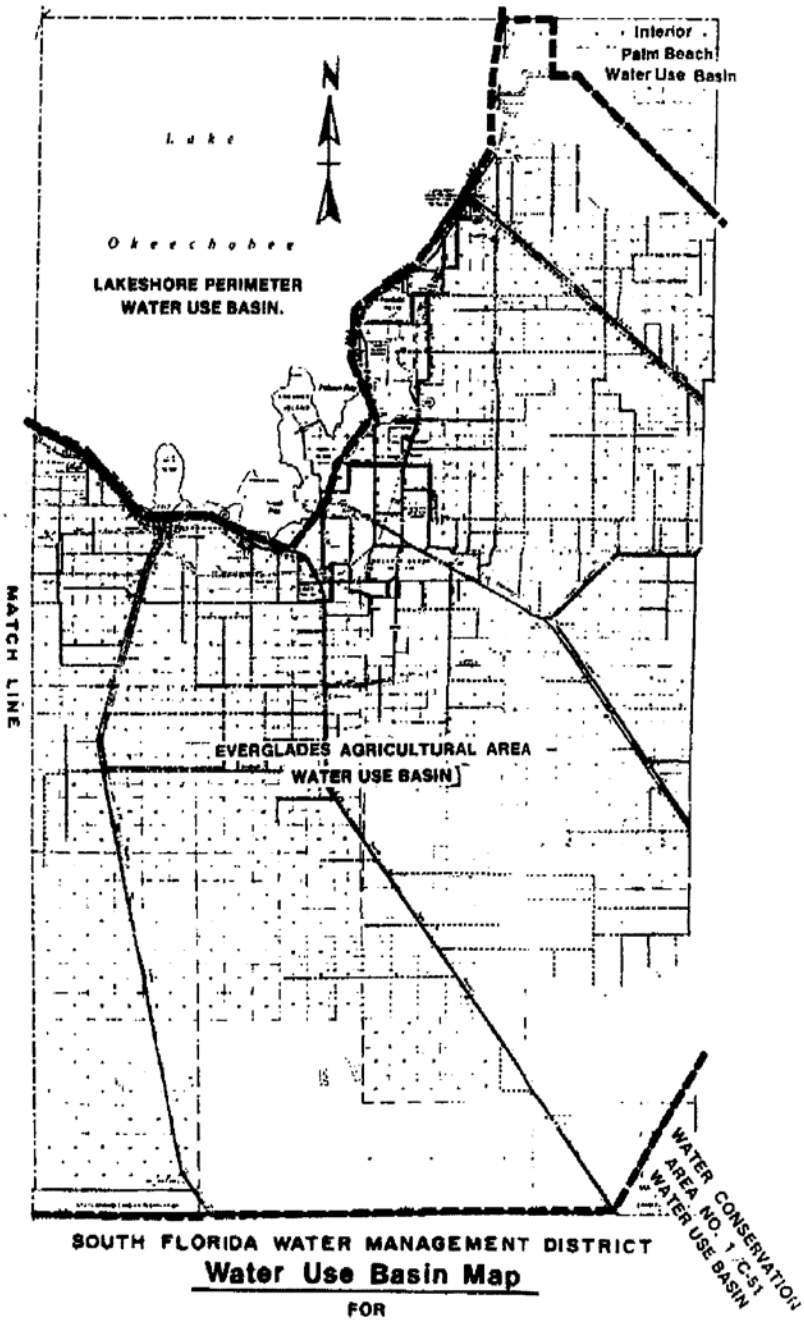

SOUTH FLORIDA WATER MANAGEMENT DISTRICT
Water Use Basin Map
FOR
BROWARD COUNTY
JANUARY 1982
MILES: 0 3 6
GRAPHIC SCALE
DENOTES BASIN BOUNDARY
WATER CONSERVATION AREA NO. 1/C-51
WATER USE BASIN
WATER CONSERVATION AREA NO. 2
WATER USE BASIN
WATER CONSERVATION AREA NO. 3
WATER USE BASIN
WATER CONSERVATION AREAS/ EVERGLADES NATIONAL PARK
WATER USE BASIN
SOUTH HENDRY COUNTY L-28
WATER USE BASIN
ATLANTIC
OCEAN

FIGURE 21-12


SOUTH FLORIDA WATER MANAGEMENT DISTRICT
Water Use Basin Map
FOR
PALM BEACH COUNTY
JANUARY 1982
MILES: 0 3 6
GRAPHIC SCALE
N
Loxahatchee River Water Use Basin
C-18 Water Use Basin
North Palm Beach County Water Use Basin
Interior Palm Beach County Water Use Basin
Everglades Agricultural Area Water Use Basin
M Canal Water Use Basin
MATCH LINE
WATER CONSERVATION AREA NO. 1 -/C-51 WATER USE BASIN
LOXAHATCHEE NATIONAL WILDLIFE REFUGE
WATER CONSERVATION AREAS/ EVERGLADES NATIONAL PARK WATER USE BASIN
DENOTES BASIN BOUNDARY
FIGURE 21-13



SOUTH FLORIDA WATER MANAGEMENT DISTRICT

Water Use Basin Map

FOR

PALM BEACH COUNTY

JANUARY 1982

MILES: 0 3 6

GRAPHIC SCALE

DENOTES BASIN BOUNDARY

FIGURE 21-13

SHEET 2 OF 2

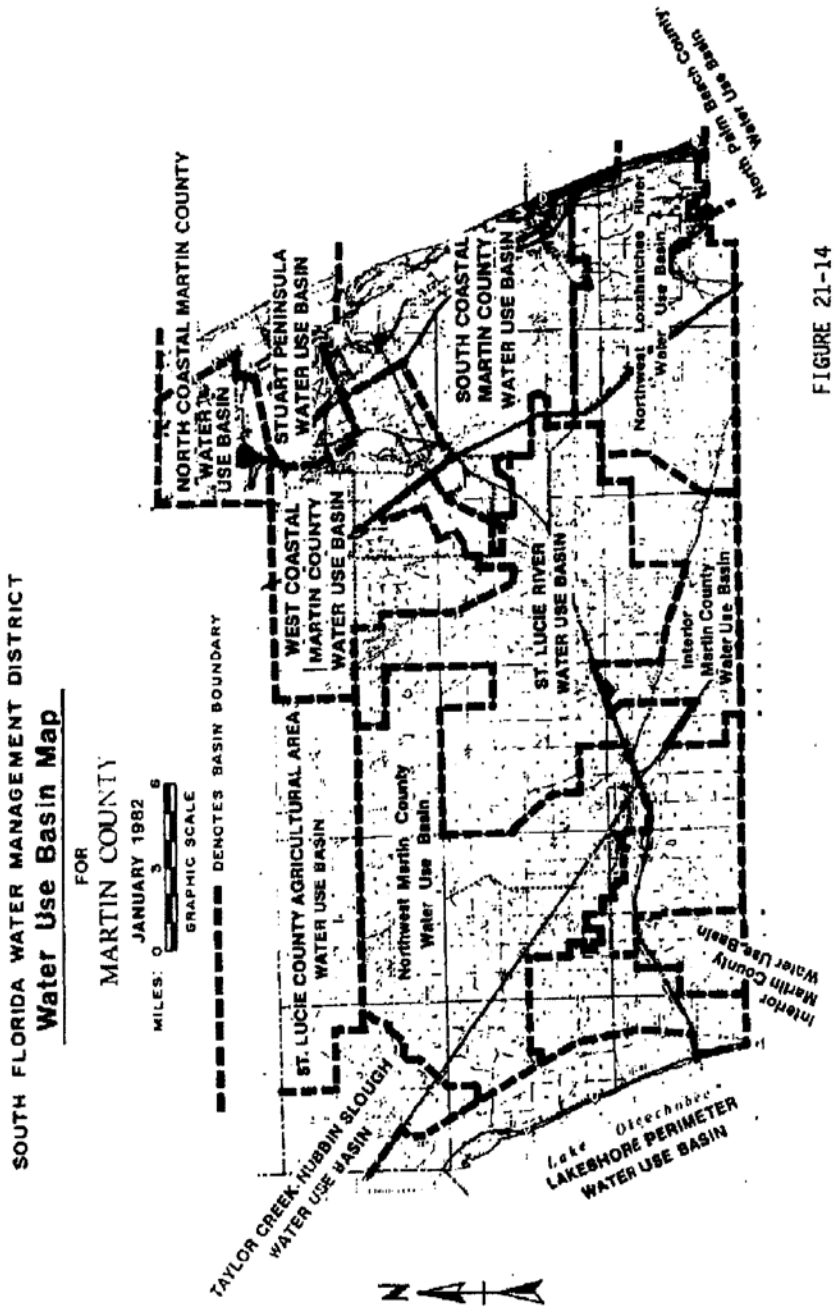
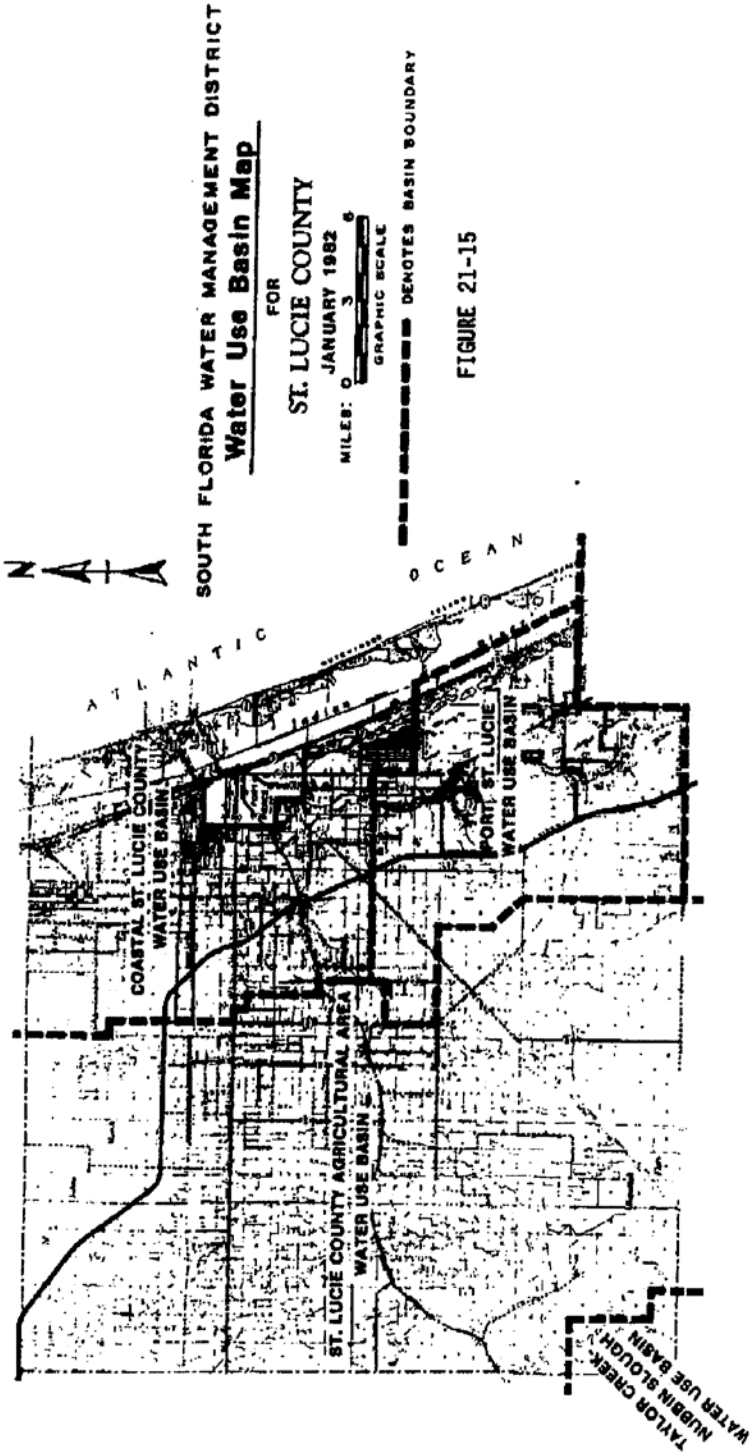


FIGURE 21-14
Revised Sept. 1982.


SOUTH FLORIDA WATER MANAGEMENT DISTRICT
Water Use Basin Map
FOR
ST. LUCIE COUNTY
JANUARY 1982
MILES: 0 3 6
GRAPHIC SCALE
DENOTES BASIN BOUNDARY
FIGURE 21-15
N
ATLANTIC OCEAN
COASTAL ST. LUCIE COUNTY WATER USE BASIN
ST. LUCIE COUNTY AGRICULTURAL AREA WATER USE BASIN
PORT ST. LUCIE WATER USE BASIN
TAYLOR CREEK-NUBBIN SLOUGH WATER USE BASIN

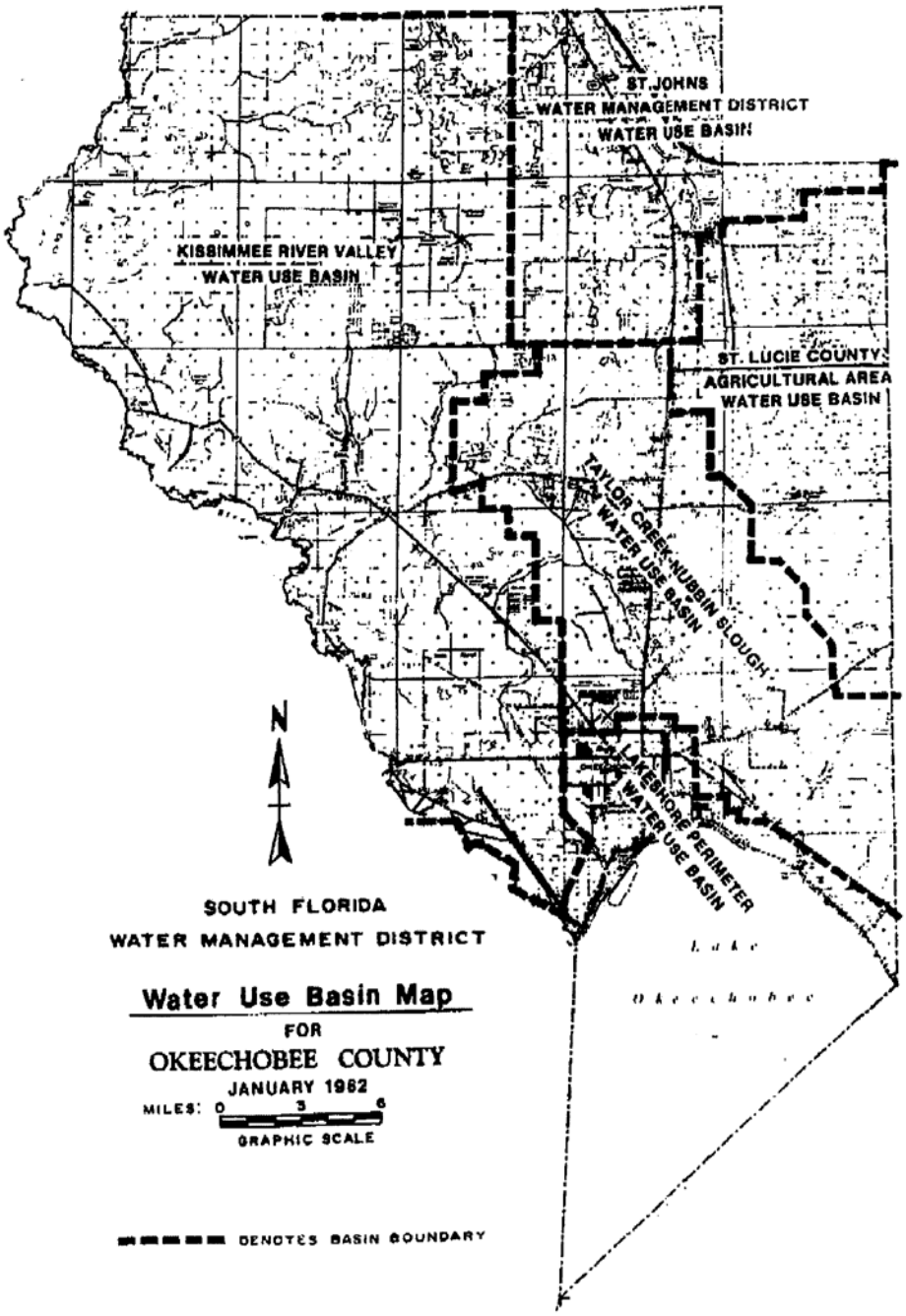

ST. JOHNS
WATER MANAGEMENT DISTRICT
WATER USE BASIN
KISSIMMEE RIVER VALLEY
WATER USE BASIN
ST. LUCIE COUNTY
AGRICULTURAL AREA
WATER USE BASIN
TAYLOR CREEK-NUBBIN SLOUGH
WATER USE BASIN
LAKESHORE PERIMETER
WATER USE BASIN
N
SOUTH FLORIDA
WATER MANAGEMENT DISTRICT
Water Use Basin Map
FOR
OKEECHOBEE COUNTY
JANUARY 1982
MILES: 0 3 6
GRAPHIC SCALE
DENOTES BASIN BOUNDARY

FIGURE 21-16

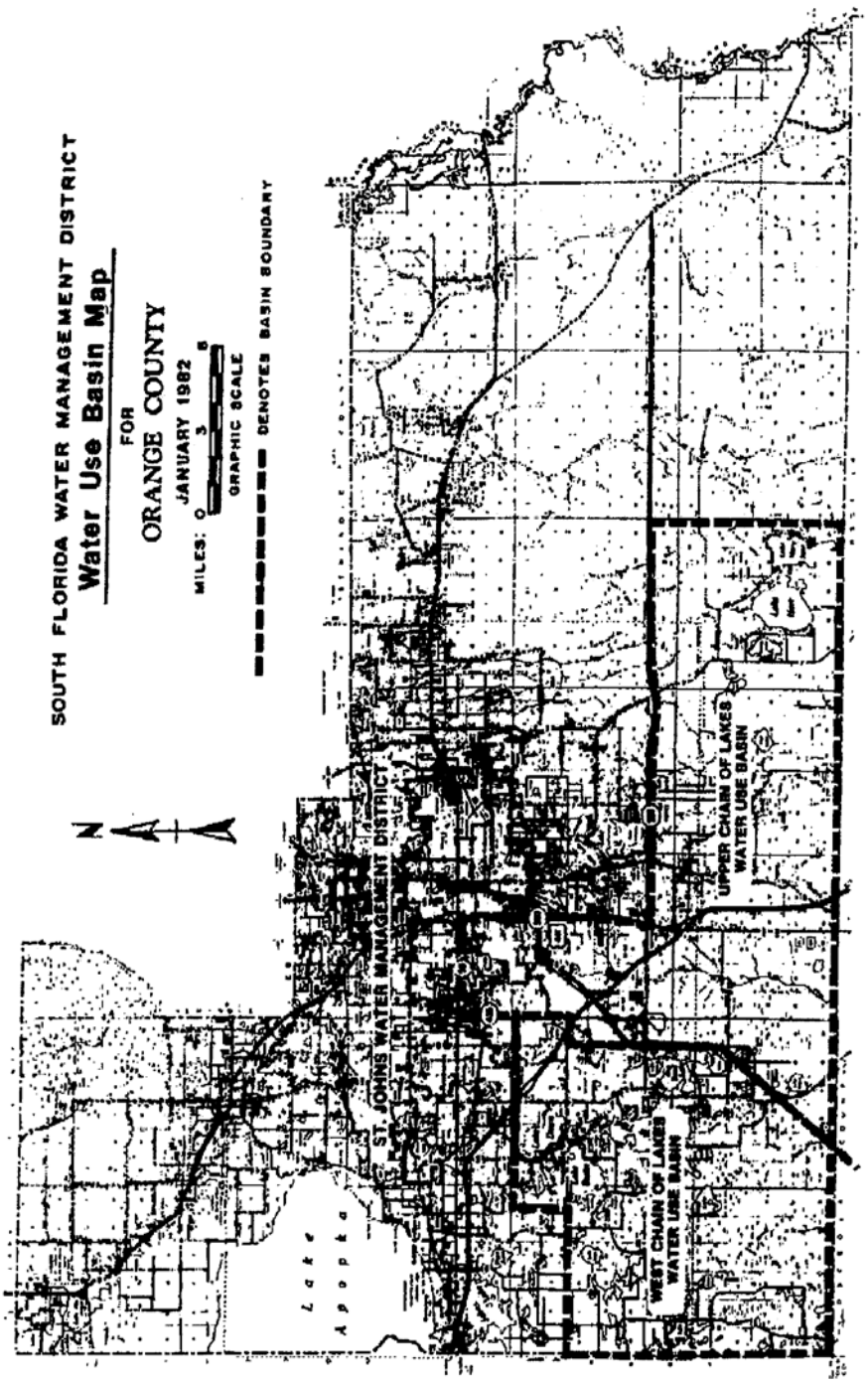

SOUTH FLORIDA WATER MANAGEMENT DISTRICT
Water Use Basin Map
FOR
ORANGE COUNTY
JANUARY 1982
MILES: 0 3 6
GRAPHIC SCALE
DENOTES BASIN BOUNDARY
N
Lake Apopka
ST. JOHNS WATER MANAGEMENT DISTRICT
WEST CHAIN OF LAKES WATER USE BASIN
UPPER CHAIN OF LAKES WATER USE BASIN

FIGURE 21-17

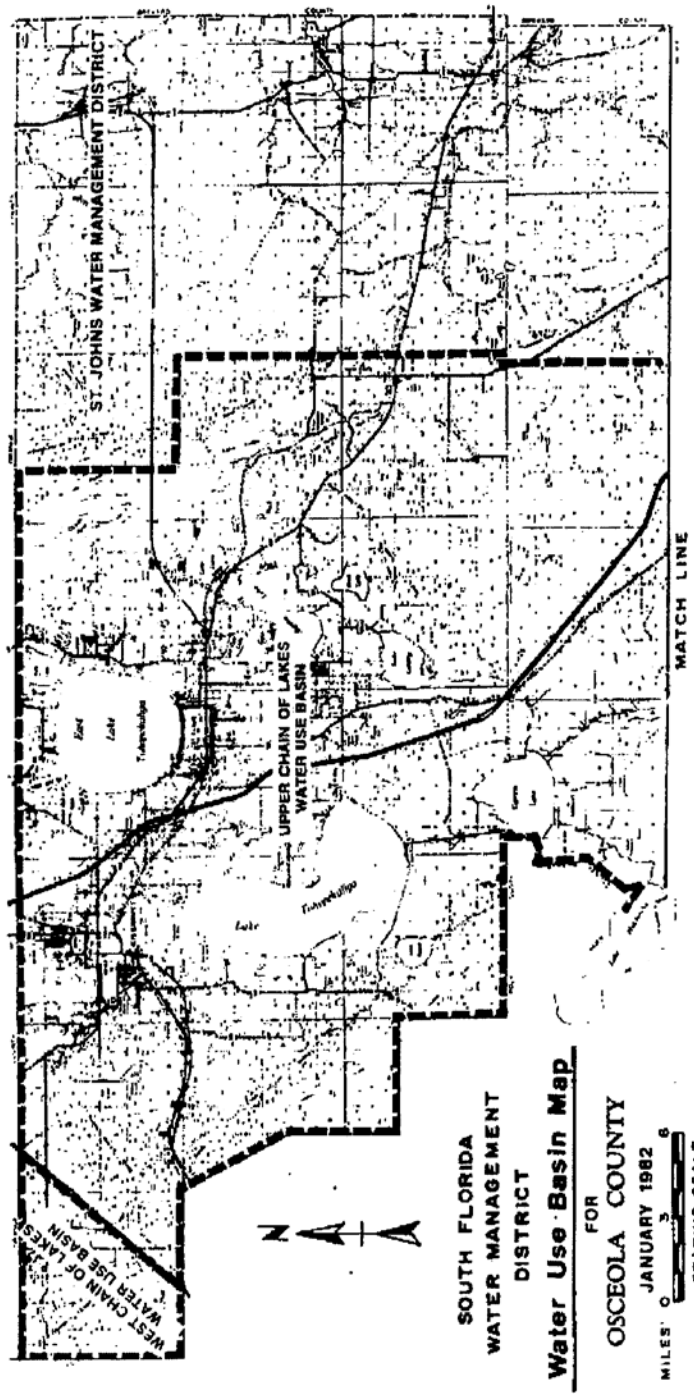


FIGURE 21-18
Sheet 1 of 2

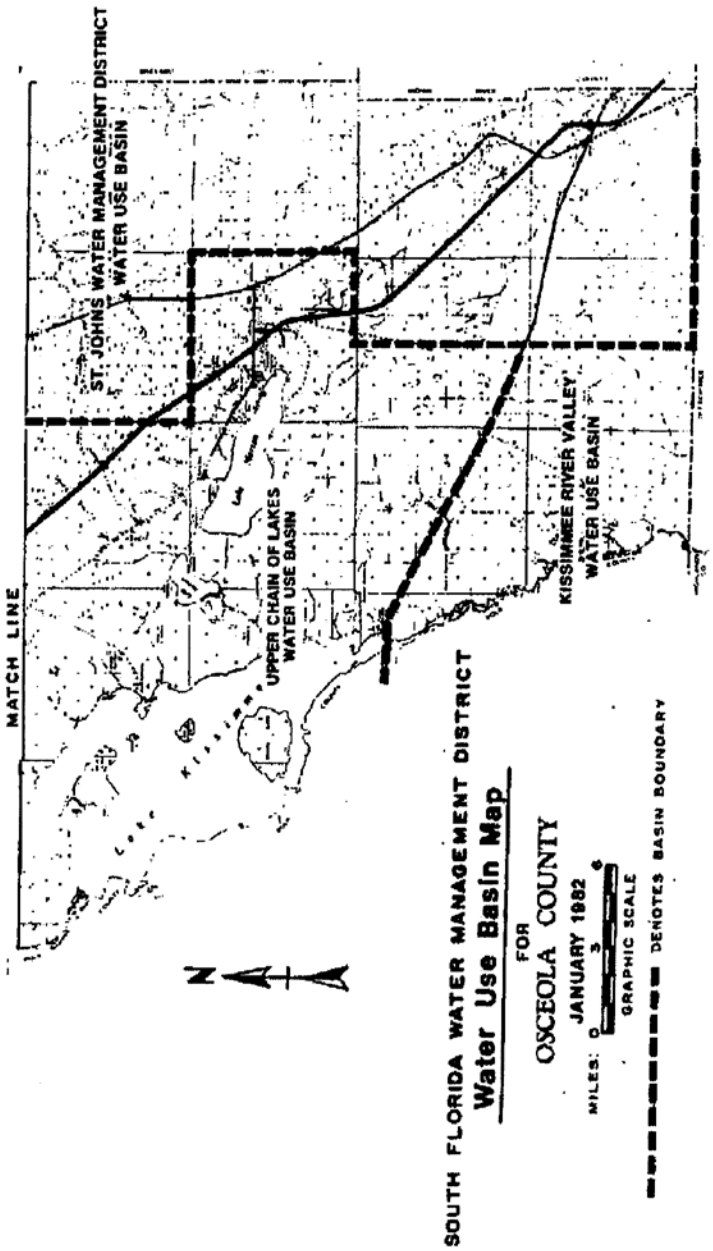


FIGURE 21-18
Sheet 2 of 2

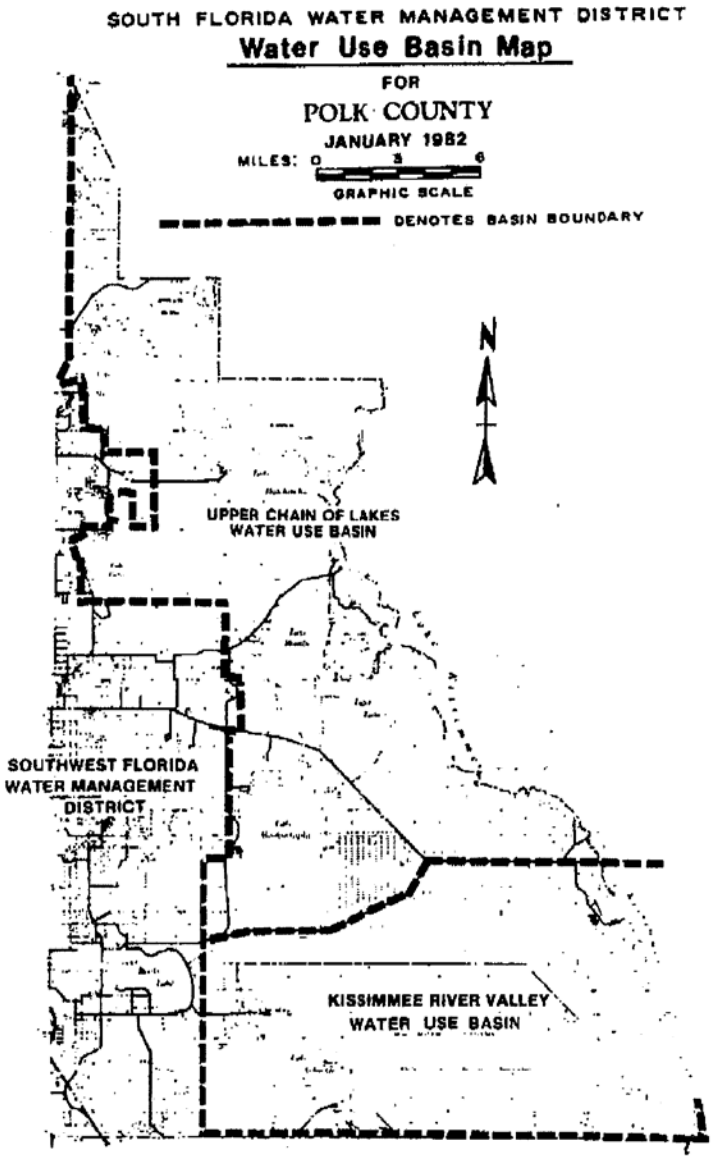

SOUTH FLORIDA WATER MANAGEMENT DISTRICT
Water Use Basin Map
FOR
POLK COUNTY
JANUARY 1982
MILES: 0 3 6
GRAPHIC SCALE
DENOTES BASIN BOUNDARY
N
UPPER CHAIN OF LAKES
WATER USE BASIN
SOUTHWEST FLORIDA
WATER MANAGEMENT
DISTRICT
KISSIMMEE RIVER VALLEY
WATER USE BASIN

FIGURE 21-19

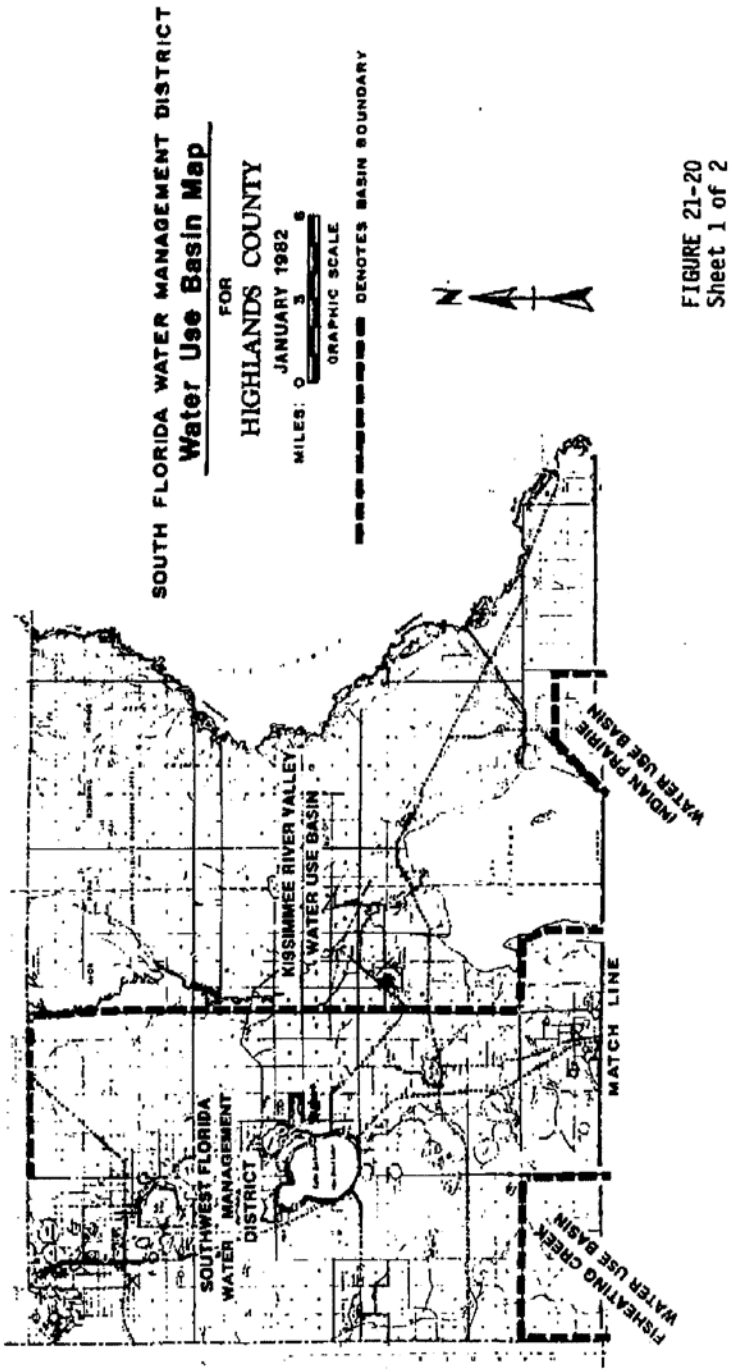


FIGURE 21-20
Sheet 1 of 2

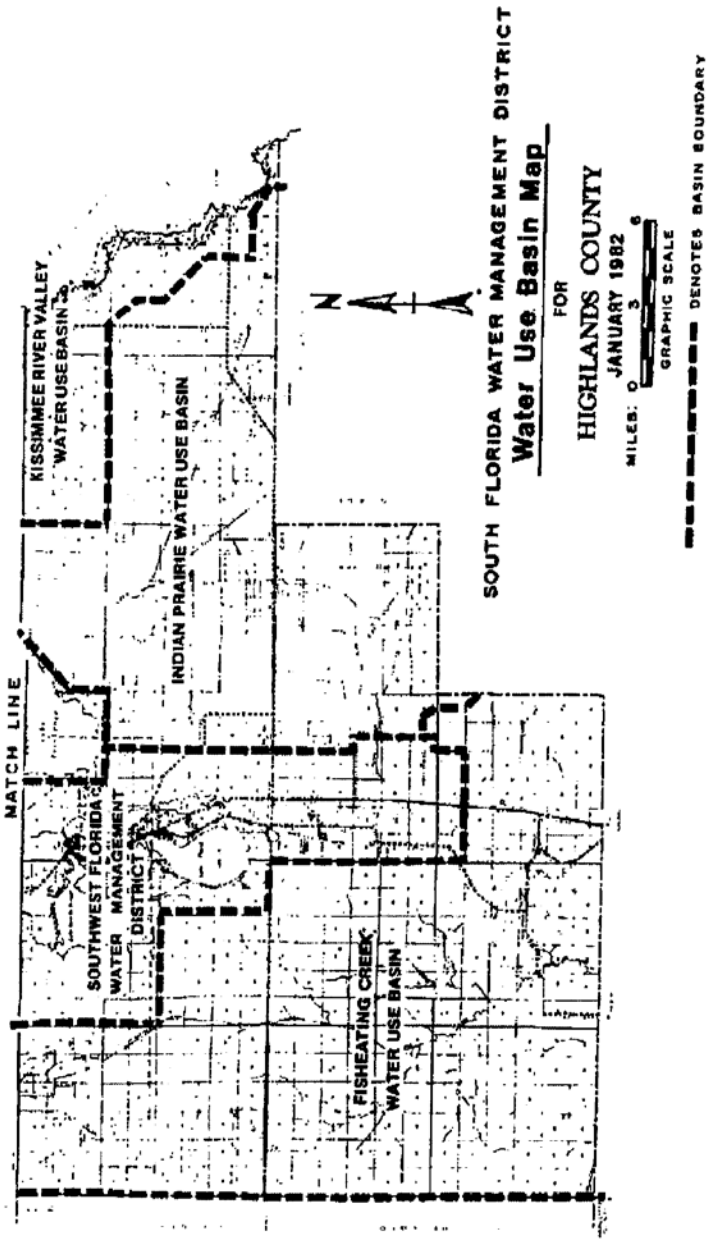


FIGURE 21-20
Sheet 2 of 2

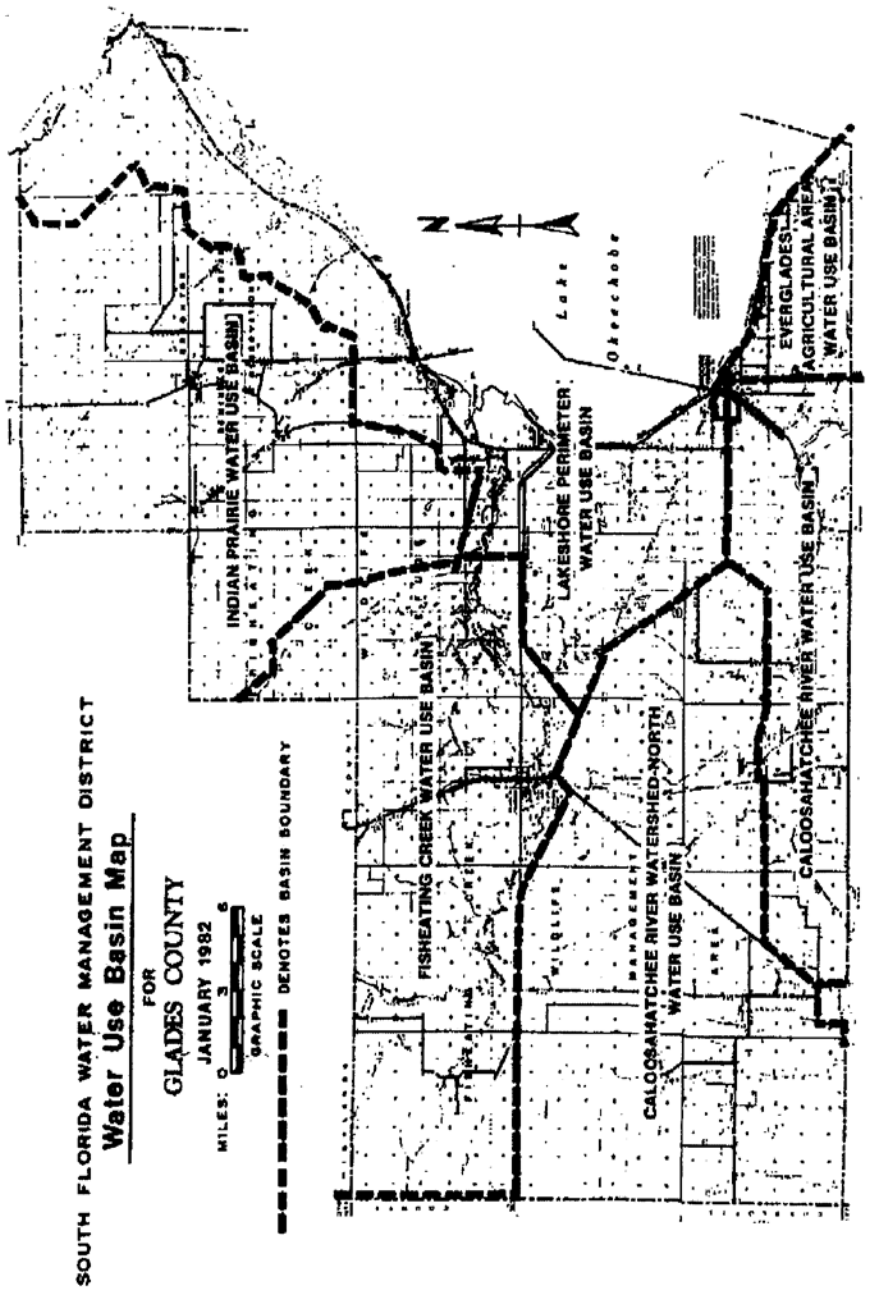

SOUTH FLORIDA WATER MANAGEMENT DISTRICT
Water Use Basin Map
FOR
GLADES COUNTY
JANUARY 1982
MILES: 0 3 6
GRAPHIC SCALE
DENOTES BASIN BOUNDARY
INDIAN PRAIRIE WATER USE BASIN
FISHEATING CREEK WATER USE BASIN
LAKESHORE PERIMETER WATER USE BASIN
CALOOSAHATCHEE RIVER WATERSHED-NORTH WATER USE BASIN
CALOOSAHATCHEE RIVER WATER USE BASIN
EVERGLADES AGRICULTURAL AREA WATER USE BASIN
Lake Okeechobee
N

FIGURE 21-21

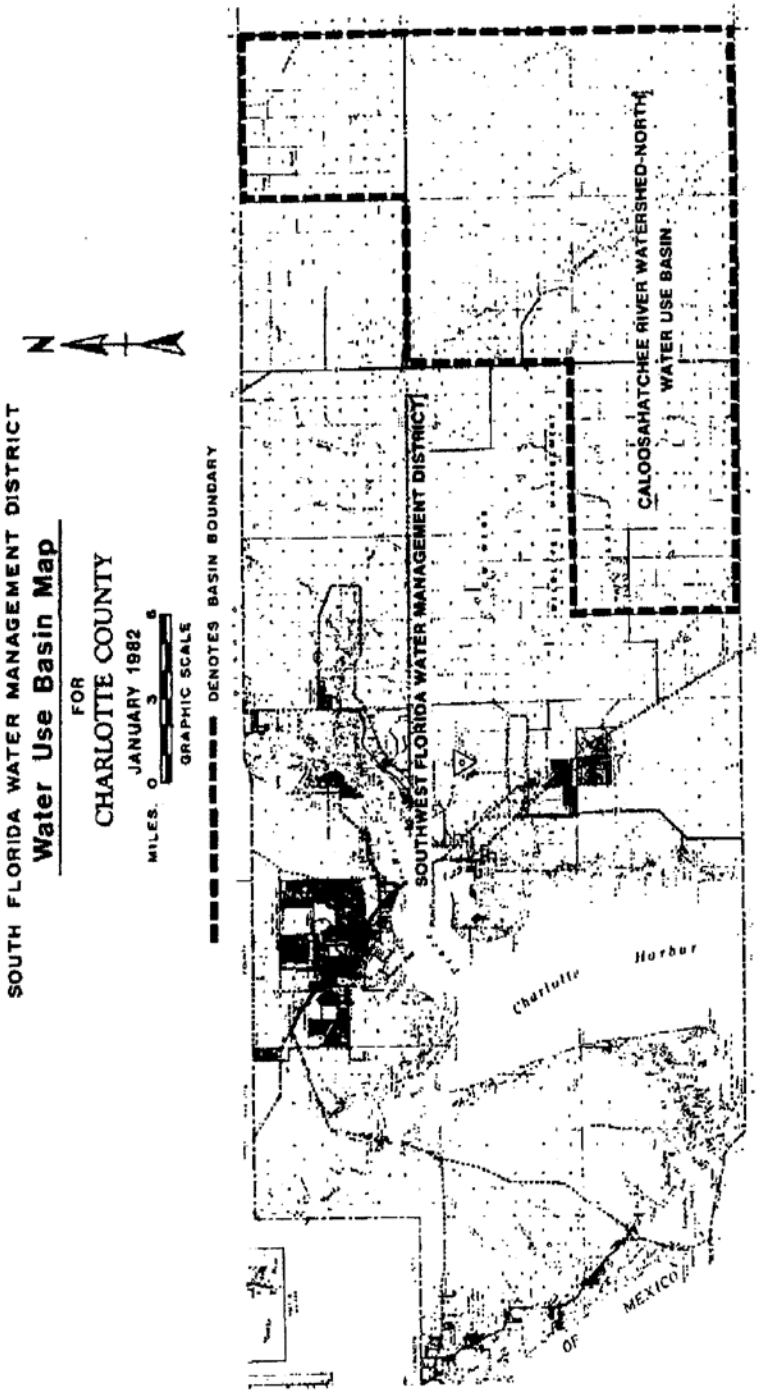
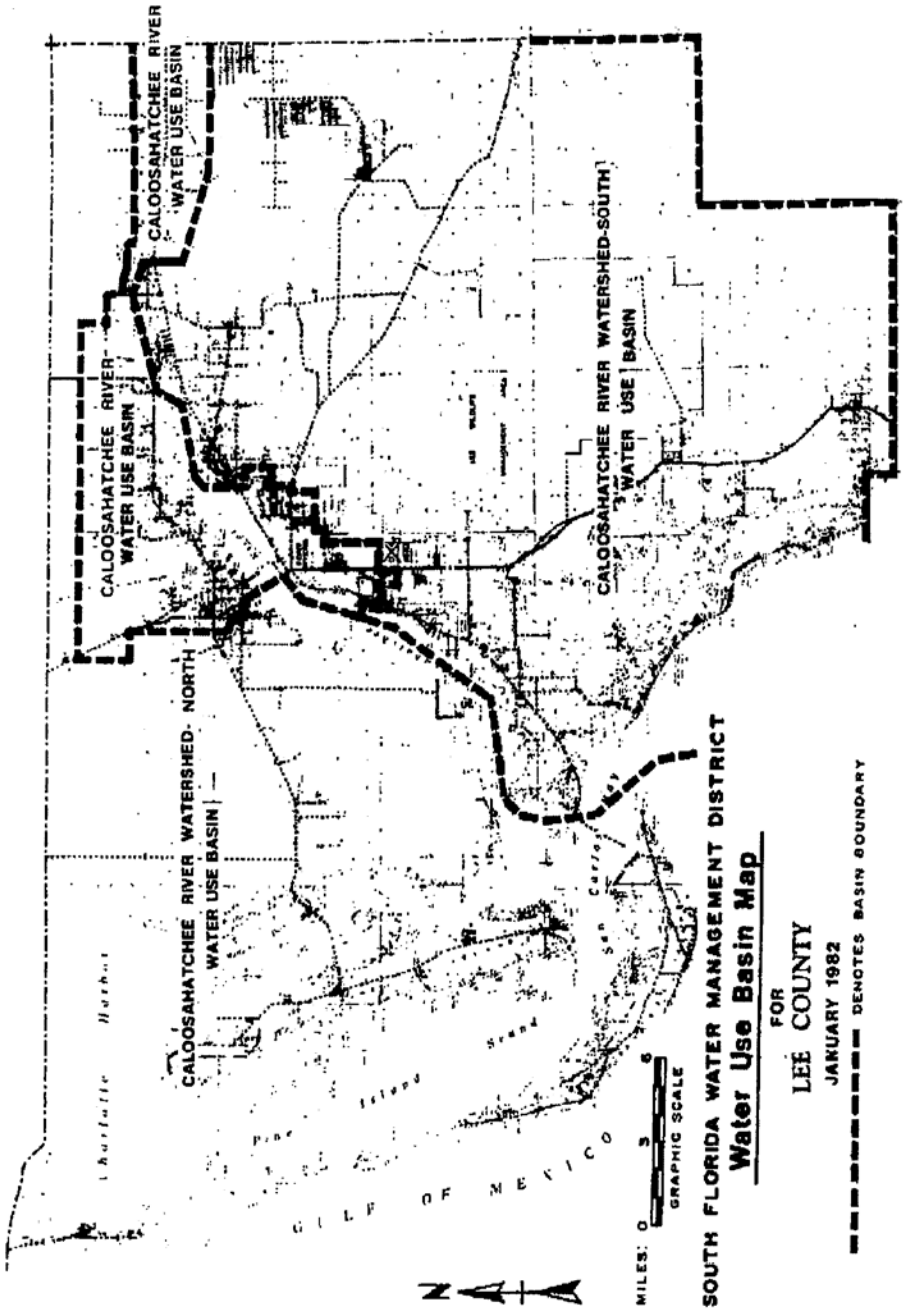

SOUTH FLORIDA WATER MANAGEMENT DISTRICT
Water Use Basin Map
FOR
CHARLOTTE COUNTY
JANUARY 1982
MILES. 0 3 6
GRAPHIC SCALE
DENOTES BASIN BOUNDARY
N
SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT
CALOOSAHATCHEE RIVER WATERSHED-NORTH
WATER USE BASIN
Charlotte
Harbor
OF
MEXICO

FIGURE 21-22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GRAPHIC SCALE
N
SOUTH FLORIDA WATER MANAGEMENT DISTRICT
Water Use Basin Map
FOR
LEE COUNTY
JANUARY 1982
DENOTES BASIN BOUNDARY

FIGURE 21-23

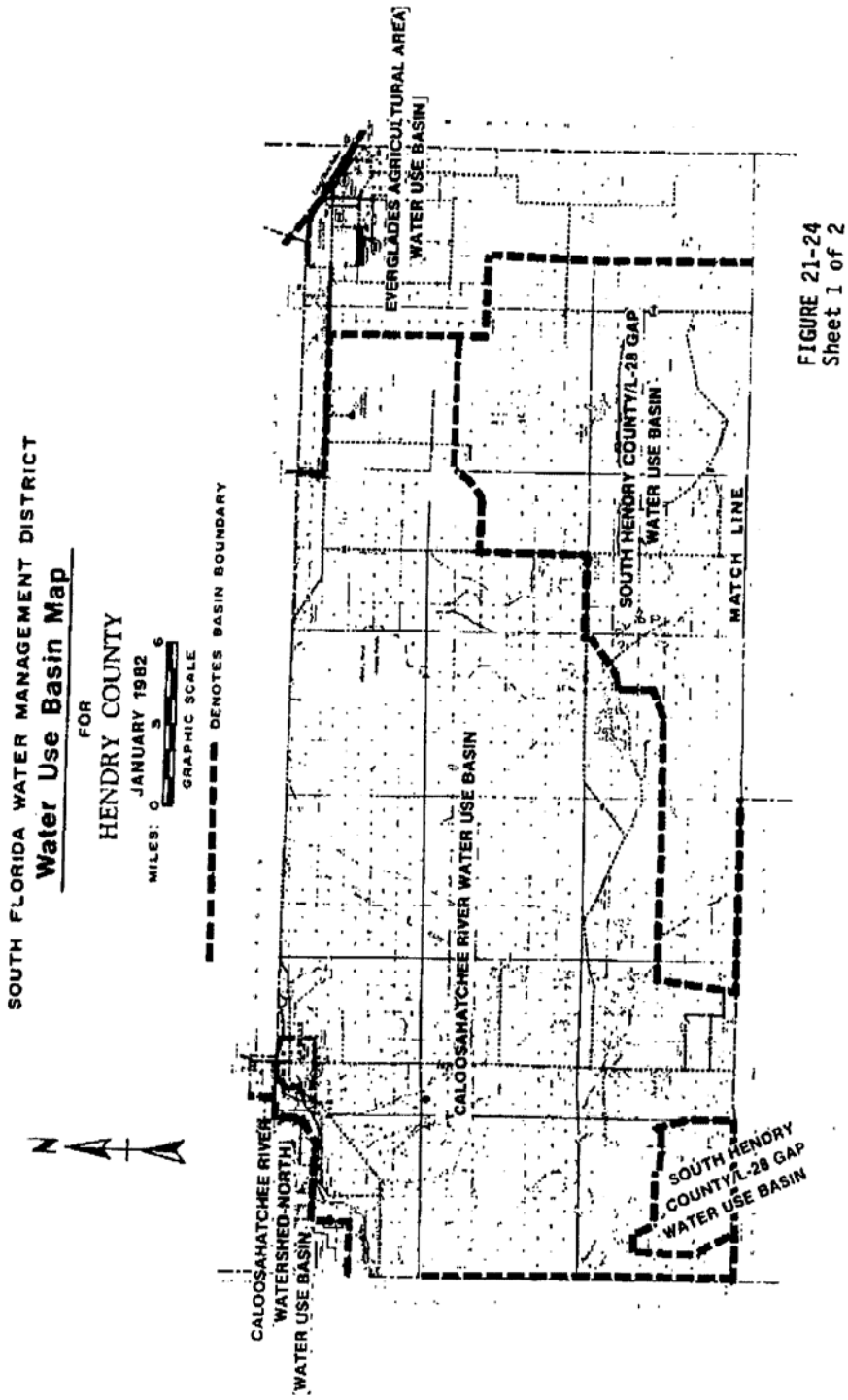


FIGURE 21-24
Sheet 1 of 2

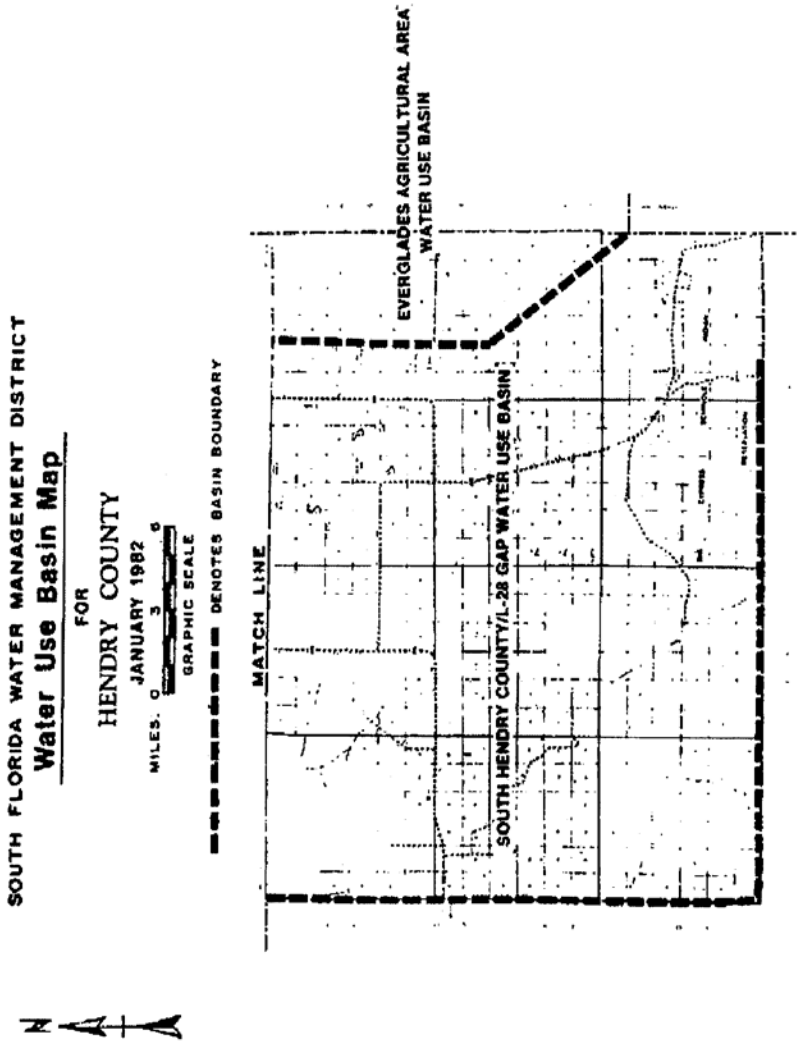


FIGURE 21-24
Sheet 2 of 2

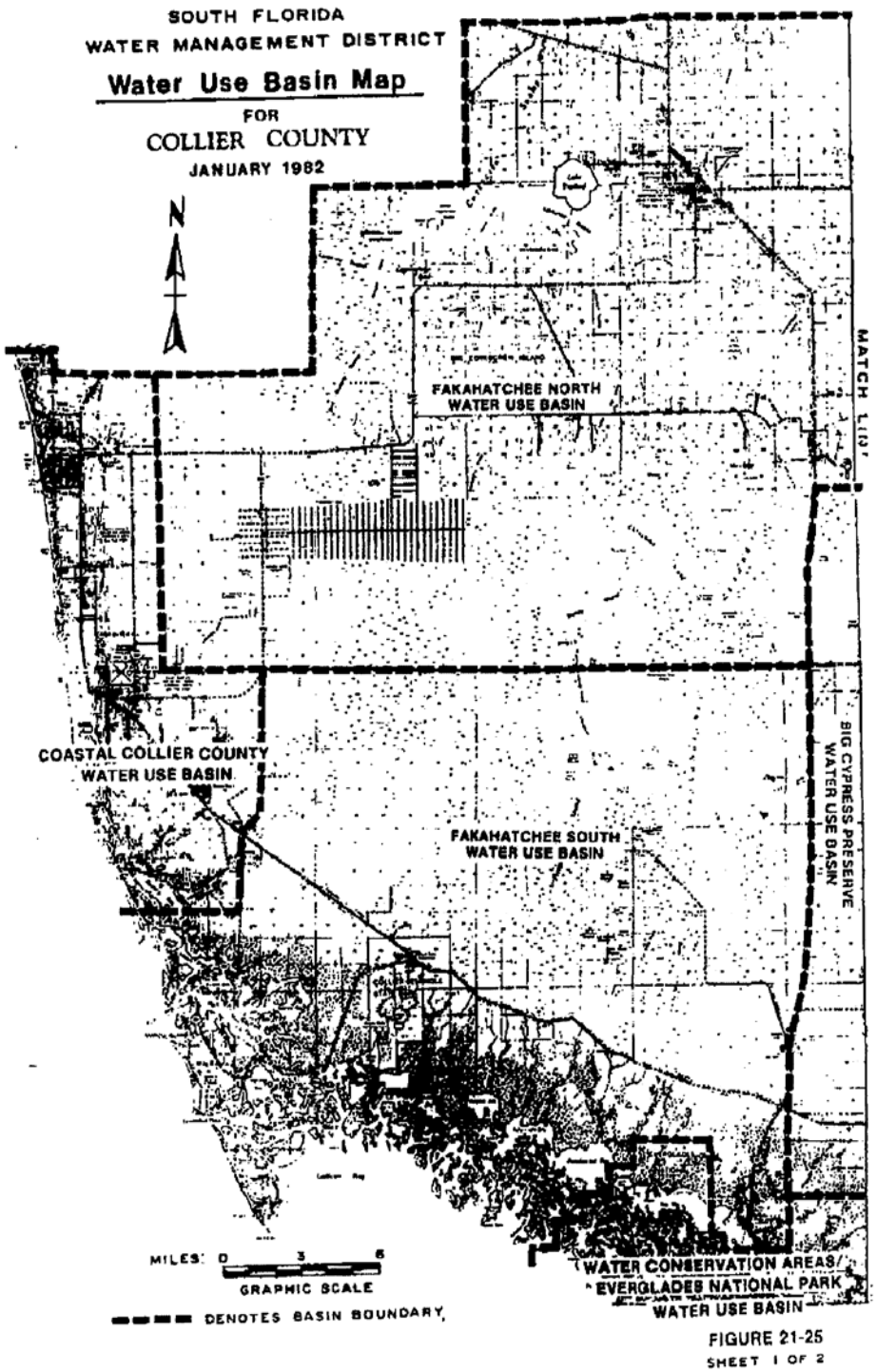


FIGURE 21-25
SHEET 1 OF 2

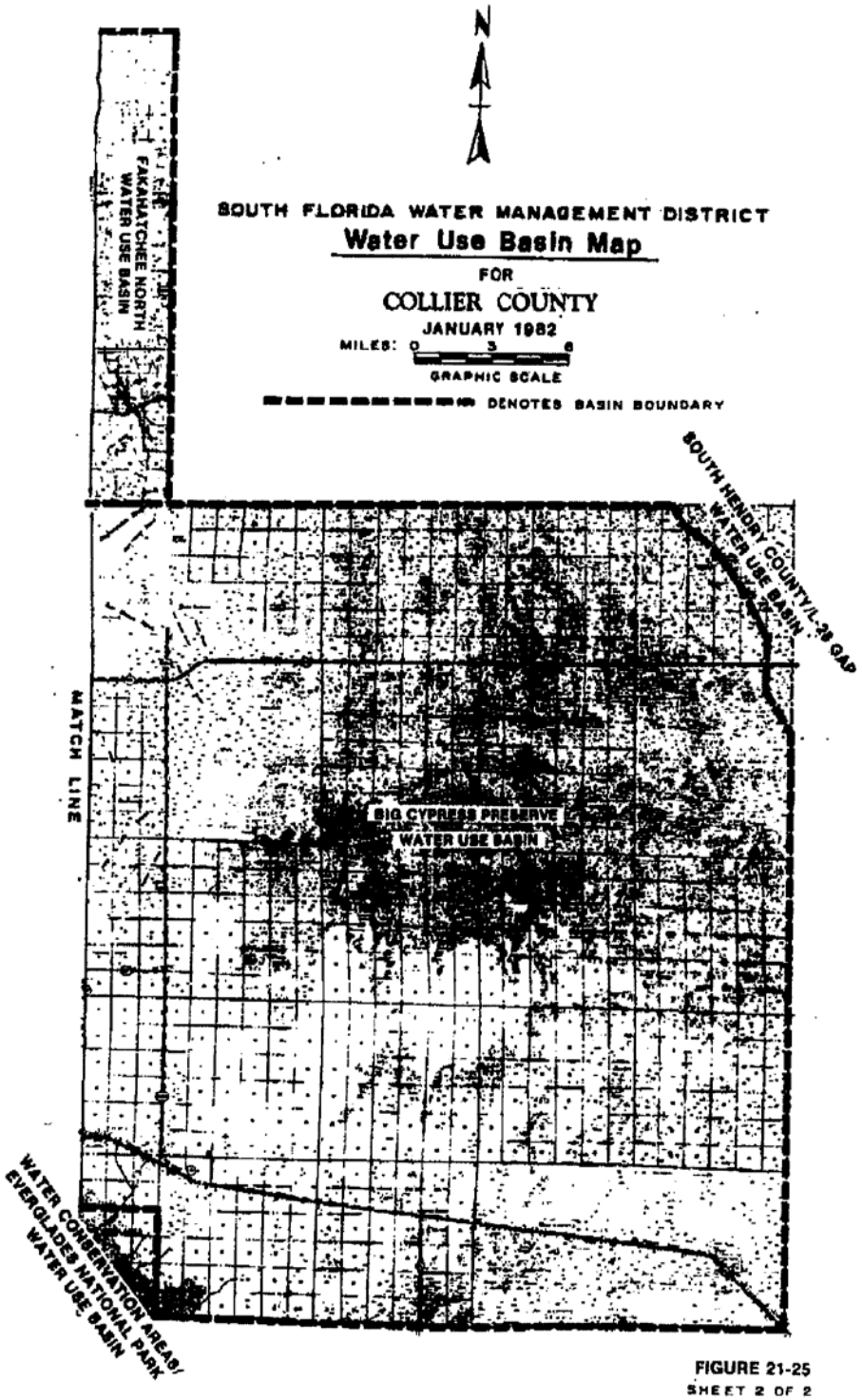


FIGURE 21-25
SHEET 2 OF 2

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.175, 373.246 FS. History–New 5-31-82.

Rules of the
South Florida Water Management District

CHAPTER 40E-22
REGIONAL WATER SHORTAGE PLANS

Effective: May 27, 2012

CHAPTER 40E-22
REGIONAL WATER SHORTAGE PLANS

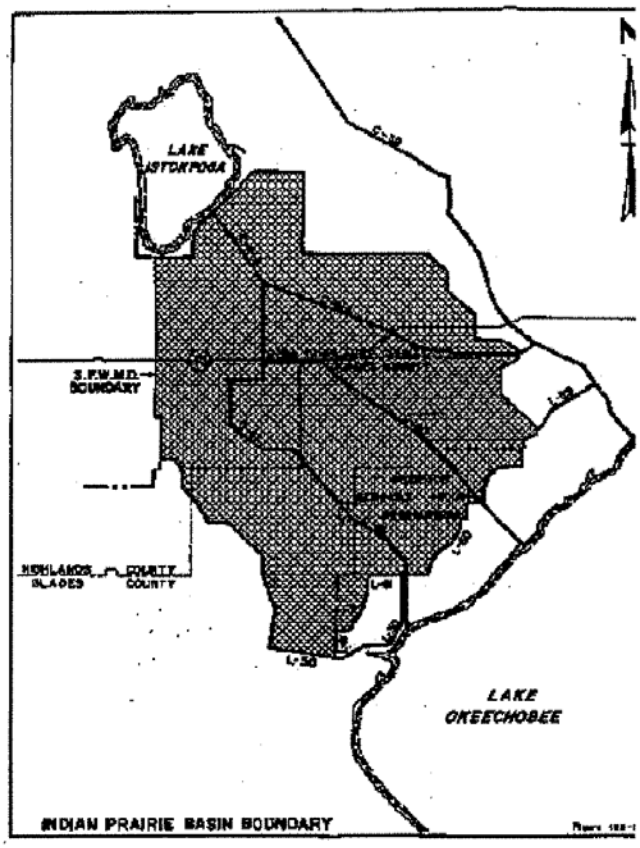
40E-22.011 Policy and Purpose
40E-22.061 Indian Prairie Basin Boundary
40E-22.072 Minimum Levels
40E-22.082 Minimum Flows (Repealed)
40E-22.112 Permit Classification (Repealed)
40E-22.122 Termination of Withdrawals
40E-22.132 Water Shortage Plan (Repealed)
40E-22.212 Policy and Purpose
40E-22.222 St. Lucie County Agricultural Area Boundary
40E-22.232 Minimum Levels
40E-22.242 Minimum Flows (Repealed)
40E-22.252 Permit Classification (Repealed)
40E-22.262 Termination of Withdrawals
40E-22.272 Water Use Restrictions (Repealed)
40E-22.312 Policy and Purpose
40E-22.322 Geographic Application
40E-22.332 Water Shortage Triggers

40E-22.011 Policy and Purpose.
This part establishes minimum water levels for Lake Istokpoga and the canals within the Indian Prairie Basin, minimum flows for the canals within the Indian Prairie Basin and Arbuckle Creek and Josephine Creek and a permit classification system and water shortage plan for the Lake Istokpoga-Indian Prairie Area. The rules in this part apply to water withdrawals from Lake Istokpoga and the Indian Prairie Basin.

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.042, 373.086, 373.103(4), 373.175, 373.246 FS. History–New 9-3-81, Formerly 16K-30.01, 40E-21.011.

40E-22.061 Indian Prairie Basin Boundary.
(See Figure 21-1.) The Indian Prairie Basin includes the areas within the following boundaries: Begin at the northeast corner of Section 1, Township 38 South, Range 33 East, in the North boundary line of Glades County; thence, southwesterly, to the southwest corner of the northwest one-quarter of said Section 1; thence, southerly, along the West line of Sections 1 and 12, Township 38 South, Range 33 East, to the northwest corner of Section 13, Township 38 South, Range 33 East; thence, southeasterly, to the southeast corner of Section 19, Township 38 South, Range 34 East; thence, southerly, to the intersection thereof with the southerly right of way line of South Florida Water Management District Levee 59; thence, southwesterly, along the southeasterly right of way lines of South Florida Water Management District Levees 59, 60 and 61, to the intersection thereof with the southerly right of way line of South Florida Water Management District Levee 50; thence, westerly and northerly, along said right of way line and its northerly extension, to the intersection thereof with the North line of Section 2, Township 40 South, Range 31 East; thence, westerly, along the Section line, to the southwest corner of Section 35, Township 39 South, Range 31 East; thence, northerly, along the Section line, to the northwest corner of said Section 35; thence, northwesterly, to the northwest corner of Section 27, Township 39 South, Range 31 East; thence, northwesterly to the northwest corner of Section 21, Township 39 South, Range 31 East; thence, westerly, along the Section line, to the southwest corner of Section 17, Township 39 South, Range 31 East, thence, northwesterly, to the southeast corner of the southwest one-quarter of Section 7, Township 39 South, Range 31 East; thence, northwesterly, to the northwest corner of the southwest one-quarter of said Section 7 in the boundary line between Glades and Highlands Counties; thence, northwesterly, to the southwest corner of the southeast one-quarter of Section 1, Township 39 South, Range 30 East; thence northerly to the northwest corner of the northeast one-quarter of said Section 1; thence, northwesterly, to the southeast corner of the North one-half of Section 35, Township 38 South, Range 30 East; thence, westerly, along the South line of the North one-half of said Section 35 to the southwest corner of the East one-half of the northwest one-quarter of said Section 35 and the westerly boundary of the South Florida Water Management District; thence, along the following three courses, being the westerly boundary

of said South Florida Water Management District; 1) Thence, northerly along the West line of Sections 35, the East one-half of the West one-half of Sections 35, 26, and 23, Township 38 South, Range 30 East, to the northwest corner of the East one-half of the West one-half of Sections 35, 26, and 23, Township 38 South, Range 30 East, to the northwest corner of the East one-half of West one-half of said Section 23; 2) Thence, westerly along the Section line to the southwest corner of Section 14, Township 38 South, Range 30 East; 3) Thence, northerly along the West line of Sections 14, 11 and 2, Township 38 South, Range 30 East, and Sections 35, 26, 23, 14, 11 and 2, Township 37 South, Range 30 East, to the intersection thereof with the center line of State Road 621; thence, easterly, northerly and northeasterly, along said centerline, to the intersection thereof with the North line of the South one-half of Section 10, Township 36 South, Range 31 East; thence, easterly to the northeast corner of the South one-half of said Section 10, thence, easterly, to the northwest corner of the South one-half of Section 12, Township 36 South, Range 31 East; thence, easterly, to the northeast corner of the South one-half of said Section 12; thence, southerly, along the Range line between Ranges 31 and 32 to the northwest corner of Section 6, Township 37 South, Range 32 East; thence, easterly, along the Township line between Townships 36 and 37, to the northwest corner of Section 5, Township 37 South, Range 33 East; thence, southeasterly, to the southeast corner of said Section 5 thence, southerly, along the Section line, to the northwest corner of Section 16, Township 37 South, Range 33 East; thence, southeasterly, to the southeast corner of said Section 16; thence southeasterly, to the northeast corner of the southwest one-quarter of Section 22, Township 37 South, Range 33 East; thence, southerly, to the southeast corner of the southwest one-quarter of said Section 22; thence, southerly, to the northwest corner of northeast one-quarter of Section 34, Township 37 South, Range 33 East; thence, easterly, along the North line of Section 34 and 35, Township 37 South, Range 33 East, to the northeast corner of said Section 35; thence, southeasterly, to the point of intersection of the South right of way line of South Florida Water Management District Canal 41-A and the East line of Section 36, Township 37 South, Range 33 East; thence, southerly, along the Section line, to the POINT OF BEGINNING.



Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.103, 373.175, 373.246 FS. History–New 9-3-81, Formerly 16K-30.02, 40E-21.061.

40E-22.072 Minimum Levels.

The following minimum levels shall be maintained.

(1) Lake Istokpoga.

(a) The minimum levels for Lake Istokpoga are shown in Figure 22-2.

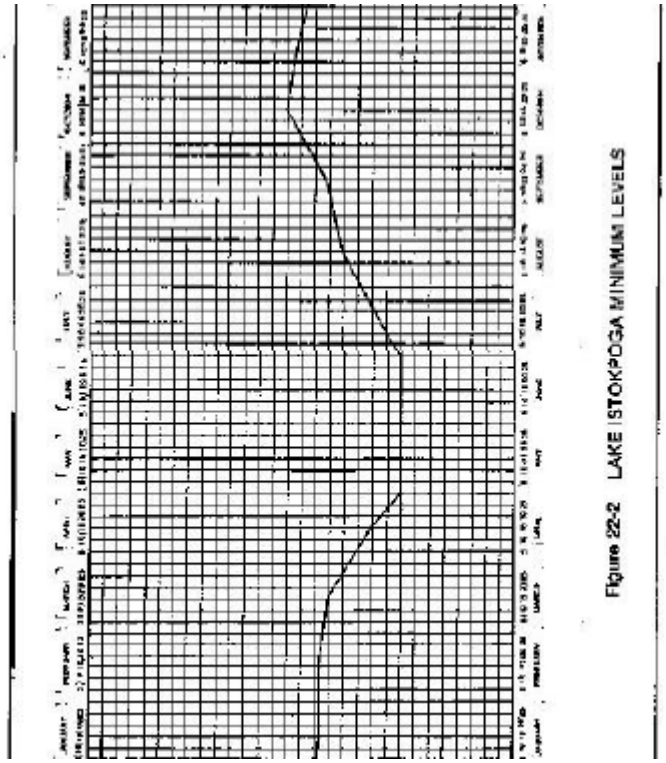


Figure 22-2 LAKE STOKPOGA MINIMUM LEVELS

(b) The District may, after public notice, allow the minimum levels in Figure 22-2 to be temporarily lowered for environmental or water quality reasons.

(2) Primary Canals	(feet above mean sea level)
(a) Canal 39-A above Structure 75	22.5
(b) Canal 40 above Structure 72	17.7
(c) Canal 41 above Structure 71	17.0
(d) Canal 41 above Structure 70	22.5
(e) Canal 41-A above Structure 84	21.7
(f) Canal 41-A above Structures 82 and 83	29.0
(g) Borrow Canal of Interceptor Levee 59	17.7
(h) Borrow Canal of Interceptor Levee 60	17.7
(i) Borrow Canal of Interceptor Levee 61	17.0

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.042, 373.086, 373.103(4) FS. History–New 9-3-81, Formerly 16K-30.03, 16K-30.05, 40E-22.072.

40E-22.082 Minimum Flows.

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.042, 373.086, 373.103(4) FS. History–New 9-3-81, Formerly 16K-30.04, 16K-30.06, 40E-21.082, Repealed by Section 3, Chapter 2012-31, Laws of Florida, 5-27-12.

40E-22.112 Permit Classification.

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.246 FS. History–New 9-3-81, Formerly 16K-30.07, 40E-21.112, Repealed by Section 3, Chapter 2012-31, Laws of Florida, 5-27-12.

40E-22.122 Termination of Withdrawals.

Upon notice from the District, water withdrawals under permits having source classification "S' shall be terminated when any of the minimum levels specified in Rule 40E-22.072, F.A.C., is reached.

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.086, 373.103(4), 373.246 FS. History–New 9-3-81, Formerly 16K-30.08, 40E-21.122.

40E-22.132 Water Shortage Plan.

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.246 FS. History–New 9-3-81, Formerly 16K-30.09, 40E-21.132, Repealed by Section 3, Chapter 2012-31, Laws of Florida, 5-27-12.

40E-22.212 Policy and Purpose.

This part establishes minimum flows and levels for Canals 23, 24 and 25 and a permit classification system for the St. Lucie County Agricultural Area. The rules in this part apply to water withdrawals within the St. Lucie County Agricultural Area and water withdrawals from Canal 25 below Structure 99.

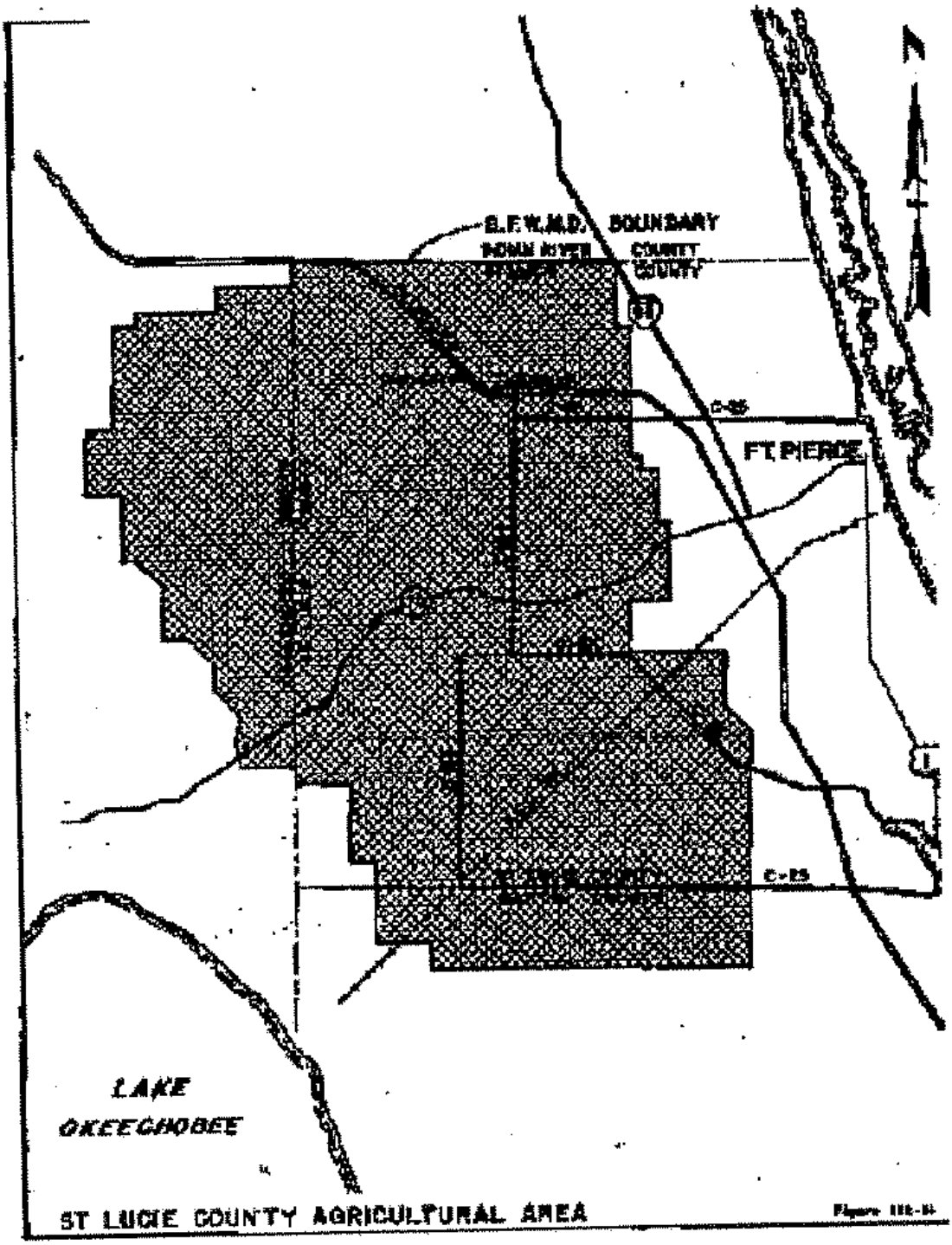
Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.042, 373.086, 373.103(4), 373.175, 373.246 FS. History–New 9-3-81, Formerly 16K-31.01, 40E-21.212.

40E-22.222 St. Lucie County Agricultural Area Boundary.

(See Figure 21-3.) The St. Lucie County Agricultural Area includes the area within the following boundaries:
BEGINNING at the Northeast corner of Section 1, Township 34 South, Range 38 East thence, Southerly along the East line of Sections 1, 12 and 13, Township 34 South, Range 38 East, to the Northwest corner of the Southwest one-quarter of Section 18, Township 34 South, Range 39 East; thence, Easterly to the Northeast corner of the Southwest one-quarter of said Section 18; thence, Southerly along the East line of the West one-half of Sections 18, 19, 30 and 31, Township 34 South, Range 39 East, and Sections 6 and 7, Township 35 South, Range 39 East, to the Northwest corner of the Southeast one-quarter of said Section 7; thence, Easterly to the Northeast corner of the Southeast one-quarter of said Section 7; thence, Southerly to the Southeast corner of the Southeast one-quarter of said Section 7; thence, Easterly to the Northeast corner of the West one-half of Section 17, Township 35 South, Range 39 East; thence, Southerly along the East line of the West one-half of Sections 17 and 20, Township 35 South, Range 39 East, to the Southeast corner of the West one-half of said Section 20; thence, Easterly to the Northeast corner of Section 29, Township 35 South, Range 39 East; thence, Southerly along the East line of Sections 29 and 32, Township 35 South, Range 39 East, and Section 5, Township 36 South, Range 39 East, to the Southeast corner of said Section 5; thence, Westerly along the South line of Sections 5 and 6, Township 36 South, Range 39 East, to the Northeast corner of the West one-half of Section 7, Township 36 South, Range 39 East; thence, Southerly along the East line of the West one-half of Sections 7 and 18, Township 36 South, Range 39 East, to the Northwest corner of the Northeast one-quarter of Section 19, Township 36 South, Range 39 East; thence, Easterly along the North line of Sections 19, 20, 21 and 22, Township 36 South, Range 39 East, to the Northeast corner of said Section 22; thence, Southerly, along the East line of Sections 22 and 27, Township 36 South, Range 39 East, to Southeast corner of said Section 27; thence, Southeasterly to the Northeast corner of Section 2, Township 37 South, Range 39 East; thence, Southerly along the East line of Sections 2, 11, 14, 23, 26 and 35, Township 37 South, Range 39 East, to the Southeast corner of said Section 35 in the boundary line between St. Lucie County and Martin County; thence, continue Southerly along the East line of Sections 2, 11 and 14, Township 38 South, Range 39 East, to the Southeast corner of said Section 14; thence, Westerly along the South line of Sections 14, 15, 16, 17 and 18, Township 38 South, Range 39 East, Sections 13, 14, 15, 16, 17 and 18, Township 38 South, Range 38 East and Section 13, Township 38 South, Range 37 East; to the Southeast corner of Section 13, Township 38 South, Range 37 East; thence Northerly along the West line of said Section 13, to the Northwest corner of said Section 13; thence, Westerly along the South line of Sections 11 and 10, Township 38 South, Range 37 East to the Southwest corner of said Section 10; thence, Northerly along the West line of Sections 10 and 3, Township 38 South, Range 37 East to the Northwest corner of said Section 3 in the boundary line between Martin County and St. Lucie County; thence, continue Northerly along the West line of Section 34, Township 37 South, Range 37 East, to the Southeast corner of Section 28, Township 37 South, Range 37 East; thence, Westerly along the South line of said Section 28, to the Southwest corner of said Section 28; thence, Northerly along the West line of Sections 28, 21 and 16, Township 37 South, Range 37 East, to the Northwest corner of said Section 16; thence, Westerly along the South line of Sections 8 and 7, Township 37 South,

Range 37 East, to the Southwest corner of said Section 7 in the boundary line between St. Lucie County and Okeechobee County; thence, Northerly along said boundary line, also being the West line of said Section 7, to the Southeast corner of Section 1, Township 37 South, Range 36 East; thence, Westerly along the South line of Sections 1 and 2, Township 37 South, Range 36 East, to the Southwest corner of said Section 2; thence, Northerly, along the West line of said Section 2 and along the West line of Section 35, Township 36 South, Range 36 East, to the Southeast corner of Section 27, Township 36 South, Range 36 East; thence, Northwesterly to the Southwest corner of Section 22, Township 36 South, Range 36 East; thence, Northerly along the west line of said Section 22, to the Southeast corner of Section 16, Township 36 South, Range 36 East; thence, Northwesterly to the Southeast corner of Section 8, Township 36 South, Range 36 East; thence, Westerly along the South line of said Section 8, to the Southwest corner of said Section 8; thence, Northerly along the West line of Sections 8 and 5, Township 36 South, Range 36 East, to the Northwest corner of said Section 5; thence, Northwesterly to the Southeast corner of Section 25, Township 35 South, Range 35 East; thence, Westerly along the South line of said Section 25, to the Southwest corner of the East one-half of said Section 25; thence, Northerly along the West line of the East one-half of Sections 25, 24 and 13, Township 35 South, Range 35 East, to the Southeast corner of the Northwest one-quarter of said Section 13; thence, Westerly along the South line of the North one-half of Sections 13 and 14, Township 35 South, Range 35 East, to the Southwest corner of the North one-half of said Section 14; thence, Northerly along the West line of Sections 14, 11, and 2, Township 35 South, Range 35 East, to the Northwest corner of said Section 2 and the Northerly boundary of the South Florida Water Management District; Thence, along the following 9 courses, being the Northerly boundary of said South Florida Water Management District; 1) Thence, Easterly along the North line of said Section 2 to the Southwest corner of Section 36, Township 34 South, Range 35 East; 2) Thence, Northerly along the West line of Sections 36, 25, 24 and 13, Township 34 South, Range 35 East, to the Northwest corner of said Section 13; 3) Thence, Easterly along the North line of said Section 13 to the Northeast corner of said Section 13 and the Range line between Ranges 35 and 36 East; 4) Thence, Northerly along said Range line to the Northwest corner of Section 18, Township 34 South, Range 36 East; 5) Thence, Easterly along the North line of Sections 18, 17 and 16, Township 34 South, Range 36 East, to the Southwest corner of Section 10, Townships 34 South, Range 36 East; 6) Thence, Northerly along the West line of said Section 10 to the Northwest corner of said Section 10; 7) Thence, Easterly along the North line of Sections 10, 11 and 12, Township 34 South, Range 36 East, to the Northeast corner of said Section 12 and the Okeechobee-St. Lucie County Line; 8) Thence, Northerly along said County line to the South line of Indian River County; 9) Thence, Easterly along the St. Lucie-Indian River County line to the POINT OF BEGINNING.

The above described parcel of land being situated in Martin, Okeechobee and St. Lucie Counties.



Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.103, 373.175, 373.246 FS. History–New 9-3-81, Formerly 16K-31.02, 40E-21.222.

40E-22.232 Minimum Levels.

The following minimum levels shall be maintained:

CANAL	LEVEL (feet above mean sea level)
(1) Canal 23 above Structure 97	14.0
(2) Canal 23 between Structure 48 and Structure 97	4.0
(3) Canal 24 above Structure 49	14.0
(4) Canal 25 above Structure 99	14.0
(5) Canal 25 between Structure 50 and Structure 99	8.0

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.042, 373.086, 373.103(4) FS. History–New 9-3-81, Formerly 16K-31.04, 40E-21.232.

40E-22.242 Minimum Flows.

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.042, 373.086, 373.103(4) FS. History–New 9-3-81, Formerly 16K-31.03, 40E-21.242, Repealed by Section 3, Chapter 2012-31, Laws of Florida, 5-27-12.

40E-22.252 Permit Classification.

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.246 FS. History–New 9-3-81, Formerly 16K-31.05, 40E-21.252, Repealed by Section 3, Chapter 2012-31, Laws of Florida, 5-27-12.

40E-22.262 Termination of Withdrawals.

(1) Upon notice from the District, water withdrawals under permits having source classification "S" shall be terminated under the following conditions:

(a) For water withdrawals directly from either Canal 23, 24 or 25: when level in the primary canal from which water is being withdrawn reaches the minimum level set forth in Rule 40E-22.242, F.A.C.

(b) For water withdrawals made from canals or ditches connecting with either Canal 23, 24 or 25: when the level in the connecting canal from which water is being withdrawn reaches an elevation of 14.0 feet mean sea level.

(2) The cessation of water withdrawals will remain in effect until the level in either the primary canal or the connecting canal rises above an elevation of 14.0 feet mean sea level and the District has notified permit holders that they may resume making withdrawals.

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.086, 373.103(4), 373.246 FS. History–New 9-3-81, Formerly 16K-31.06, 40E-21.262

40E-22.272 Water Use Restrictions.

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.086, 373.103(4), 373.246 FS. History–New 9-3-81, Formerly 16K-31.07, 40E-21.272, Repealed by Section 3, Chapter 2012-31, Laws of Florida, 5-27-12.

40E-22.312 Policy and Purpose.

This section identifies water levels within Lake Okeechobee that will be considered by the Governing Board in declaring a water shortage pursuant to Rule 40E-21.231, F.A.C. The rules in this section apply to the withdrawal of surface water from the Lake Okeechobee Region as depicted on Figure 21-4 and described in subsection 40E-21.691(3), F.A.C., and the Brighton Reservation in accordance with the terms of the Water Rights Compact Among the Seminole Tribe of Florida, the state of Florida, and the South Florida Water Management District ("Seminole Compact").

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.042, 373.0421, 373.086, 373.103(4), 373.175, 373.246 FS. History–New 9-10-01.

40E-22.322 Geographic Application.

This rule shall be applied to the Lake Okeechobee Region described in subsection 40E-21.691(3), F.A.C., and the Brighton

Reservation in accordance with the terms of the Seminole Compact. In addition, depending upon particular hydrologic conditions, restrictions imposed under this section may be applied to agricultural users of Lake Okeechobee and its connected canal system that are in areas outside the Lake Okeechobee Region. Such areas will be identified, as appropriate in the specific water shortage order declaring the restrictions.

Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.042, 373.0421, 373.086, 373.103(4), 373.175, 373.246 FS. History–New 9-10-01.

40E-22.332 Water Shortage Triggers.

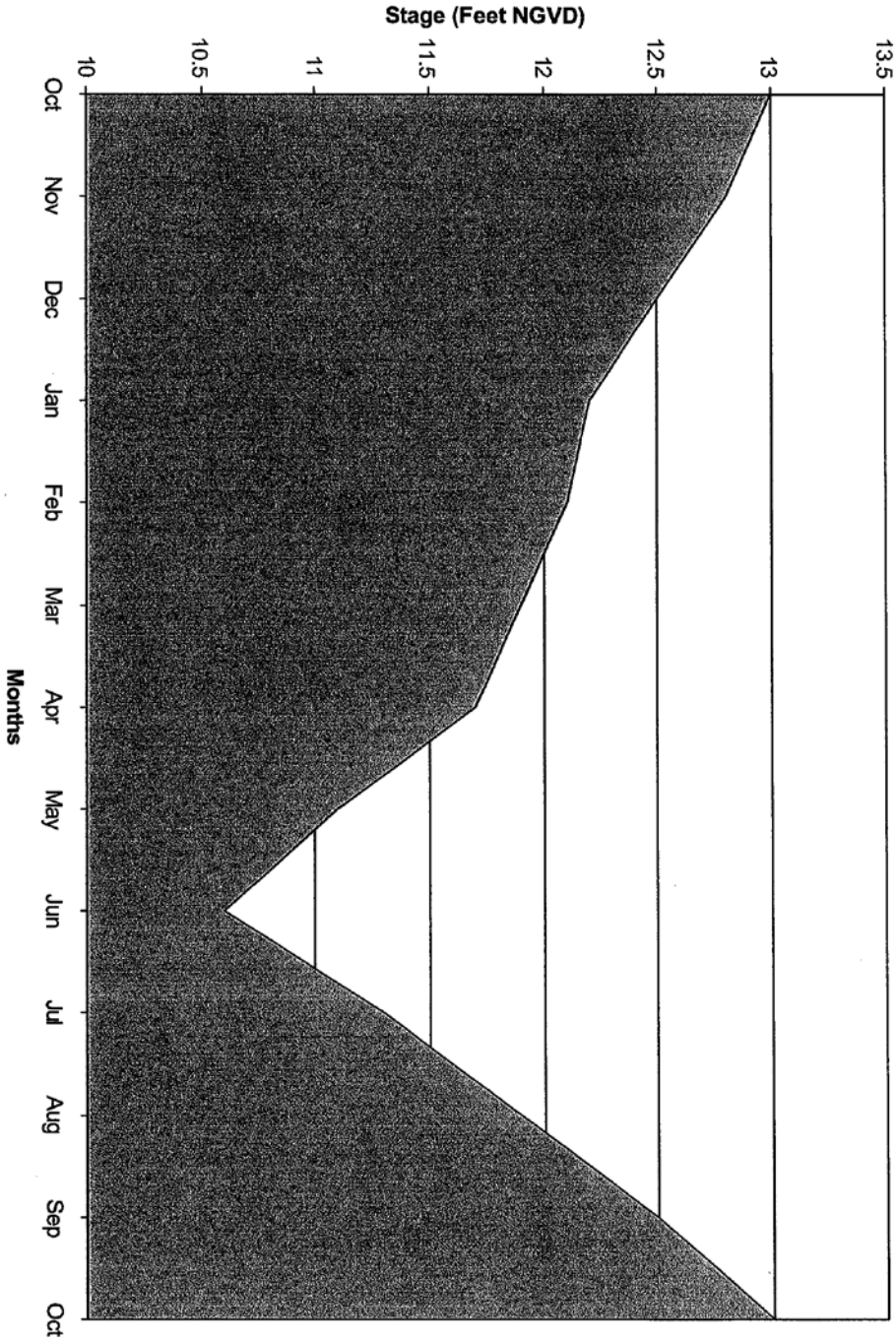
(1) Water shortage trigger levels for Lake Okeechobee are shown on Figure 22-4. When water levels within Lake Okeechobee fall below these trigger levels, the Governing Board may impose water shortage restrictions pursuant to Rules 40E-21.231, 40E-8.441, F.A.C., and this Part. In considering declaring a water shortage, the Governing Board shall consider other factors evaluated in this Part and Rule 40E-21.221, F.A.C., along with these trigger levels.

(2)(a) When water levels within Lake Okeechobee fall within "Zone A" depicted on Figure 22-4, a Phase I water shortage may be declared within the service area, pursuant to Rule 40E-21.521, F.A.C.

(b) When water levels within Lake Okeechobee fall within "Zone A" area depicted on Figure 22-4, and can be expected to reach a June 1st lake stage of 10.5 feet NGVD, a Phase II water shortage may be declared within the service area pursuant to Rule 40E-21.531, F.A.C.

(c) When water levels within Lake Okeechobee fall below, or can be expected to fall below the June 1st lake stage of 10.5 feet NGVD, a Phase III or greater water shortage may be declared within the service area pursuant to Rule 40E-21.541, F.A.C.

Fig 22-4: Water Shortage Trigger Levels for Lake Okeechobee as Referenced in Rule 40E-22.332, F.A.C.



Rulemaking Authority 373.044, 373.113 FS. Law Implemented 373.042, 373.0421, 373.086, 373.103(4), 373.175, 373.246 FS. History–New 9-10-01.

Rules of the
South Florida Water Management District

CRITICAL WATER SUPPLY PROBLEM AREAS

CHAPTER 40E-23, F.A.C.

ENTIRE CHAPTER REPEALED 05/27/2012

Rules of the
South Florida Water Management District

Mandatory Year-Round Landscape Irrigation Conservation Measures

Chapter 40E-24, F.A.C.

Effective: July 14, 2014

CHAPTER 40E-24
MANDATORY YEAR-ROUND LANDSCAPE IRRIGATION MEASURES CONSERVATION MEASURES

40E-24.011 Policy and Purpose
40E-24.101 Definitions
40E-24.201 Year-Round Landscape Irrigation Conservation Measures
40E-24.301 Local Government Option
40E-24.401 Enforcement
40E-24.501 Variances and Waivers

40E-24.011 Policy and Purpose.

(1) This chapter comprises the Mandatory Year-Round Landscape Irrigation Conservation Measures within the boundaries of the South Florida Water Management District (District). These mandatory conservation measures are intended to provide a framework for consistent implementation to ensure the long-term sustainability of the water resources of the region, increase water use efficiency and prevent and curtail wasteful water use practices through regulatory means for landscape irrigation by all users. Water savings achieved by public and private water supply utilities through conservation may be used to extend the availability of all water sources to meet future demands and defer the need for additional capital investment in alternative water supplies, subject to compliance with Chapter 40E-2, F.A.C. Local governments are encouraged to implement these conservation measures through the adoption of ordinances that would include these measures, variance and enforcement provisions. These measures are in addition to the Chapter 40E-2, F.A.C., provisions and non-regulatory measures, such as education and incentive programs, which are also utilized by the District to promote water conservation. These conservation measures prohibit landscape irrigation during those periods of the day when irrigation efficiency significantly decreases, and limit landscape irrigation water use to two days per week except as specified herein. Users are encouraged to apply no more than 3/4-inch to 1-inch of water per week on their lawns and landscapes and only as needed to supplement rainfall. However, provisions have been made in this chapter to allow landscape irrigation three days per week in designated counties to address utility operational, health, and safety and landscape concerns.

(2) This chapter applies to all water users unless specified otherwise herein.

(3) This chapter only applies to landscape irrigation as defined herein. This chapter does not apply to agricultural irrigation.

(4) In concert with the establishment of the year round landscape irrigation conservation measures of this chapter, the District commits to the following activities:

(a) Coordinate with stakeholders to develop and implement a water conservation partnership plan to further promote conservation and efficient use of water;

(b) On at least an annual basis, evaluate the implementation and effectiveness of the District's water conservation partnership plan; and,

(c) No later than five years from the effective date of this chapter, District staff shall provide the Governing Board with recommendations based on a comprehensive evaluation of this chapter and its implementation. The Governing Board may revise this chapter at any time, as it deems appropriate.

Rulemaking Authority 373.044, 373.113, 373.171 FS. Law Implemented 373.042, 373.0421, 373.171, 373.219, 373.223, 373.227 FS. History–New 6-12-03, Amended 3-15-10, 7-14-14.

40E-24.101 Definitions.

When used in this chapter:

(1) "Address" means the "house number" (a numeric or alphanumeric designation) that, together with the street name, describes the physical location of a specific property. This includes "rural route" numbers but excludes post office box numbers. If a lot number in a mobile home park or similar community is used by the U.S. Postal Service to determine a delivery location, the lot number shall be the property's address. If a lot number in a mobile home park or similar residential community is not used by the U.S. Postal Service (e.g., the park manager sorts incoming mail delivered to the community's address), then the community's main address shall be the property's address. If a property has no address it shall be considered "even-numbered".

(2) "Athletic play area" means all golf course fairways, tees, roughs, and greens, and other athletic play surfaces; including,

football, baseball, soccer, polo, tennis and lawn bowling fields, and rodeo, equestrian and livestock arenas.

(3) "Consumptive Use Permit (CUP)" means a permit issued pursuant to Chapter 40E-2, F.A.C., authorizing the consumptive use of water.

(4) "Even Numbered Address" means an address, ending in the numbers 0, 2, 4, 6, 8, or rights-of-way or other locations with no address, or the letters A-M.

(5) "Existing landscaping" means any landscaping which has been planted and in the ground for more than ninety (90) days.

(6) "Landscaping" means shrubbery, trees, lawns, sod, grass, ground covers, plants, vines, ornamental gardens, and such other flora, not intended for resale, which are situated in such diverse locations as residential landscapes, recreation areas, cemeteries, public, commercial, and industrial establishments, public medians, and rights-of-way except athletic play areas as defined in subsection 40E-24.101(2), F.A.C.

(7) "Low Volume Hand Watering" means the watering of landscape by one person, with one hose fitted with a self-canceling or automatic shutoff nozzle.

(8) "Low Volume Irrigation" means the use of equipment and devices specifically designed to allow the volume of water delivered to be limited to a level consistent with the water requirement of the plant being irrigated and to allow that water to be placed with a high degree of efficiency in the root zone of the plant. The term also includes water used in mist houses and similar establishments for plant propagation. Overhead irrigation and flood irrigation are not included.

(9) "Landscape Irrigation" means the outside watering of shrubbery, trees, lawns, sod, grass, ground covers, plants, vines, ornamental gardens, and such other flora, not intended for resale, which are planted and are situated in such diverse locations as residential landscapes, recreation areas, cemeteries, public, commercial, and industrial establishments, public medians, and rights-of-way except athletic play areas as defined in subsection 40E-24.101(2), F.A.C.

(10) "Micro-irrigation" means the application of small quantities of water on or below the soil surface as drops or tiny streams of spray through emitter or applicators placed along a water delivery line. Micro-irrigation includes a number of methods or concepts such as bubbler, drip, trickle, mist or microspray, and subsurface irrigation.

(11) "New landscaping" means any landscaping which has been planted and in the ground for ninety (90) days or less.

(12) "Odd Numbered Address" means an address ending in the numbers 1, 3, 5, 7, 9 or the letters N-Z.

(13) "Reclaimed Water" means wastewater that has received at least secondary treatment and basic disinfection and is reused after flowing out of a wastewater treatment facility as defined by Rule 62-40.210, F.A.C..

(14) "User" means any person, individual, firm, association, organization, partnership, business trust, corporation, company, agent, employee or other legal entity whether natural or artificial, the United States of America, and the State and all political subdivisions, regions, districts, municipalities, and public agencies thereof, which directly or indirectly takes water from the water resource, including uses from private or public utility systems, uses under water use permits issued pursuant to Chapter 40E-2, F.A.C., or uses from individual wells or pumps.

(15) "Wasteful and unnecessary" means allowing water to be dispersed without any practical purpose to the water use; for example, excessive landscape irrigation, leaving an unattended hose on a driveway with water flowing, allowing water to be dispersed in a grossly inefficient manner, regardless of the type of water use; for example, allowing landscape irrigation water to unnecessarily fall onto pavement, sidewalks and other impervious surfaces; allowing water flow through a broken or malfunctioning water delivery or landscape irrigation system.

Rulemaking Authority 373.044, 373.113, 373.171 FS. Law Implemented 373.042, 373.0421, 373.171, 373.219, 373.223, 373.227 FS. History–New 6-12-03, Amended 3-15-10, 7-14-14.

40E-24.201 Year-Round Landscape Irrigation Conservation Measures.

(1) The year-round landscape irrigation conservation measures contained in this chapter are applicable to all users as defined in subsection 40E-24.101(14), F.A.C., including permitted and exempt users under Chapter 40E-2, F.A.C., unless indicated otherwise herein. These conservation measures apply to all water sources, except that the use of reclaimed water, which may or may not be supplemented from another source, is allowed anytime. In addition to the requirements of this section, all permitted users under Chapter 40E-2, F.A.C., are required to maintain compliance with all CUP conditions and terms, including those designed to require the implementation of water conservation practices.

(2) Any restrictions or other measures declared pursuant to Chapter 40E-21, F.A.C., or related Board or Executive Director orders which are more restrictive than a measure contained within this chapter, shall supersede this rule for the duration of the applicable water shortage declaration.

(3) It shall be the duty of each water user to keep informed as to the landscape irrigation conservation measures presented within this chapter, which affect each particular water use.

(4) In addition to the specific conservation measures enumerated below, all wasteful and unnecessary water use as defined in subsection 40E-24.101(15), F.A.C., is prohibited.

(5) The following requirements or exceptions shall apply to all users unless specified otherwise herein:

(a) Landscape irrigation shall be prohibited daily between the hours of 10:00 a.m. and 4:00 p.m., except as otherwise provided herein.

(b) Irrigation of new landscaping shall comply with the following provisions:

1. On the day the new landscaping is installed, the new landscaping may be irrigated once without regard to the normally allowable watering days and times. Irrigation of the soil immediately prior to the installation of the new landscaping is also allowable without regard to the normal allowable watering days and times.

2. The ninety (90) day period begins the day the new landscaping is installed. The new landscaping shall be installed within a reasonable time from the date of purchase, which may be demonstrated with a dated receipt or invoice.

3. Irrigation of new landscaping which has been in place for thirty (30) days or less may be accomplished on Monday, Tuesday, Wednesday, Thursday, Saturday, and Sunday.

4. Irrigation of new landscaping which has been in place for thirty-one (31) to ninety (90) days may be accomplished on Monday, Wednesday, Thursday, and Saturday.

5. Irrigation of the new landscaping is limited to areas containing the new landscaping only. An entire zone of an irrigation system shall only be utilized for landscape irrigation under this paragraph if the zone in question is for an area that contains at least 50% new landscaping. If a zone contains less than 50% new landscaping, or if the new landscaping is in an area that will not typically be irrigated by an irrigation system, only the individual new plantings are eligible for additional irrigation under this paragraph. Targeted watering may be accomplished by low volume hand watering, or any appropriate method which isolates and waters only the new landscaping.

(c) Landscape irrigation systems may be operated during restricted days and/or times for cleaning, maintenance, and repair purposes with an attendant on site in the area being tested. Landscape irrigation systems may routinely be operated for such purposes no more than once per week, and the run time for any one test should not exceed 10 minutes per zone.

(d) Landscape irrigation for the purpose of watering-in fertilizers, insecticides, pesticides, fungicides and herbicides, where such watering-in is recommended by the manufacturer, or by federal, state or local law, or best management practices, shall be allowed under the following conditions:

1. Such watering-in shall be limited to one application unless the need for more than one application is stated in the directions for application specified by the manufacturer; and

2. Such watering-in shall be accomplished during normally allowable watering days and times set forth in subsections (5)(a), (6), and (7) unless a professional licensed applicator has posted a temporary sign containing the date of application and the date(s) of needed watering-in activity.

(e) Any plant material may be watered using low volume irrigation, micro-irrigation, low-volume hand watering methods, and rain barrels, cisterns, or other similar rain-harvesting devices without regard to the watering days or times allowed pursuant to this section.

(6) Except as authorized in subsection (7), below, irrigation of existing landscaping shall comply with the following provisions:

(a) Even addresses, installations with irrigation systems that irrigate both even and odd addresses within the same zones, such as multi-family units and homeowners' associations, and rights-of-way or other locations with no address as defined in subsection 40E-24.101(4), F.A.C., shall have the opportunity to accomplish necessary landscape irrigation only on Thursday and Sunday.

(b) Odd addresses as defined in subsection 40E-24.101(12), F.A.C., shall have the opportunity to accomplish necessary landscape irrigation only on Wednesday and Saturday.

(7) Users located in Broward, Collier, Glades, Hendry, Lee, Martin, Miami-Dade, Monroe, Palm Beach, and St. Lucie counties shall irrigate existing landscaping in accordance with the provisions set forth in subsection (6), above, or as provided below.

(a) Even addresses, installations with irrigation systems that irrigate both even and odd addresses within the same zones, such as multi-family units and homeowners' associations, and rights-of-way or other locations with no address as defined in subsection 40E-24.101(4), F.A.C., shall have the opportunity to accomplish necessary landscape irrigation only on Tuesday, Thursday, and Sunday.

(b) Odd addresses as defined in subsection 40E-24.101(12), F.A.C., shall have the opportunity to accomplish necessary landscape irrigation only on Monday, Wednesday, and Saturday.

Rulemaking Authority 373.044, 373.113, 373.171 FS. Law Implemented 373.042, 373.0421, 373.171, 373.219, 373.223, 373.227 FS. History–New 6-12-03, Amended 3-15-10, 7-14-14.

40E-24.301 Local Government Option.

(1) Local governments that wish to enforce alternative landscape irrigation conservation measures, shall be considered to be in substantial compliance with this rule upon the enactment of an ordinance establishing landscape irrigation measures which achieve water conservation consistent with the number of days and times for landscape irrigation set forth in subsections 40E-24.201(5)-(7), F.A.C. Such ordinance shall provide for variance and enforcement procedures that do not diminish the effectiveness of the measures.

(2) Local governments with a jurisdiction divided between the South Florida Water Management District and another water management district may enact an ordinance providing for alternative landscape irrigation conservation measures as necessary for the local government to achieve a uniform schedule within its jurisdiction that is in accordance with at least one of the involved water management district rules.

(3) At least thirty (30) days prior to the adoption of an ordinance for alternative landscape irrigation conservation measures, the local government shall submit the proposed ordinance to the District.

(4) In order to evaluate the effectiveness of the alternative conservation measures, such local governments shall provide an annual report to the District which includes any variances granted or denied, enforcement actions taken and any measures proposed to be amended in the next reporting period. Each annual report shall be submitted to the District no later than September 30th of each year following the adoption of this chapter.

(5) Users within the jurisdiction or customers of such local governments shall comply with the alternative landscape irrigation conservation measures contained within the ordinance implementing that program and are not subject to the measures contained in subsections 40E-24.201(5)-(7), F.A.C.

Rulemaking Authority 373.044, 373.113, 373.171 FS. Law Implemented 373.042, 373.0421, 373.171, 373.219, 373.223, 373.227, 373.609 FS. History–New 6-12-03, Amended 3-15-10.

40E-24.401 Enforcement.

(1) As required by Section 373.609, F.S., each county and city commission, state and county attorney, sheriff, police officer and other appropriate local government official in the region covered by this chapter which is not implementing alternative landscape irrigation conservation measures pursuant to a local government ordinance, shall respond to address-specific or location-specific violations of this chapter upon request from the District.

(2) A local government is strongly encouraged to enforce Rule 40E-24.201, F.A.C., within its jurisdiction by adopting an ordinance that incorporates the provisions set forth in Rule 40E-24.201, F.A.C. At least thirty (30) days prior to the adoption of an ordinance to enforce Rule 40E-24.201, F.A.C., the local government shall submit the proposed ordinance to the District.

(3) In enforcing the provisions of this chapter the District will utilize any of the enforcement remedies available pursuant to Chapter 120 or 373, F.S., or applicable District rule. The Executive Director may take appropriate action pursuant to Sections 373.119, 373.175(4), 373.246(7) and 120.69, F.S., to enforce the provisions of this chapter.

Rulemaking Authority 373.044, 373.113, 373.171 FS. Law Implemented 373.119, 373.171, 373.175(4), 373.219, 373.227, 373.246(7), 373.603, 373.609 FS. History–New 6-12-03, Amended 3-15-10.

40E-24.501 Variances and Waivers.

(1) Users may request relief from the provisions of this Chapter by filing a petition for variance or waiver pursuant to Section 120.542, F.S., and Chapter 28-104, F.A.C. Examples of circumstances, which, subject to the above-referenced statute and rule and the provisions below, may be candidates for the issuance of a variance, include but are not limited to:

(a) Two or more properties which share a common source of water;

(b) A public or private water system experiencing, or anticipating distribution problems that cannot be addressed through Rule 40E-24.301, F.A.C.;

(c) User maintains an irrigation system that uses soil moisture sensors with remote monitoring and adjustment capabilities that satisfies the requirements set forth in Section 373.62(7), F.S.

(2) A variance or waiver is invalid if it has expired or if the user or its agent violates the terms of the variance or waiver.

(3) Where a local government has adopted an ordinance incorporating the provisions set forth in Rule 40E-24.201, F.A.C., or alternative landscape irrigation measures pursuant to Rule 40E-24.301, F.A.C., the local government may grant a variance from the specific day or days for landscape irrigation identified in the ordinance, or the specific day or days for landscape irrigation identified in the ordinance adopting the alternative landscape irrigation measures, provided that the applicant demonstrates with particularity that compliance with the schedule of days for landscape irrigation will result in a substantial hardship on the applicant requesting the variance or those served by the applicant. If granted, the applicant shall be required to post a notice at each parcel to which the variance pertains.

Rulemaking Authority 120.542, 373.044, 373.113, 373.171 FS. Law Implemented 120.542, 373.119, 373.171, 373.175(4), 373.219, 373.227, 373.246(7), 373.603, 373.609 FS. History–New 3-15-10.

Rules of the
South Florida Water Management District

General Permits for Water Wells
40E-30, F.A.C.
Repealed December 19, 2012

https://www.flrules.org/gateway/ChapterHome.asp?Chapter=40E-30