MANAGEMENT OF WATER USE
PERMITTING INFORMATION MANUAL VOLUME III
FOR THE
SOUTH FLORIDA WATER MANAGEMENT DISTRICT

Regulation Department
South Florida Water Management District
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VOLUME III

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Basis of Review for Water Use Permit Applications within the
South Florida Water Management District

I.0 Introduction

1.1 Objectives - Under Part II of Chapter 373, Florida Statutes, and Rules Chapter 40E-2, and 40E-20, Florida Administrative Code, the District is responsible for the permitting of the use of water within its jurisdictional boundaries. The objective of this document is to identify the procedures and information used by District Staff in permit application review. The objective of the review is to insure that the applicant shows that the use is a reasonable-beneficial use and that such use will not interfere with any presently existing legal use of water and is consistent with the public interest.

1.2 Application Review Process - The District has established two types of water use permits: individual (40E-2) and general (40E-20). The primary differences between a general and individual permit is that in the general permit process 1) the authorization to commence water use is given after a positive review and evaluation by Staff, and 2) the review period is generally short in comparison with the individual permit process. The general permit process has been established to create a quicker review process for small uses which have little potential for causing adverse impacts, not to allow lower standards to be met. When in doubt as to the specific process applicable, applicants for a water use permit should refer to District rules (40E) or consult with District Staff.

1.2.1 Application Form - All applicants for individual permits should complete Application Form, 0050. The type of use, system complexity, location of proposed withdrawal and source (including specific aquifer), and volume of water withdrawn determine the detail and extent of additional information required for permit review. In general applications should be supported with more extensive and detailed information as indicated by the information checklist when the application is for the following:

1) large public water supply uses,

2) large irrigation uses,

3) groundwater withdrawals in areas of high demand and limited groundwater availability,

4) large withdrawals in close proximity to environmentally sensitive areas, or

5) withdrawals close to coastal areas, areas with poor water quality, potential sources of pollution.

Engineered systems are required by state law to have plans and calculations signed and sealed by a Florida Professional Engineer. Applicants are encouraged to meet with Staff prior to application submittal (pre-application meeting) to discuss additional information requirements. In some cases professional assistance may be necessary in application preparation. Application for the use of surface water may require a surface water management or right-of-way occupancy permit. Applications for mining (dewatering) use must address both withdrawal and disposal of water. If the disposal involves permanent on-site storm drainage facilities, a separate surface water management permit will be required. An application involving a proposed project will require a concurrent surface water management permit.

The application form has been prepared to supply only the most basic information. Since review time is dependent on informational sufficiency it is to the Applicant's benefit to submit all information to allow review to proceed without delays. In addition to the application form, the applicant must provide responses to the appropriate checklists (Part B-II).

1.2.1.1 Phased Projects - Projects that are to be developed in phases should submit a master plan for water use. Water use should be projected for all phases within the time frame that the District will consider projected water use. The primary interest of the District is to insure that impacts of projected water use are evaluated fully and that the full demands of a project are compared with water availability. However, water cannot be reserved beyond the time of permit expiration.

1.2.2 Checklists - Each application must be accompanied by the responses to the appropriate checklist referenced under Part B-II. Public water supplies should use the public water supply checklist. Livestock, nursery, recreational area, soil flooding, agricultural, freeze protection, golf course, and landscaping irrigation water uses should use the irrigation water use checklist. Mining (dewatering) water uses should use the mining (dewatering) checklist. Power production, commercial and industrial process. cooling and air conditioning, navigation, water-based recreation. aquacultural, diversion and impoundment into non-District facilities and other uses not mentioned above should use the industrial water use checklist.

1.2.3 General Permit Notice - Applicants for general permit authorization must complete the Notice of Intent to Use Water Form 0155, providing the supplemental information requested therein. Comments above concerning informational sufficiency are also applicable to general permits.

1.3 Criteria Flexibility - The criteria contained herein are flexible with the primary goal being to meet District water resource objectives. Performance criteria are used where possible. Depending on the magnitude of impacts, other methods will be considered by Staff, or presented to the District's Governing Board for its consideration.

1.4 Simultaneous Reviews - In addition to purely technical aspects, legal and institutional factors will be considered. Because of legal time constraints for processing permits, the Applicant is advised to contact interested agencies, organizations, and affected citizens prior to submitting a formal application to the District. Summaries of meetings and copies of responses from appropriate parties should be included with the application. It may be in the Applicant's best interest to seek simultaneous reviews from all agencies with jurisdiction in related matters. This provision is not intended to preclude the submission of an application to this District prior to receiving other necessary approvals. The application should contain a status report on other approvals being sought, with an indication that the water use is consistent with those approvals. Issuance of a water use permit by the District does not relieve the Applicant of the responsibility of obtaining all necessary federal state, local, or special district permits or authorizations for related activities.

For those projects which are proposed and involve a surface water management system, the water use application will not be considered complete until the surface water management application is complete.

1.5 Existing but Unpermitted Use - An existing but unpermitted use of water will be evaluated as a proposed use. Facilities which are already constructed will not weigh in favor of a recommendation for a water use allocation.

1.6 Well Construction Permit - Beginning January 1, 1985, all public water supply wells and all other wells six inches or larger in diameter must be permitted by the District prior to construction, repair, or abandonment and must be constructed, repaired, or abandoned by a licensed well contractor as outlined in Chapter 40E-3, Water Wells. All other water wells must comply with the standards in 40E-3 or 4OE-30.

2.0 Explanation of Terms

2.1 Annual Allocation - The permitted quantity of water for use on a yearly basis as approved by the Governing Board of the District.

2.2 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 the drawdown induced by proposed withdrawals as the boundaries of the area of influence.

2.3 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.

2.4 Conservation - The act of reducing water usage through voluntary or mandatory altering of water use practices and/or installation of low water use systems, fixtures, and devices.

2.5 Current Pumpage - The quantity of water an applicant has pumped during the most recent 12 month period preceding the date of application.

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

2.7 Historical Maximum Day Withdrawal - The maximum quantity of water that was pumped on any one day during the current pumpage period.

2.8 Permitted Maximum Day Withdrawal - The maximum quantity of water which can be withdrawn on a daily basis as approved by the Governing Board.

2.9 Presently Existing Legal Use - A use that is: 1) under District permit. or 2) in existence for those uses which are exempt from permit requirements at the time the application is filed.

2.10 Potentially Permittable Yield - The amount of water that can be withdrawn from a wellfield on an annual basis without creating adverse impacts, including but not limited to impacts on the wellfield itself,. adjacent uses, the environment, water bodies, land use and water quality.

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

2.12 Saline Water Interface - The saline water interface is that hypothetical surface of chloride concentration between freshwater and seawater where the chloride concentration is 250 mg/l at each point on the surface.

2.13 Seawater - An aqueous solution with a chloride concentration equal to or greater than 19,000 mg/l.

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

2.15 Step Drawdown Test - A procedure for determining the efficiency of a pumping well by measuring the steady-state drawdown within the well at various constant discharge rates.

2.16 System Efficiency (Irrigation) - The ratio of the volume of water utilized by a crop to the volume of water applied.

2.17 Use Class - The use classes are described under 4OE-21.651. These include but are not limited to agricultural, aquacultural, commercial and industrial processes, cooling and air conditioning, dewatering, diversion and impoundment into non-District facilities, freeze protection, golfcourse, landscape, livestock, navigation, nursery, other outside uses, power production, recreation areas, soil flooding, water-based recreations, and water utility use.

3.0 Criteria

3.1 Administrative

3.1.1 Control Over Activities - Applicants must have legal control over the activities or situations for which they desire a Permit. This includes service areas for public water supply, lands which they wish to irrigate, and lands on which pumps or wells will be located.

3.1.1.1 Public Water Supply Service Area - If an Applicant refuses to serve a new demand located within either the existing or proposed service area, the permitted allocation may be subject to modification.

3.1.1.1.1 Public Service Commission (PSC) Territory - Applicants regulated by the Public Service Commission must submit as part of the application a copy of the PSC certification describing the service area. If the Applicant proposes a new service area in addition to an existing certified area then a permit condition requiring that PSC certification for the expansion be obtained within two years of permit issuance will be added to the permit.

3.1.1.1.2 Dade County Service Area - Applicants within Dade County must submit documentation that their service area is franchised by the Miami Dade Water and Sewer Board.

3.1.1.1.3 Local Government Franchise - If the Applicant is regulated by local government, the service area must be that which has been franchised by the local government unless the Applicant submits documentation that local government will allow the utility to operate outside the franchised area. The Applicant must submit a copy of a local government franchise with the application, if applicable.

3.1.1.1.4 Unregulated Service Territory - Applicants not regulated by either the PSC or local government must confine their service area to that which can reasonably be served within a projected ten year time frame, except for Broward and Lee county applicants, who must confine their service area to that which can reasonably be served

within a projected five year time frame. Municipal Applicants must justify service areas outside their municipal boundaries by attaching those agreements or contracts that authorize service to these areas.

3.1.1.1.5 Conflicting Service Territories - Conflicting Service area claims between Applicants, or between Applicant and an unregulated water service area, must be resolved by the involved parties. Unresolved disputes will prompt the Staff to recommend an allocation based only on the non-disputed portions of the projected service area.

3.1.2 Compatibility - Water use application must be consistent with the requirements and approvals of other governmental agencies that exercise jurisdiction over related matters, including comprehensive plans, zoning, public health, and natural resources.

3.1.2.1 Land Use - Before an application will be considered for the issuance of a water use permit the proposed land use must be compatible with all of the following: existing zoning, local government comprehensive plan and wellfield protection ordinance. Making application to local government for rezoning of the land will not suffice. Any necessary rezoning must be officially obtained prior to the application for a water use permit.

If the proposed project is a Development of Regional Impact (DRI) a copy of the final approved Development Order must be provided as part of the application. 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.

3.1.2.2 Water Supply - The proposed water use should not be inconsistent with positions taken by the District on the water supply element of the local government comprehensive plan, short term and long term county water supply plans, District water supply plans and other regional or subregional water resource plans.

3.1.2.3 Surface Water Management - The impact of withdrawals on an existing or conceptually permitted surface water management system must be evaluated and submitted as part of the application. When surface water management is related to water use through considerations of aquifer recharge, overdrainage, and/or saline water intrusion, the Applicant must provide a map of control elevations and evaluate the impact of the surface water management system on water availability.

3.1.2.4 State, Regional and Federal Agencies - The Applicant must provide information on approvals from agencies such as DER, EPA and Regional Planning Councils that have control over related activities.

3.1.2.5 State Water Policy - In addition to District rules, application must be consistent with State Water Policy Chapter I7-40, Florida Administrative Code (F.A.C.).

3.2 Technical - All applications are reviewed for compatibility of both supply and demand plus the ability of each application to meet District rules and policies.

3.2.1 Supply - District permits are required for the usage of all fresh and saline water sources. Sources are described as surface and groundwater, which can be further identified with the name of the aquifer and/or water body. Seawater and treated wastewater effluent are not subject to water use permit action.

3.2.1.1 Potentially Permittable Water- Potentially permittable water is that which is possibly available for use at a specific site. Potentially permittable water will be determined by evaluation of the following factors.

3.2.1.1.1 Basin Yield - Basin yield is the amount of water that can be withdrawn from a specific source in a basin without causing water level or potentiometric head declines that could not be in the public interest. Determination of basin yield involves delineation of a water budget, including: rainfall, evaporation, evapotranspiration, groundwater and surface water inflows and outflow's, and changes in stored water. If water shortages have historically occurred in the Applicant's area, Staff will evaluate on a case-by-case basis the reasonableness of additional allocations. In all cases, water shortage refers to a lack of water availability, not a lack of withdrawal facilities. When appropriate studies have not been conducted, basin yield may be calculated by establishing a conservative groundwater recharge factor for the basin. This method of estimation is particularly true of island or peninsular areas where rainfall recharge is the primary or only source of water.

3.2.1.1.2 Allocated Water - When considering a new allocation, Staff will consider the amount of water already allocated and exempt uses. If a new use requests an allocation in an area where there is not enough water to satisfy allocated water, exempt uses and proposed demands, Staff will determine an allocation that, in the evaluation o. Staff, when added to existing allocations and exempt uses, will not exceed the basin yield.

3.2.1.1.3 Existing Legal Uses of Water - The proposed use of water must not cause an unmitigated adverse impact on a legal use of water existing at the time of permit application. An adverse impact is defined as a decrease of ten percent or more in the withdrawal capability of any presently existing legal use. The percentage reduction in withdrawal capability is calculated in the following way:

% Reduction = (1 - (withdrawal capability after impact divided by the withdrawal capability prior to impact)) multiplied by 100.

In all cases, it is the Applicant's responsibility to evaluate and mitigate adverse impacts on presently existing legal uses. Mitigation may include pumpage reduction, replacement of the impacted individual's equipment to enable greater withdrawals, payment of cash for damages, drilling a new well farther away from the damaging well, etc.

3.2.1.1.4 Existing Land Use - The use of water must not adversely impact off-site land use existing at the time of permit application. The owner of a wellfield, well, or mining pit may accept adverse impacts on his own land use, as long as the public interest is not detrimentally affected. Adverse impacts include, but are not limited to: land subsidence or collapse as a consequence of water table or potentiometric head drawdown, significant lowering of lake levels, wetland water levels or drainage of ponds and other water bodies; appreciable damage or destruction of landscape and other vegetation. It is the Applicant's responsibility to evaluate and mitigate adverse impacts on off-site existing land use.

3.2.1.1.4.1 Disposal of Industrial Wastewater - Depending upon the nature of the industrial wastes generated, surface water and or groundwater quality monitoring programs will be required as a condition of a District industrial water use permit. Although not normally associated with industrial water use, discharge quantity and quality may be subject to storm water regulations, with District surface water management rules applicable.

3.2.1.1.5 Environmental Impact - The following categories of environmental features will be used by the Staff in evaluating impacts:

3.2.1.1.5.1 Direct Relationship to Water Resources - Environmental features directly related to the water resources of the District' such as:

1) Wetland habitat except those previously affected by drainage, land clearing, earthwork, or those which have been invaded by exotic species and are in a state of environmental decay, and

2) Natural water bodies.

3.2.1.1.5.2 Indirect Relationship to Water Resources - Environmental features which may be indirectly related to the water resources of the District, such as:

1) Intermittent ponds, and

2) Significant habitat diversity support systems, usually consisting of highly productive mixed upland and wetland systems with appropriate buffer areas.

3.2.1.1.5.3 Other Environmental Features Evaluated on a Case-by-Case Basis

3.2.1.1.5.4 Preferred Habitats - Preferred habitat for rare, endangered, or threatened species of plants or animals will be identified.

3.2.1.1.5.5 Natural vs. Proposed - The actual impact resulting from changes to the natural site will be predicted by considering the existing natural system as altered by the proposed project.

3.2.1.1.6 Public Health and Water Quality - The Applicant for a public water supply permit must request that other governmental agencies responsible for public health evaluate the application for impacts on public health. If a response is made by those agencies then the response must be submitted as part of the application. Agencies responsible for public health include the following: Department of Environmental Regulation, Health Departments for Dade, Broward, Palm Beach, Polk, and Lee Counties; Dade County Department of Environmental Resources Management, and Lee County Environmental Protection Services.

3.2.1.1.7 Saline Water Intrusion

3.2.1.1.7.1 Use of Fresh Water - The use of fresh water must not:

1) cause significant inland movement of saline surface water,

2) cause significant inland movement of the saline water interface within an aquifer system, or

3) otherwise reduce the amount of potable water because of inland movement of the saline water interface, upconing of saline water that may be beneath the freshwater, or vertical leakage of connate saline water.

3.2.1.1.7.2 Saline Water Movement - Significant movement is defined in the following way:

1) saline water encroachment that adversely affects the Applicant, or other existing legal uses, or is otherwise detrimental to the public interest or the public health, safety and general welfare.

Assessment of the potential for saline water intrusion will be made on a case-by-case basis, as will the reduction of storage capability of the aquifer. The Applicant must submit proof that the use of fresh water will not cause the problems outlined in 3.2.1.1.7.1 (1), (2), and (3) above.

Staff will not recommend an increase in allocation under the following circumstances:

1) the hydraulic gradient between the wellfield and saline water is such that a hydraulic head (mound of fresh water) less than one foot National Geodetic Vertical Datum (NGVD) exists between the wellfield and saline water during the months of November through April,

2) monitoring wells within 800 feet of a production well reflect chloride concentration increases at the base of the aquifer, indicating long term advancement of the saline front toward the wellfield.

3) other evidence shows saline water intrusion will be a serious threat to the wellfield if pumpage is increased.

The Staff may recommend implementation of a "Saline Water Intrusion Monitoring (SWIM) Program" as a special condition to permits issued to applicants who are located near saline water. The criteria used to determine if a SWIM Program will be recommended are listed under Section 5.1.4.2.

3.2.1.1.7.3 Use of Saline Water - This section includes the use of saline water as a source of supply including but not limited to its use for irrigation and public water supply through the use of desalination treatment. The use of saline water may cause saline water intrusion, but not to the extent of adversely affecting other existing legal uses of water, the applicant, or the public health, safety and general welfare. Evaluation of proposed withdrawals will be accomplished on a case-by-case basis. The Applicant must provide proof that:

1) the use of saline water will not prevent the Applicant from providing potable water as defined by DER in the case of public water supplies,

2) the proposed use of water will not have an unmitigated adverse impact on existing legal uses, and

3) the use is in the public interest.

3.2.1.1.8 Minimum Stages, Levels and Flows - Some withdrawals will be subject to limitations because of minimum surface or groundwater levels defined in District rules, operation schedules, management plans and by prior District permits. The geographic coverage of such levels is variable and changes as new permits are issued and old ones cancelled. Pre-application meetings with District Staff are encouraged if questions about these criteria arise.

3.2.1.1.9 Competing Uses - Applications are declared to be competing when Staff evaluation indicates that the proposed water use by two or more Applicants will, in the estimation of Staff, exceed either the basin yield or the amount of water which exists at a particular location and is capable of being used.

In the case of competing applications, Staff will recommend that the Board approve or modify the application that best serves the public interest. In the event that both Applicants serve the public interest equally, Staff will recommend that the Board give preference to a renewal application over a new application.

If competing public water supply applicants are all renewals or all new applications and each applicant serves the public interest equally, Staff will calculate an equitable allocation for each applicant in the following manner:

1) per capita consumption will be set equal to the smallest value of either of the fol1owing:

   (a) the District-wide average, or

   (b) the least value of all Applicants in competition,

2) projected water use based on population growth for all Applicants will be reduced on a percentage basis until the sum total of all withdrawals is equal to the sum total of water, which in the estimation of Staff, can be allocated.

3.2.2 Demand - The highest allocation that Staff can recommend is based on reasonable need. If all criteria are satisfied, Staff will recommend as the permitted allocation the quantity of water constituting a reasonable-beneficial use of water (F.A.C. 17-40). The District computes, projects, and confirms demands as described below (Sections 3.2.2.1.1, 3.2.2.2.1, 3.2.2.3.1, and 3.2.2.4.1).

Should an Applicant believe that his situation requires special consideration he should so advise the Staff. Examples of unusual situations include:

1) industrial use of public water supply that invalidates traditional per capita demands,

2) circulation systems for fish and other marine organisms, recreation, hydroponics, etc., and

3) air conditioning systems.

3.2.2.1 Public Water Supply

3.2.2.1.1 Reasonable Need for Requested Allocation - The Applicant must demonstrate a reasonable need for the requested allocation. For public water supply systems, reasonable need is calculated by multiplying the ten year projected permanent population (five years for Broward and Lee counties) for an authorized service area by the calculated or estimated per capita daily water use. Projected population shall be determined using the methods and data sources specified in subsection 3.2.2.1.2; authorized service areas shall be determined using the information in subsection 3.1.1.1; and per capita daily water use shall be calculated or estimated as prescribed in subsection 3.2.2.1.3. Other methods of determining reasonable need may be used as approved by Staff.

If the Applicant's requested allocation exceeds the reasonable need as calculated pursuant to this section, the Staff will recommend a projected need based on its analysis of population projections for the service area and historical or design per capita use of water.

3.2.2.1.2 Projected Population - Ten years of permanent population growth (five years in Broward and Lee Counties) should be projected for the service area by using the local comprehensive land use plan and its amendments. In the absence of suitable information in the comprehensive plan, one of the following sources of growth projections should be used:

1) University of Florida, Bureau of Economic and Business Research Population Data, or

2) Regional Planning Council information.

If the Applicant feels that the population projected by any of the above sources is inaccurate for the proposed service area, the Applicant may verify the inaccuracy by submitting written concurrence by a local government planning agency. Developer agreements alone will not be considered acceptable projections for population growth.

Staff will also consider evidence submitted in the application that indicates adjustments to the population base due to changes in the percentage of residents in the service area actually served by the utility. Information about large, unique users not related to population, such as golf courses and industrial plants, will also be considered.

For small developments, virtually no information on projected population may be available at the local government level. In this case, the Applicant may estimate the population based on a persons per unit figure for the number of dwelling units in the development. The persons per unit figure must be verified by local government.

3.2.2.1.3 Per Capita Daily Water Use - Historical average per capita daily water use will generally be acceptab1e as a water use for the projected future population. Historical average per capita daily water use is calculated either by dividing average day water withdrawals for the current pumpage period (most recent twelve months of pumpage data) by the permanent resident population for the same period of time, or by determining the per capita daily water use as described above for each of the five most recent years and choosing the highest value.

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, al1ternative per capita estimates will be appropriate and should be presented accompanied by necessary documentation. In the event that the historical usage is greater than 200 gallons per capita day (GPCD) the Applicant must submit information explaining the high per capita use.

If no historical use of water exists, a design per capita use acceptab1e to the District Staff may be used. For any proposed development, the design per capita use must be explained. For proposed residential development, the design per capita should be justified based on dwelling unit type, population characteristics,

seasonality of the population and by comparison with adjacent similar developments. The Applicant should clearly state what provisions are made for irrigation in residential developments. If the developer is providing on-site irrigation from a well or other source or if the owners may reasonably be expected to do so, the per capita demand of the population should reflect indoor use only. If no irrigation system is to be provided by the developer, per capita demand will then include reasonable irrigation demand as well as indoor use.

3.2.2.1.4 Other Uses - If unusual uses of the public water supply system would invalidate the use values obtained by multiplying per capita values by population, such information should be provided for consideration.

3.2.2.1.5 Maximum Day Withdrawal - The maximum daily withdrawal is determined by multiplying the average day allocation by an acceptable maximum day to average day withdrawal ratio. The methodology used in determining the maximum day to average day ratio will vary somewhat depending upon the available data. In general, the maximum day to average day withdrawal ratio is calculated by dividing historical maximum day withdrawal by the average day withdrawal for twelve months of record.

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

1) In cases where several years of pumpage records are available. a maximum day to average day withdrawal ratio is calculated for each year. The most suitable ratio may then be chosen from the last three years of record.

2) For proposed developments, a ratio between 1.5 and 2.0 will be used, depending upon the operation of the utility, although engineering documents justifying a different ratio will be considered.

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

3.2.2.2 Industrial

3.2.2.2.1 Reasonable Need for Industrial Water Use - A reasonable need for the requested allocation Is based on the amount of water

needed to perform an industrial process in an efficient, non-wasteful and economic manner.

3.2.2.2.2 Maximum Daily Withdrawal - A new industrial use with records for less than one year's operation must use a ratio between 1.5 and 2.0, although engineering documents justifying a different ratio will be considered.

3.2.2.3 Mining (dewatering) - Mining (dewatering) use is a withdrawal of water for the purpose of creating a dry working environment. Demands are computed on a case-by-case basis and may be related to rainfall conditions.

3.2.2.3.1 Reasonable Need for Allocation - A reasonable need for the requested allocation is the amount of water needed to be discharged from a mining pit in order to economically and effectively mine the pit. In some cases, dewatering may involve lowering the water table several feet to lower the level below caprock, which is then used as an operating floor and drying surface. In other cases, it may involve completely dewatering a pit to allow pans and scrapers to remove minable rock and sand.

3.2.2.3.2 Maximum Day Withdrawal - Maximum day withdrawal criteria for Industrial water use will also apply to mining dewatering water use applications. See Section 3.2.2.2.2 above.

3.2.2.4 Irrigation and Related Water Uses

3.2.2.4.1 Reasonable Need - The reasonable need for irrigation water use is equal to one of the following:

1) the supplemental crop requirement divided by the system efficiency if the installed capacity is capable of supplying the computed quantity.

2) the installed capacity, if this quantity is less than the supplemental crop requirement divided by the system efficiency,

3) the amount of irrigation water determined by the Institute of Food and Agricultural Sciences (IFAS) or that which IFAS is in agreement with.

4) the amount of irrigation water determined by District Staff, or

5) the supplemental crop requirement for citrus and pasture as defined in sections 3.2.2.4.5 and 3.2.2.4.6, respectively.

3.2.2.4.2 Supplemental Crop Requirement - The supplemental crop requirement is determined by using the method developed by the Soil Conservation Service (SCS) and described in the publication "Irrigation Water Requirements, Technical Release No. 21, United States Department of Agriculture, Soil Conservation Service, Engineering Division, 1970." This procedure utilizes a modified Blaney Criddle method to determine evapotranspiration and then determines the supplemental crop requirement using soil type and rainfall, among other variables. In most cases the supplemental irrigation requirement is determined for a two-in-ten year drought condition.

3.2.2.4.3 System Efficiency - The system efficiency factors listed below will be utilized in determining water allocation requirements, unless the Applicant can prove that a different factor is applicable for his particular system.

System	Method	Efficiency
Surface-gravity	Seepage, furrow	50%
	Semi-closed, closed pipe	50%
	Crown flooding	50%
	Subirrigation	50%
Sprinkler	Sprinkler	75%
	Volume gun, Traveling gun	75%
	Overhead	75%
Trickle	Drip	85%
	Spray jet	85%

3.2.2.4.4 Allocation Quantities - Irrigation allocations will be based on maximum daily withdrawals and annual withdrawals for applications of special concern. For other applications, allocations will be based on maximum monthly withdrawals. Maximum daily withdrawals will be computed by dividing maximum monthly withdrawals by 30. Maximum monthly withdrawals will be computed by choosing the irrigated month with the highest supplemental crop requirement. The annual withdrawal will be computed by determining the average annual withdrawal necessary to grow the crop.

3.2.2.4.5 Citrus Irrigation - The reasonable need for citrus is calculated using a monthly supplemental crop requirement of 5.3 inches in all areas of the District except the western portion of Orange County as shown in Figure B-1 and described on figure B-2,

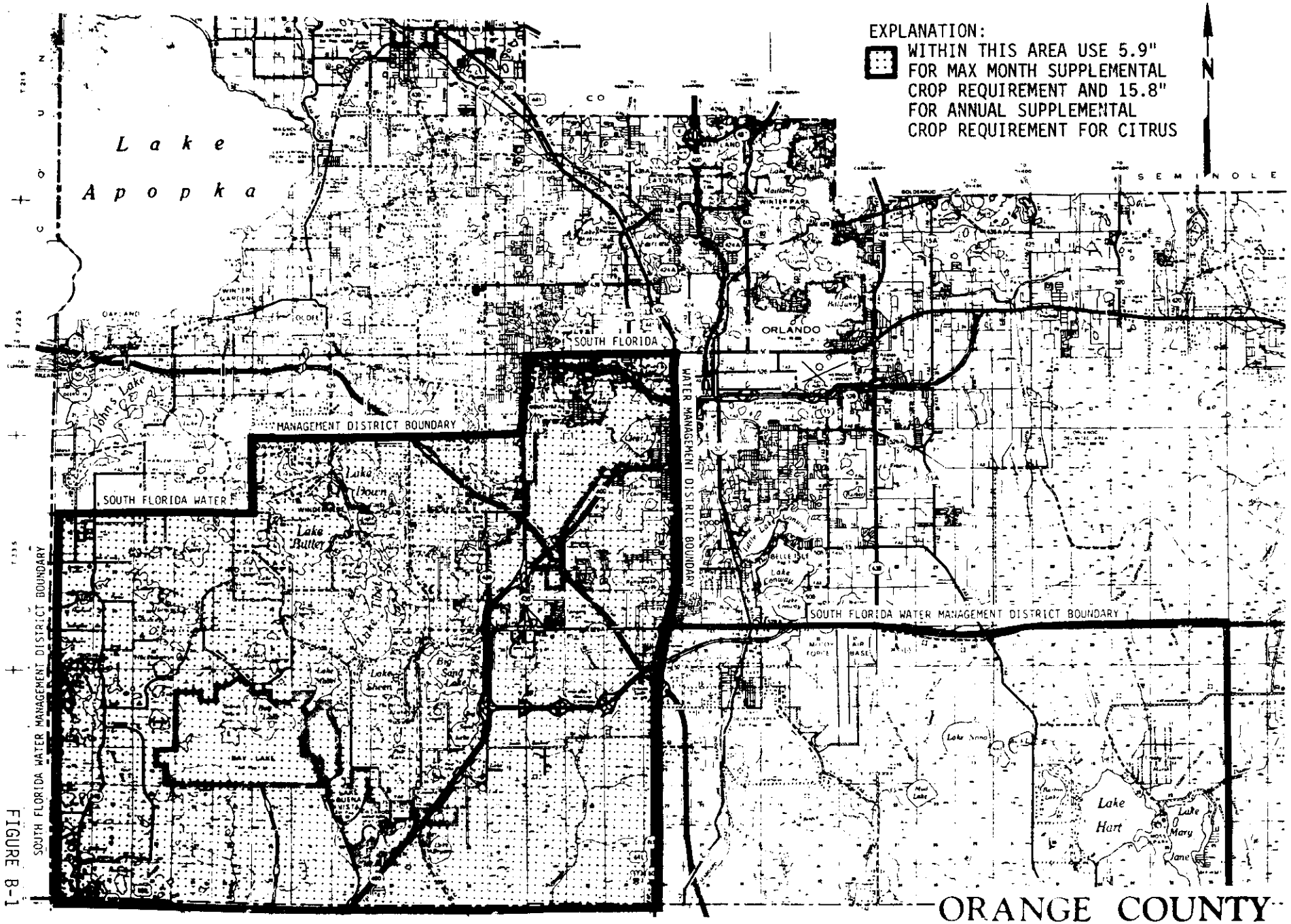


FIGURE B-1

CITRUS ALLOCATION FOR WESTERN ORANGE COUNTY

Citrus Allocation
for
Western Orange County

Beginning at the intersection of the range line dividing Ranges 26 and 27 East with the township line dividing Townships 24 and 25 South; thence northerly along said 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 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 said Westerly right-of-way line to the intersection with the Orange-Osceola County line; thence westerly along said County line to the POINT OF BEGINNING.

Figure B-2

where 5.9 inches must be used. The reasonable need is then calculated as in 3.2.2.4.1(1) or (2).

3.2.2.4.6 Pasture Irrigation - Unimproved pasture will not be given an allocation. An allocation for improved pasture may be given if the applicant documents that an irrigation system capable of irrigating the improved pasture will be or has been constructed and the details of such a system are provided. only the irrigated area excluding roads, ponds, ditches, and forested areas will be considered for an allocation. Only the acreage that will be put into improved pasture during the duration of the permit will be evaluated. The reasonable need for improved pasture will be calculated as in 3.2.2.4.1(1) or 3.2.2.4.1(2) but using the following evapotranspiration values in the SCS procedure:

Month	ET	Month	ET
Jan	2.02 inches	Jul	4.81 inches
Feb	2.51	Aug	4.79
Mar	3.35	Sep	3.85
Apr	4.21	Oct	3.42
May	5.21	Nov	2.50
Jun	4.25	Dec	1.92
	Total		42.84 inches

3.2.2.4.7 Livestock - The reasonable need for livestock use will be derived by multiplying the estimated total number of animals by gallons needed per day per animal. Usage by beef cattle is 12 gpd/head; usage by dairy cattle is 35 gpd/head for drinking and 150 gpd/head for barn use; usage by horses is 12 gpd/horse.

3.2.2.4.8 Freeze Protection - A daily allocation for freeze protection will be evaluated when the Applicant:

1) makes a request,

2) is able to show through system design that the water can be utilized,

3) application of water in the proposed manner will provide freeze protection,

4) the use of water is in agreement with IFAS research on the amount of water necessary for freeze protection, and

5) the requested amount of water necessary for freeze protection exceeds the allocation for irrigation. The use of water for freeze protection will be subject to technical review as described under 3.2.

3.2.2.4.9 Restricted Allocation Areas

3.2.2.4.9.1 Allocation of Floridan Aquifer Water in the Eastern Okeechobee - Northwestern St. Lucie Basin - When the project site is located within the Eastern Okeechobee - Northwestern St. Lucie basin, the withdrawals from the Floridan Aquifer are limited to 1.5" for the maximum month, with the balance of the water needs being withdrawn from other sources. This area is depicted in Figure B-3 AND DESCRIBED ON FIGURE B-4.

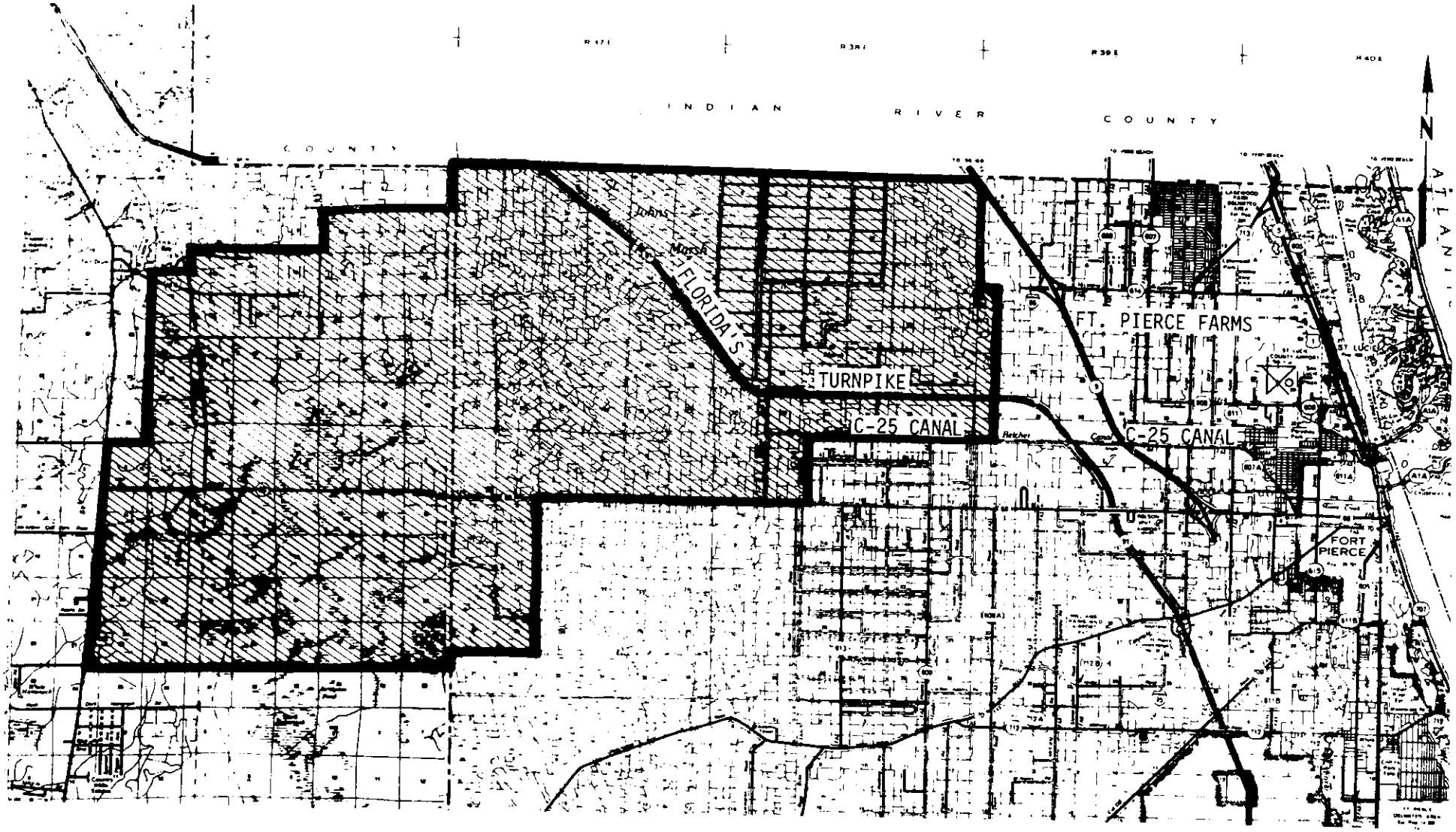
3.2.2.4.9.2 Pumps on Floridan Wells in Martin and St. Lucie Counties - No pump shall be placed on a Floridan well in Martin or St. Lucie county except under the following guidelines:

1) The pump was in place and operational on the well prior to March 2, 1974.

2) The pump which is proposed for installation, is a centrifugal pump installed for the purpose of increasing pressure in attached piping (i.e. drip or jet irrigation systems) and not for the purpose of increasing flow over and above that flow which naturally emanates from the well. The Permittee shall notify District Staff after well construction, for the purpose of determining flow rate prior to pump installation.

3) The Applicant conducts a hydrogeologic study approved by Staff which shows that pump installation and withdrawal of artesian water will not have an adverse impact on any existing legal use during the course of the irrigation season.

3.2.2.4.9.3 New Uses from District Canals C-23, C-24, and C-25; Changing Pump Sizes on District Canals C-23, C-24, and C-25 - No additional water will be allocated from C-23, 24 and 25 over and above existing allocations until District investigations show that additional water is available for allocation. No increases in pump capacity will be recommended for surface water pumps located on C-23, 24, and 25 for any use of water.



EXPLANATION

AREA OF CONCERN

EASTERN OKEECHOBEE - NORTHWESTERN
ST. LUCIE BASIN

FIGURE B-3

ST. LUCIE COUNTY
FLORIDA

Eastern Okeechobee-
Northwestern St. Lucie Basin

Begin at the Southwest corner of Section 36, Township 34 South, Range 35 East; thence northerly along the section lines to the Northwest corner of Section 13, Township 34 South, Range 35 East; thence easterly along the section line to the Range line between Ranges 35 and 36 East; thence northerly along said Range line to the Northwest corner of Section 18, Township 34 South Range 36 East; thence easterly along the section lines to the Southwest corner of Section 10, Township 34 South, Range 36 East; thence northerly along the section line to the Northwest corner of said Section 10; thence easterly along the section lines to the Okeechobee-St.Lucie County line; thence northerly along said county line to the south line of Indian River County; thence easterly along the St.Lucie-Indian River County line to the westerly right of way line of Interstate 95; thence Southeasterly along said right of way line of Interstate 95 to the East line of Section 1, Township 34 South, Range 38 East; thence southerly along the section lines to the Northwest corner of the Southwest one-quarter of Section 18, Township 34 South, Range 39 East; thence easterly along the 1/4 line to the Northeast corner of said Southwest 1/4 of Section 18; thence southerly along the 1/2 section lines to the North right of way line of South Florida Water Management Districts Canal 25 (Belcher Canal); thence westerly along said North right of way line of Canal 25 to the West right of way line of South Florida Water Management Districts Canal 24; thence southerly along said Westerly right of way line of Canal 24 to the North right of way line of State Road 68; thence westerly along said North right of way line of State Road 68 to the West line of Section 9, Township 35 South, Range 37 East; thence southerly along the section lines to the Southwest corner of Section 28 Township 35 South, Range 37 East; thence westerly along the section lines to the St. Lucie-Okeechobee County line; thence southerly along said St.Lucie-Okeechobee County line to the Southeast corner of Section 25, Township 35 South, Range 36 East; thence westerly along the section lines to the East right of way line of U.S. Highway 441; thence northerly along said East right of way line of U.S. Highway 441 to the Township line between Townships 34 and 35 South; thence easterly along said Township line to the POINT OF BEGINNING.

Figure B-4

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

3.2.2.4.9.5 New Uses from Lake Istokpoga-Indian Prairie Area No additional surface water will be allocated from Lake Istokpoga-Indian Prairie Area over and above existing allocations. No increase in surface water pump capacity will be recommended.

3.3 Conservation - The District requires that the feasibility of conservation be considered by all applicants.

3.3.1 Irrigation - The District requires that all golfcourse irrigation permits present the District with an evaluation of the feasibility of using wastewater as a source of irrigation prior to permit expiration. Other conservation measures should be identified, such as: priority irrigation systems, moisture sensing devices, native vegetation, etc. Golfcourse irrigation permits at this time are issued with a duration of not more than three years.

3.3.2 Public Water Supply - An Applicant for a public water supply use which is a local government must submit a letter which indicates that the local government is requiring compliance with the Water Conservation Act, F.S. 553.14, which requires that after September 1, 1983, no new building shall be constructed which;

1) employs a tank-type water closet having a tank capacity in excess of 3.5 Gallons of water,or

2) employs a shower head or faucet that allows a flow of more than an average of 3 gallons of water per minute at 60 pounds of pressure per square inch.

An applicant for a public water supply use which is not a local government must submit a letter to the local government in which the use is either existing or proposed requesting that the local government implement the Water Conservation Act provisions if it has not already done so; a copy of this letter must then accompany the application form. Other conservation practices should be identified by the Applicant because such information may affect restrictions during a water shortage.

3.3.3 Mining (dewatering) - Saltwater discharge to freshwater systems will not be permitted for dewatering operations. Freshwater discharge to saltwater will only be allowed during the wet season as a normal storm drainage release which is in compliance with the surface water management permit. At times

other than during project storms, on site retention is required. Compartmentalizing and pumping between cells is encouraged and usually required. Applicants should reserve adequate land for water storage purposes.

3.3.4 Industrial - Conservation recycling and reuse of water are encouraged to the extent that water use is reduced and the reuse meets the restrictions of the Department of Environmental Regulation's water quality rules.

4.0 Application Support Hydrogeologic Data - If the Applicant desires an allocation greater than that which the Staff can recommend, it is in the best interest of the Applicant to perform a hydrogeologic investigation. The need for hydrogeologic data collection and evaluations should be discussed during the pre-application meeting. Additional hydrogeologic data based on site-specific considerations may be requested in the additional information (30-day) letter.

Data collection must be performed when the amount of data is inadequate for Staff to evaluate impacts associated with proposed withdrawals and if a larger allocation is desired. Data collection may involve the compilation of existing data and/or the collection of new data. The types of data that may be collected include but are not limited to: rainfall, historical pumpage records, specific capacity data on individual wells, transmissivity, storage coefficient, leakance to the aquifer, water level elevations and records for wells or other water bodies, water budgets, and the location of the saline water interface. A proposal for data collection should have Staff approval prior to expenditure of funds.

Staff may re-evaluate an application upon receipt of additional data. It should be emphasized that additional data collection will result in a higher allocation only if an allocation determined from additional data satisfies all criteria.

If the Applicant disagrees with the Staff's interpretation and evaluation of existing or new data, and subsequent allocation recommendation, it will be in the best interest of the Applicant to conduct a hydrogeologic evaluation if a larger allocation is desired. An evaluation may involve the interpretation of field data, analysis of impacts, movement of the saline front, migration of pollution plumes, and computer modeling of the groundwater system. Proposals for evaluations should have Staff concurrence prior to initiation of the work effort to insure that work effort will cover all the concerns of Staff.

5.0 Staff Recommendation

5.1 General - Recommendations for approval by Staff and subsequent permits will contain an authorization and special conditions. The authorization will include a description of the user by name, project name, location and/or service area size, a withdrawal allocation per unit time, the purpose of the use, the source, and the duration or expiration date.

5.1.1 Amount and Source - Allocations are usually described in terms of million or billion of gallons per year or month. As a special condition withdrawals may

also be limited to a maximum daily quantity in million gallons. Sources are described, with further descriptions of the name of the aquifer and/or water body as a special condition.

5.1.2 Duration of Permit - Permit duration is based on the Applicant's demonstrated ability to meet the demand.

5.1.2.1 Public Water Supply and Industrial - When the water use projection for a 10-year period satisfies all allocation criteria, Staff will recommend permit issuance for as long as a 10-year period, except in Broward and Lee Counties where Staff will recommend only a five-year permit duration.

Permit duration will reflect the number of years the recommended allocation will be able to satisfy projected demands.

5.1.2.2 Mining (dewatering) - Permit durations are for the length of the dewatering activity but not to exceed three years.

5.1.2.3 Irrigation - The duration of irrigation permits (landscaping, agricultural, recreational, and golf) is normally established by Basin expiration date as follows (see Figure B-5 for location):

July 15, 1987	July 15, 1988
October 15, 1987	October 15, 1988
January 15, 1988	January 15, 1989
April 15, 1988	

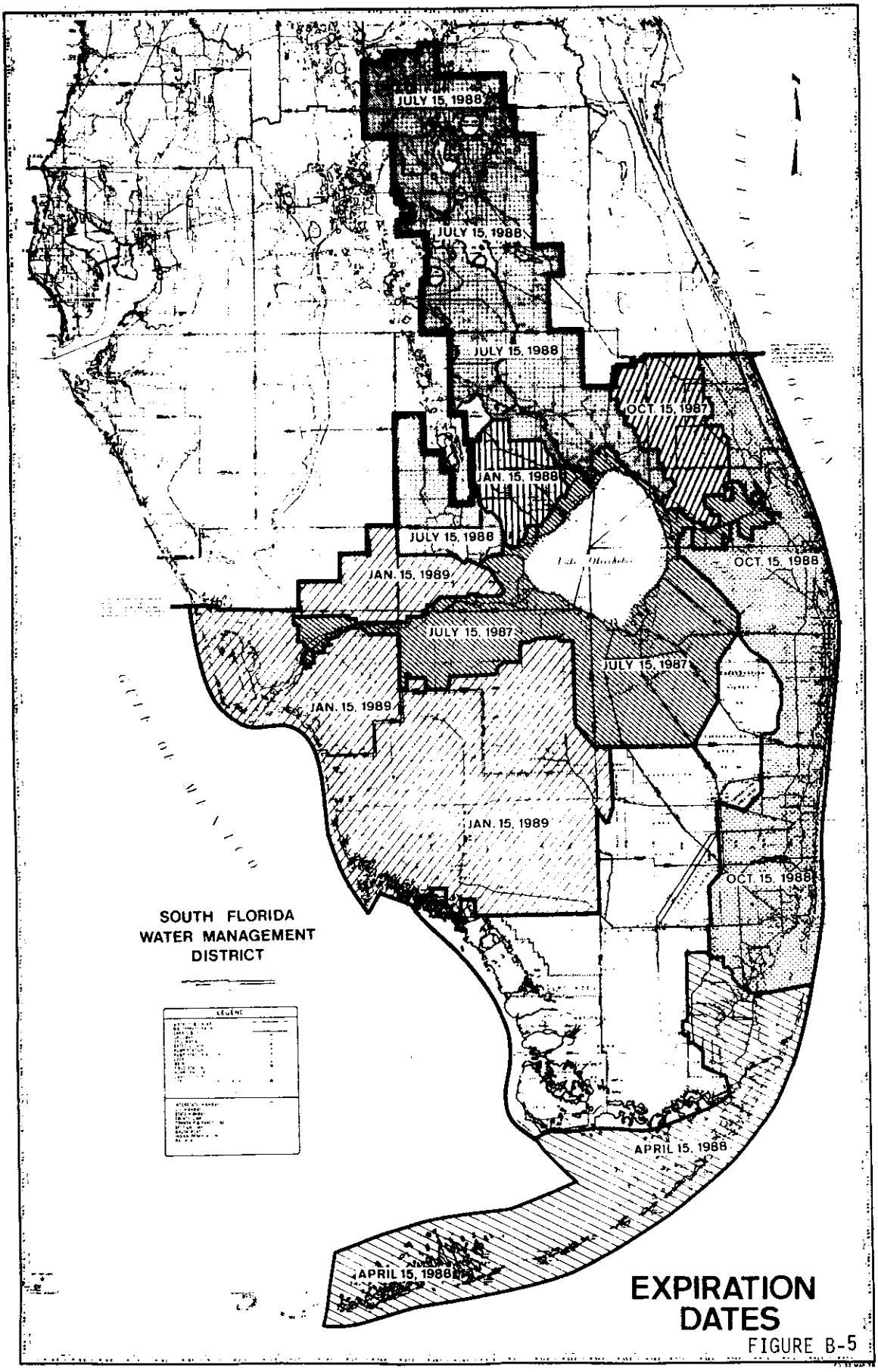
The duration of irrigation applications of special concern is handled on a case-by-case basis.

The duration of irrigation permits in Broward and Lee counties is not more than five years.

5.1.3 Type of Use - Uses are those as described in 2.18 above, and are placed on permits for purposes of identifying the types of restrictions that will be placed on a user during a water shortage.

5.1.4 Monitoring - The District uses data from monitoring programs to evaluate quantitative and qualitative effects of water use on an aquifer. The size of the area of influence of a water use can be determined, and the potential for interference with other uses, adverse impact to the environment, and POTENTIAL FOR inducing movement of pollutants into an aquifer can be evaluated.

5.1.4.1 Pumpage - For irrigation applications of special concern, the collection of pumpage data will be required on a daily basis with monthly



EXPIRATION DATES

FIGURE B-5

submittal. For other irrigation applications, the collection of pumpage data, if requested, must be performed weekly and submitted monthly as required by District Staff. For uses other than irrigation, data must be collected on a daily basis and submitted monthly.

5.1.4.2 Water Quality

5.1.4.2.1 Saline Water Intrusion Monitoring - The District will require development and implementation of a Saline Water Intrusion Monitoring (SWIM) Program when:

1) saline water is near the point of withdrawals, or

2) movement of saline water towards the source of water is possible as a consequence of future withdrawals.

A SWIM Program may also be necessary for an applicant using saline water. A SWIM Program will be required if any one of the following conditions is present:

1) the point of withdrawal is within one mile of a brackish or saltwater body of water, including canals and tidal creeks;

2) the source of water is located seaward of the 250 mg/l chloride line mapped at the base of the aquifer, or is located seaward of a line connecting two adjacent salinity control structures;

3) the land on which the source of water 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;

4) a history of saltwater intrusion, or increasing chloride concentrations, exists for either groundwater or surface water in the vicinity of the water use;

5) non-potable saline water is located either above or below the producing zone, and is not separated from the producing zone by a distinct and definable confining layer;

6) 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; or

7) Staff evaluation indicates that, at projected withdrawal rates, saline water intrusion may occur in neighboring wellfields.

5.1.4.2.2 Other Pollution Monitoring - The District will require monitoring when the source of water is a potential source of pollution or when the wellfield will cause movement of polluted water towards the withdrawal point.

5.1.4.3 Rainfall - The District will require monitoring of rainfall at all public water supplies. For other uses the necessity for rainfall monitoring will be determined on a case-by-case basis and reported to the District monthly.

5.1.4.4 Groundwater Level Monitoring Program - A groundwater level monitoring program will be required under the following conditions:

1) A wellfield is located near a source of saline water,

2) A wellfield is in proximity to a potential source of groundwater contamination including, but not limited to, landfills, land waste disposal sites, facilities which store or handle hazardous materials, and petroleum storage facilities,

3) The area of influence of the wellfield is such that the potential exists for interference with other existing wells,

4) The wellfield may cause adverse impact on surface water or wetlands, or

5) Insufficient data exists to define the cone of depression of the wellfield.

5.1.5 Use of the Lower Hawthorn Aquifer in Lee County - the use of the Lower Hawthorn aquifer in Lee county is subject to the following restrictions on its use:

1) as a source of potable water with desalination, if the effluent brine can be discharged without causing adverse impacts,

2) as a source of irrigation water where the shallow aquifer is:

a) too thin to be exploitable,

b) contaminated,

c) the surface water management system will carry runoff to tidewater, or

d) where the irrigation water can be diluted to 200 mg/l chloride concentration.

Use of the Lower Hawthorn aquifer for irrigation requires a technical evaluation and a conclusion of no adverse impact; and

3) any use of the lower hawthorn aquifer where the shallow aquifer contains potable water will necessitate a detailed water quality monitoring program.

5.2 Limiting Conditions

5.2.1 Standard - The items listed below are standard limiting conditions that may be added to a permit. Case-by-case evaluation may require project specific conditions.

1) In the event of a declared water shortage, water withdrawal reductions will be ordered by the District in accordance with the Water Shortage Plan, Chapter 40E-21, Florida Administrative Code.

2) Source Classification is _____.

3) Permittee shall mitigate to the satisfaction of the District any adverse impact on existing legal uses caused by withdrawals. When adverse impacts occur, or are imminent, District reserves the right to curtail withdrawal rates. Adverse impacts are:

a) reduction in well water levels that impairs the ability of an adjacent well to produce water (an adjacent well may be domestic well, lawn irrigation well, public water supply well, etc.),

b) significant reduction in levels in an adjacent water body such as a lake, pond, or a canal system,

c) saline water intrusion or induction of pollutants into the water supply of an adjacent water use, resulting in a significant reduction in water quality, and

d) change in water quality that causes impairment or loss of use of a well or water body.

4) Permittee shall mitigate to the satisfaction of the District any adverse impact on existing off-site land use as a consequence of withdrawals permitted herein. If increased withdrawals cause an adverse impact on

existing land use the District reserves the right to curtail future withdrawal rates. Adverse impacts are:

a) significant reduction in water levels in an adjacent water body (such as a lake, pond, or canal system),

b) land collapse or subsidence caused by reduction in water levels, and

c) damage to crops and other vegetation, causing financial harm to the landowner.

5) Permittee shall not refuse immediate entry or access to any authorized representative of the District who requests entry for purposes of inspection and presents appropriate credentials.

6) If any condition of the permit is violated, the permit shall be subject to review and possible modification, enforcement action, or revocation.

7) Application for a permit modification may be made at any time.

8) Withdrawal facilities are _____.

9) This permit shall expire _____ from the date of issuance.

10) Maximum day withdrawal shall not exceed _____.

11) Use classification is _____.

12) The Permittee shall obtain all necessary Federal, State, local and special District authorizations prior to the use or withdrawal of water.

13) The permit does not convey any property right to the permittee, nor any rights and privileges other than those specified in the permit and Chapter 40E-2, FAC.

5.2.2 Special Conditions - The following are typical conditions that may be placed on a permit.

5.2.2.1 Groundwater Special Conditions

1) 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 acceptable to the District. Failure to make such repairs shall be cause for filling and abandoning the well, in accordance with procedures outlined in Chapter 40E-3 AND 40E-30, F.A.C.

2) One month prior to all new well construction, Permittee shall submit to the District an evaluation of the impact of pumpage from A proposed well location on adjacent existing legal users, pollution sources, environmental features, the saline water interface, and water bodies if the proposed well location is either different from a location specified in the application or if the well location was unspecified in the application.

3) Permittee shall secure a well construction permit prior to construction, repair, or abandonment of all wells, after January 1, 1885, as described in Chapter 40E-3 AND 40E-30, F.A.C.

5.2.2.2 Public Water Supply Special Conditions

1) Maximum daily withdrawal shall not exceed _____.

2) Permittee shall submit to the District copies of the monthly DER water treatment plant reports showing wellfield pumpage. Reports shall be submitted monthly in the month following either the first month of pumpage or permit issuance.

3) Permittee shall make daily or cumulative weekly rainfall measurements at the wellfield and report this data to the District monthly. Data collection shall begin in the month following the month of the permit issuance.

4) Permittee shall determine "unaccounted for" distribution system losses if the permittee distributes water within one mile of surface saline water. 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.Data collection shall begin within six months of permit issuance. Loss reporting shall be submitted to the District on a yearly basis from the date of permit issuance.

5) If the Permittee will not serve a new demand within the service area for which the annual allocation was calculated, the annual allocation may then be subject to modification.

6) Six months from date of permit issuance, Permittee shall develop and implement a "Wellfield Operating Program". This program shall detail which wells are primary, secondary, standby (reserve), and any other aspects of wellfield management. The Wellfield Operating Program may be submitted as a letter report.

7) Within one month of new well construction, Permittee shall perform step drawdown tests. Permittee shall submit this information within one month of the test. (Information on performing step drawdown tests is available from the District).

8) Permittee shall maintain an operable and accurate flow meter on the discharge side of the water treatment plant for the purpose of measuring daily use of water.

5.2.2.3 Industrial Special Conditions

1) Maximum daily withdrawal shall not exceed _____ .

2) Daily withdrawals shall be reported to the District monthly on forms provided by the District.

3) Within six months of date of permit issuance, Permittee shall develop and implement a "Wellfield Operating Program". This program shall detail which wells are primary, secondary, standby (reserve), and any other aspects of wellfield management. The Wellfield Operating Program may be submitted as a letter report.

4) Within one month of new well construction, Permittee shall perform step drawdown tests. Permittee shall submit this information to the District within one month of the test. (Information on performing step drawdown tests is available from the District.)

5.2.2.4 Mining (dewatering) Special Conditions

1) Maximum day pumpage for each pit shall not exceed MGD unless otherwise specified by Staff as a consequence of unusual rainfall conditions. If the need to exceed the above withdrawal rate arises, Permittee shall notify District Staff of the need, Staff shall evaluate the request then render a decision in an expeditious manner.

2) The borrow pit shall be constructed using sound engineering practice. If in the opinion of Staff the excavation endangers the properties of adjacent owners (through erosion, side wall collapse, etc.), the Permittee shall cease operation upon notification by the District until a method to stop such occurrences is found and instituted.

3) The operation, maintenance, and reclamation of the borrow pit shall comply at all times with all county, state, and federal regulations governing these operations.

4) Maximum installed capacity for each borrow pit shall not exceed _____GPM.

5) Permittee shall establish a surveyed datum point from which water levels in the borrow pit can be referenced.

6) Permittee shall immediately cease dewatering upon notification by the District when the District determines that continued dewatering would create a condition hazardous to the health, safety, and general welfare of the people of the District.

7) Daily withdrawals shall be reported to the District monthly on forms provided by the District.

8) Permittee shall be responsible for clearing shoaling if the Permittee's dewatering operation creates shoaling in adjacent water bodies.

9) Permittee shall comply with turbidity and general water quality standards for surface discharge into receiving streams, as per Florida Administrative Code 17-3.

10) Permittee shall not lower the water table below__feet NGVD which is__feet below ground surface. The depth of the pit shall not exceed feet below ground surface.

11) Off-site discharge shall be made only through the following facilities: _____.

12) Upon completion of construction, all above ground dikes, levees, and berms that will contain water shall be inspected for structural adequacy, with reports submitted to the District. These reports shall include proposal of technique and schedule for repair of any deficiencies noted, and shall be signed and sealed by a Florida Registered Professional Engineer.Subsequent continuing inspections shall be made in April and November with reports submitted to the District the following month.

13) Prior to installation of discharge facilities, the Permittee shall install in the receiving water body a staff gauge referenced to NGVD datum. The location of this gauge is subject to Staff approval. District Staff will then establish a maximum receiving water elevation. Dewatering discharge from the project must cease when receiving water elevation exceeds this maximum level.

14) All dewatering water shall be retained either on the Permittee's land or legally acceptable adjacent areas. Dewatering discharge shall not be allowed to drain to tidewater.

5.2.2.5 Irrigation Special Condition

1) If required, withdrawals on a (daily)(weekly)(monthly) basis shall be reported to the District monthly. Data submittal begins either in the month following the date of permit issuance or in the month that water use is initiated.

5.2.2.6 Golf Course Irrigation Special Condition

1) Prior to the expiration of the permit the Permittee shall present the District with an evaluation of the feasibility of using wastewater as a source or irrigation water. If wastewater is not a viable and economically feasible source of water then the Governing Board may renew the permit.

5.2.3 Monitoring/Data Collection Limiting Conditions

5.2.3.1 Potentiometric Head or Water Level

1) Permittee shall construct and maintain a potentiometric head monitoring well with a continuous recording device. The well and recorder shall be constructed, at a location acceptable to both Permittee and District Staff, within six months of permit issuance. Weekly potentiometric head measurements may be recorded by the Permittee in place of a continuous recording device. Potentiometric head records shall be submitted to the District as frequently as charts are changed for recording devices, or on a monthly basis for manual data collection. Charts from recording devices shall be submitted by December 31 of each year. Data collection shall begin in the month following the month of well construction.

2) Within two years of permit issuance, Permittee shall develop and implement a "Potentiometric Head Monitoring Program ." The program shall involve the construction of a multi-depth monitoring well network that will indicate the areal extent of the cone of depression. The network shall consist of _____ wells. A preliminary proposal shall be submitted to Staff within six months of the date of permit issuance.

3) Within six months of permit issuance, Permittee shall construct and maintain a staff gauge in the _____(water body). Water level data shall be collected on at least a weekly basis; more frequent collection is encouraged. The staff gauge shall be constructed in the

aforementioned water body, at a location acceptable to both Permittee and District Staff. Water level records shall be submitted to the District on a monthly basis.

5.2.3.2 Rainfall

1) Permittee shall make daily rainfall measurements at the wellfield and report this data to the District monthly beginning in the month following the month of permit issuance.

5.2.3.3 Water Quality

5.2.3.3.1 Saline Water Intrusion

1) Within two years of the date of permit issuance, Permittee shall develop and implement a "Saline Water Intrusion Monitoring (SWIM) Program." A preliminary proposal shall be submitted to Staff for approval within six months of permit issuance. The purpose of this program shall be to;

a) locate the saline water interface, and

b) construct a monitoring well network that will monitor the movement and velocity of the saline water interface.

The program shall consist of ____ wells. In developing the program, the Permittee shall consider well localities, depth, method of well construction, types of screen, method of chloride analysis, and frequency of data collection.

5.2.3.3.2 Pollution/Contamination

1) Permittee shall establish a water quality monitoring program within two years of permit issuance. The sampling points shall consist of _____ wells and _____ surface water sites. In developing the program, the Permittee shall consider well localities, depth, method of well construction, types of screen, methods of analysis, and frequency of data collection. A preliminary proposal shall be submitted to Staff for approval within six months of permit issuance.

5.2.4 Proposed Service Area Regulated by the Public Service Commission

1) Permittee shall obtain a Public Service Commission (PSC) certificate for the proposed service area within two years of permit issuance.

5.2.5 Artesian Floridan Wells

1) A one-quarter inch brass valve shall be installed on the casing side of the well valve head of Well No.___. The brass valve shall be threaded into the casing and shall exhibit a female threaded end on the discharge side. The valve shall be kept in working order. The purpose of this valve shall be for periodic checks on the potentiometric head of the Floridan Aquifer.

2) Permittee shall submit to the District an artesian well survey, which shall include the following: well cased depth, well total depth, and chloride ion concentration of the water in each well. This survey shall be submitted with six months of permit issuance.

3) Permittee shall equip each flowing artesian well with a valve capable of controlling the discharge from the well within one year of permit issuance.

4) In Martin and St. Lucie counties, the maximum installed capacity shall be that capacity at which the wells are capable of flowing in a free flowing mode relative to existing land elevation at the well site. Pumping equipment shall not be installed on any well as a means to regain or increase capacity.

5) Prior to the installation of a pump on a Floridan aquifer well in either Martin or St. Lucie county for the purpose of increasing pressure on the discharge side (rather than increasing flow) permittee shall obtain a flow verification determination by district staff to insure that the natural flow rate of the well is less than that of the proposed pump.

5.2.6 Desalination of Saline Water

1) Permittee shall receive approval from the Department of Environmental Regulation for discharge of effluent brine resulting from the desalination process. If approval is not received, the permit is subject to modification or revocation.

5.2.7 Additional Conditions for Applications of Special Concern. If the district determines on a case-by-case basis that the application is an area of special water concern because of either limitations on water availability or other potentially adverse impacts associated with the proposed withdrawal then;

1) allocation of water may be restricted or denied for irrigation purposes when sewage effluent is available,

2) irrigation may be restricted to the use of a low volume irrigation system or the irrigation allocation limited to the quantity of water which may be usable by a low-volume irrigation system,

3) monitoring programs may be imposed to delineate the cone of depression surrounding a withdrawal,

4) restrictions may be placed on the depth of surface water pump intakes

In addition the following limiting conditions may be attached to the permit:

5.2.7.1 Conditions on Applications of Special Concern -

1) Allocations shall be limited to on a maximum day basis and on an annual basis.

2) Pumpage data shall be collected on a daily basis and submitted to the District monthly.

3) For groundwater withdrawals - within six months of permit issuance, permittee shall equip all existing wells with flow meters or clocks which totalize pump operation time. Permittee shall equip all proposed wells with flow meters or clocks which totalize pump operation time prior to initiation of water use from those wells. In the case of flowing floridan aquifer wells, each well shall be equipped with a flowmeter within six months for existing wells and prior to use for proposed wells.

4) For surface water withdrawals - within six months of permit issuance, permittee shall equip all existing surface water pumps with flow meters, clocks or other devices which totalize pumpage. Permittee shall equip all proposed surface water pumps with flow meters, clocks or other devices which totalize pumpage prior to initiation of water use from those pumps.

6.0 Renewals and Modifications - All renewals and modifications shall be treated and applied for in the same manner as initial applications. Monitoring programs under existing or expired permits may be continued. Application must be made to the District for modification of a permit when;

1) the Permittee proposes to change the amount of water used, either increasing or decreasing the quantity,

2) the Permittee proposes to change the crop type, in the case of agricultural use,

3) the Permittee proposes a change in the use, and

4) the Permittee proposes a change in facilities or in the location of facilities or defines the location of proposed facilities which were previously not located.

6.1 Requirements - In order for a Permittee to obtain a modification or renewal, the Permittee must be in compliance with the limiting conditions of the existing permit. Well construction must be in compliance with Chapters 40E-3, 40E-30 and 17-22, F.A.C.

7.0 Water Shortage or Water Shortage Emergency - In the event of either a water shortage or water shortage emergency, Chapter 40E-21, FAC shall apply to all water users except to those whose source of water is limited solely to treated effluent or seawater.

PART A BASIS OF REVIEW FOR WATER USE

II. CHECKLISTS

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A. Checklist For Public Water Supply

This checklist is for a typical project. For complex projects and large withdrawals in sensitive areas, additional information may be requested.

A. General

1. Describe the purpose of the application.

2. State the quantity of water applied for as an annual allocation (gals/year). This quantity may equal the annual quantity which will be pumped at a future point in time, or may equal the applicant's existing pumpage if no future increases in pumpage are anticipated. The requested allocation should equal average daily pumpage multiplied by 365 days.

3. Explain briefly the derivation of annual allocation.

a. Indicate the projected population used to determine the annual allocation.

b. Indicate proposed consumption of water per capita on a permanent population basis. If proposed per capita consumption is greater than existing, explain the difference.

4. Indicate the maximum daily pumpage associated with your projected average day pumpage.

5. Indicate the maximum day to average day demand ratio used in calculating the projected maximum day pumpage. Explain briefly the basis for using this number.

6. List the future year in which the quantity of water applied for will be used (ten years maximum except five years in Broward and Lee Counties).

7. Indicate the source of water.

8. Indicate the date on which the use of water was initiated or is proposed for initiation and the duration of the use of water.

B. Location

1. Provide a location map.

2. Provide a service area map and site map of existing and proposed wellfield and treatment plant facilities. Number wells, pumps and culverts to correspond with Tables A, B, and C.

3. Use a map or sketch of the applicant's property and surrounding area to indicate:

a. Approximate location of other wells not owned by the applicant including domestic wells, irrigation wells, public water supply wells, etc. within 1000'.

b. Location of pollution sources within one mile of the applicant's wells such as landfills, percolation ponds, hazardous waste disposal sites, sewage mains, etc. (septic tanks excluded).

c. Location of nearest saline water or salinity control structure (if the distance is less than or equal to one mile).

d. Location of any existing or proposed wastewater treatment and disposal facilities that will recharge the aquifer in the vicinity of the applicant's wellfield(s).

e. Describe the location of existing flow meters on individual wells, before treatment, after treatment, and/or at customer's connections.

f. Describe existing storage capacity.

C. Facilities

1. Describe all existing and proposed wells by completing Table A for each well.

2. Describe all existing and proposed surface water pumps by completing Table B for each pump.

3. Describe all existing and proposed culverts essential to the operation of the wellfield by filling out Table C for each culvert.

4. Describe existing and proposed water treatment plants, DER rated capacity, potential capacity and method of treatment.

5. Describe fire flow and standby capacity.

6. Describe the existing wellfield operation schedule. Include in the description those wells that are primary, secondary, standby, and well rotation schedule.

7. Describe existing legal rights to proposed well or wellfield sites.

D. Population, Service Area, and Water Use

1. Indicate the number of people, and number of equivalent residential connections presently served.

2. Indicate in acres size of area served.

3. List interconnections with other suppliers and indicate ability to supply water via the interconnect.

4. Provide information on present, past and future water use by filling out Tables D, E, and F.

5. Indicate average daily sewage effluent production for the past 12 months. Indicate disposal point for effluent.

6. Submit a copy of any local government franchise to serve water.

E. Raw Water Quality

Provide recent information on raw water quality.

F. Public Service Commission

An applicant regulated by the Public Service Commission must indicate the certificate number of each Public Service Commission certificate, provide a copy of the description of the certificated service area and provide a map of the certificated area.

G. Water Problems

Explain any problems the utility or any other user is currently experiencing or causing as a consequence of withdrawals.

H. Irrigation

If any of the projected water use will be for irrigation of golf courses or park areas, please indicate the following:

1. Area in acres which will be irrigated.

2. Type of vegetation to be irrigated.

3. Approximate maximum monthly water use.

4. Approximate average annual water use.

5. Show irrigated area on map.

I. Impacts

1. Will the proposed water use affect domestic, irrigation, or other public water supply wells?

2. Will the proposed water use affect adjacent lake levels?

3. ill the proposed water use cause saltwater intrusion?

4. Will the proposed water use impact environmental features that have either a direct or indirect relationship to the water resources of the District (wetland habitat, natural water bodies, intermittent ponds, upland areas), preferred habitats for rare, endangered or threatened species?

5. Will the proposed water use enhance the rate of formation of sinkholes?

In addition to responding to the above questions the Applicant must document any adverse impact on other users, pollution sources, saline water intrusion, adjacent water bodies, environmental features or land use that the proposed withdrawals may have.

J. Wastewater Recycling

Describe plans to recycle wastewater and indicate present and/or future quantities. If wastewater is recycled, then both monitoring and hydrogeologic study requirements will be reduced.

K. Reverse Osmosis Treatment

Indicate the following:

1. Withdrawal capacity.

2. Potable water supply capacity.

3. Reject water discharge capacity.

4. The treatment efficiency ratio.

5. Indicate the amount of raw water that can be blended with the R. O. permeate.

6. The highest level of total dissolved solids (TDS) or chlorides that can be efficiently and economically treated using the installed membranes.

7. The chloride ion concentration in both the reject water and receiving water body.

8. Location of effluent discharge on a map.

L. New wellfield or additional wells

If a new wellfield or additional wells are proposed, indicate the following:

1. Why a new wellfield or wells are needed.

2. Choice of the specific site(s).

3. The legal right to use the proposed site(s) for wells, treatment plants, facilities (i.e., owned, leased, easement).

M. Water Conservation

If the Applicant for a public water supply use is a local government then a letter must be submitted along with the application form indicating that the Applicant is in compliance with the Water Conservation Act, F.S. 553.14 requiring water conserving fixtures in new construction. If the Applicant for a public water supply use is not a local government then a copy of a letter sent to the local government in which the use exists or is proposed requesting that the provisions of the Water Conservation Act be implemented must be sent along with the application form.

List other means and methods by which water is being or will be conserved.

N. Zoning, Wellfield Protection and Water Supply Plans

1. Include the status under the DRI process if applicable. If the project is a DRI, then a copy of the final approved development order must be supplied.

2. What does the comprehensive plan say that land use and zoning should be in the service area of this application? For a new use of water submit a letter from the appropriate local government indicating that the land use upon which the population projections are based is compatible with the local government comprehensive plan. If the proposed land use and/or zoning are not in conformance with the comprehensive

plan what steps is the Applicant taking to bring zoning into conformance with the comprehensive plan?

3. Does industrial zoning or other zoning that may involve the use of hazardous materials exist within one mile of either existing or proposed well sites or within the cone of influence? If yes, show zoning locations in relation to well sites on a map.

4. Will the water use affect existing land uses as a consequence of a wellfield protection ordinance?

5. Will the water use be protected by a wellfield protection ordinance? If no, how will water quality at the well sites be protected from degradation?

6. Is the application compatible with short term and long term county water supply plans and other regional or subregional water resource plans?

O. Adjacent Uses of Water

Submit the names and complete addresses of adjacent owners that are withdrawing water from either groundwater or surface water and are within 300 feet of:

1. a well or pump proposed by the applicant,

2. an existing but unused well or pump,

3. a well or pump not listed under facilities in the applicant's current permit, or

4. an existing well or pump currently in service if an increase in pumpage is proposed for the existing well or pump.

P. Proposed Surface Water Management System

If the Applicant proposes a new surface water management system then an evaluation of the impact of the proposed withdrawal on the lake system and conversely, the impact of the control elevations of the surface water management system on the withdrawal and water availability at the project site must be submitted.

Q. Health Review

As part of the application, the Applicant must request that 1) other governmental agencies responsible for public health evaluate the application for impacts on public health, and 2) other governmental agencies send a copy of the response to the District. The Applicant must indicate that this request has been made in the application. Agencies responsible for public health include the following: Department of Environmental Regulation; Health Departments for Dade, Broward, Palm Beach, Polk and Lee Counties; Dade County Department of Environmental Resources Management; and Lee County Environmental Protection Services.

Note: Include four copies of all information and one completed copy of Application Form 0050.

B. Irrigation Water Use Checklist

Applicants for the following water uses should utilize this checklist: livestock, nursery, recreational area, soil flooding, agricultural, freeze protection, golf course and landscape irrigation.

This checklist is for a typical project. For complex projects, large withdrawals, or withdrawals in sensitive areas, additional information may be requested. Only applicable information need be submitted.

A. General

1. Project Ownership; to be completed only if the project site is leased:

a. If the person listed as Owner in Application for a Permit (Form 0050) is the lessor, give name, address and phone.

b. If the person listed as Owner in Application for a Permit (Form 0050) is the lessee, give name, address and phone number of lessor.

c. If project site is leased, provide expiration date of the lease. (Permit will not be issued beyond the expiration date of the lease).

2. If the project site is located within a drainage district, provide the name of the district.

3. Briefly describe the purpose of the application.

4. If new pumps, culverts, or wells are needed for irrigation, describe the reason for construction and placement of each.

5. If the project is existing, an aerial photograph that shows the crop must be submitted with the application.

6. Indicate the source of water.

7. Indicate the date on which the use of water was initiated or is proposed and the duration of the use of water.

B. Location

1. Provide a location map.

2. Provide a site map. Indicate the property boundaries, irrigated area, wells, pumps, culverts, canals, ditches, roads, and other landmarks. Number wells, pumps and culverts to correspond with Tables A, B, and C. Show areas served by irrigation systems described in Table G.

3. Indicate Section, Township and Range of Project.

C. Facilities

1. Describe all existing and proposed wells by completing Table A for each well.

2. Describe all abandoned flowing wells by completing Table A for each well.

3. Describe all existing and proposed surface water irrigation pumps by completing Table B for each pump.

4. Describe all existing and proposed irrigation-withdrawal culverts by completing Table C for each culvert.

5. Describe existing legal rights to proposed well or wellfield site.

D. Crop type by Irrigation system

For each type of irrigation system (flood, drip, microjet, overhead, etc.) fill out a Table G. For example, if a grower has 150 acres of citrus on drip and 500 acres on Flood, two copies of Table G would be filled out, one for drip and another for flood irrigation. Three copies of Table G are attached. "Acres planted" is the irrigated acreage minus roads, ditches, canals, swales, etc.

E. Water Usage

1. If available, please provide any pumpage records of existing water usage and the time period of usage.

2. Indicate the amount of water that will be required on a monthly basis for each month (January through December) for irrigation of each crop in a dry year.

3. Indicate the total water needed to meet the irrigation demands of all crops.

4. Explain the basis for the crop requirements in "2" above.

F. Water Problems

Explain any water problems currently experienced within one mile of the project site as a consequence of withdrawals, such as drawdowns of adjacent water bodies, saline water intrusion, adverse impact on adjacent land use, water quality problems, within one mile of the wellfield.

G. Frost Protection

1. Describe methods of freeze protection and quantities desired.

2. Request a letter from the IFAS County Extension Agent evaluating the water quantity requested for freeze protection.

H. Water Conservation

1. Describe any water conservation techniques or methods of water use optimization (soil moisture meters, accounting methods, etc.) that are currently being used or are proposed for use.

2. Describe any potential for reusing wastewater.

3. For golf course irrigation please provide the following information:

a. Explain the derivation of the quantity of water needed for irrigation.

b. Break down golf course acreage for the following areas:

rough
fairway approach
fairways
tees
greens
other

c. Will the rough areas be irrigated?

d. During which hours of the day will the course be irrigated?

e. Is the golf course associated with a residential development?

I. Impacts

1. Will the proposed water use affect domestic, irrigation, or other public water supply wells?

2. ill the proposed water use affect adjacent lake levels?

3. Will the proposed water use cause saltwater intrusion?

4. Will the proposed water use affect environmental features that have either a direct or indirect relationship to the water resources of the District (wetland habitat, natural water bodies, intermittent ponds, upland areas) and preferred habitats for rare, endangered or threatened species?

5. Will the proposed water use enhance the rate of formation of sinkholes?

In addition to responding to the above questions the Applicant must document any adverse impact on other users, pollution sources, saline water intrusion, adjacent water bodies, environmental features or land use that the proposed withdrawals may have.

J. Present and Proposed Zoning

Submit evidence of compatible zoning. Include the status under the DRI process if applicable. If the project is a DRI, then a copy of the final approved development order must be supplied. For a new use of water submit a letter from the appropriate local government indicating that the proposed land use is compatible with the local government comprehensive plan.

K. Adjacent uses of Water

Submit the names and complete addresses of adjacent owners that are withdrawing water from either groundwater or surface water and are within 300 feet of:

1. a proposed well or pump proposed by the applicant,

2. an existing but unused well or pump,

3. a well or pump not listed under facilities in the applicant's current permit, or

4. an existing well or pump currently in service if an increase in pumpage is proposed for the existing well or pump.

L. Proposed Surface Water Management System

If the Applicant proposes a new surface water management system then an evaluation of the impact of the proposed withdrawal on the lake system and conversely, the impact of the control elevations of the surface water management system on the withdrawal and water availability at the project site must be submitted.

Note: Include four copies of all information and one completed copy of Application Form 0050.

C. Checklist for Mining Dewatering Water Use

This checklist is for a typical project. For complex projects, large withdrawals, or withdrawals in the sensitive areas, additional information may be requested. Only applicable information need be submitted.

A. General

1. Describe the purpose of the application and the activity which will be performed.

2. Explain in detail why dewatering is necessary. Indicate the method of excavation.

3. Explain briefly the derivation of the requested annual allocation and average daily withdrawal.

4. Indicate the maximum daily pumpage and how it was derived.

5. Designate the future year in which the quantity of water to be allocated will be used. The District will consider projected needs for a 10 year period or less. In Broward and Lee counties water use projections are considered for a five year period.

6. Provide name, address and phone number of contractor if different from applicant.

7. Provide evidence showing ownership/lease of the site or letter of permission from owner and/or easement approval.

8. Indicate the source of water.

9. Indicate the date on which the use of water was initiated or is proposed for initiation and the duration of the use of water.

B. Location

1. Provide a location map.

2. Provide a site map. Show pit area (existing and/or proposed dimensions including maximum depth of excavation), stockpile area, dike and levees (cross-sections designating height, width, side slopes), retention/detention area location and linear extent, pumps, culverts, and structures (with numbers to correspond with Tables A and B), ditches, canals (designating side slopes and dimensions including height, width and depth), staff gauges and monitoring wells, roads, and the approximate location of domestic, irrigation, and public water supply wells not owned by the applicant within 1000 feet of the applicant's facilities (see section J(1)).

3. Provide an aerial photo and topographic map of the site.

C. Facilities

1. Describe all existing and proposed surface water pumps by completing Table B for each pump.

2. Describe all existing and proposed culverts by completing Table C for each culvert.

D. Operation Description

1. Indicate elevation to which ground water level will be drawn down as a consequence of the dewatering. Indicate maximum depth of pit to be excavated.

2. Describe how turbidity in discharges will be controlled.

3. Indicate working hours - hours/day, days/week, weeks/year.

4. Provide water quality data if within 1 mile of saline water or if project is located in Lee or Collier counties.

5. Provide a description of any monitoring program.

E. Water Usage

If available, please provide any pumpage records of existing water usage and the time period of usage.

F. Present and Proposed Zoning

Submit evidence of compatible zoning. Include the status under the DRI process if applicable. If the project is a DRI, then a copy of the final approved development order must be supplied. For a new use of water submit a letter from the appropriate local government indicating that the project is compatible with the Comprehensive Plan.

G. Historical Information - Water problems

1. Provide information on past construction and practices, pumpage, and pollution.

2. Describe any water problems that have occurred within one mile of the project site.

H. Water Table - Geologic Borings Data

Provide information on wet and dry season water table elevations. Include logs and attach data of borings that have been made at the pit site.

I. Water Conservation

Describe any water conservation techniques or methods of water use optimization.

J. Off-Site Information

The extent of off-site information necessary will depend on the zone of influence caused by withdrawals, discharge and upland drainage through the site.

1. Aerial Map.

a. Designate domestic or irrigation well locations within 1000 feet of the proposed dewatering.

b. Indicate surface drainage basin limits and designate drainage route and discharge locations.

c. Indicate upstream and downstream drainage facilities.

d. Indicate pollution sources, environmentally sensitive areas, adjacent water bodies, and saline water control, structures within 1000 feet of the dewatering operation.

2. Submit the names and complete addresses of adjacent owners that are withdrawing water from either groundwater or surface water and are within 300 feet of:

a. a well or pump proposed by the applicant,

b. an existing but unused well or pump,

c. a well or pump not listed under facilities in the applicant's current permit, or

d. an existing well or pump in service.

3. Depths, casing depths and screened/open hole depths of adjacent wells.

4. Facilities plan if off-site is proposed.

a. Explain why dewatering off-site is necessary.

b. Describe location of dewatering discharge (routing to receiving body).

c. Indicate wet season and dry season water levels in receiving stream.

K. Drainage System (Stormwater)

Indicate the routing of stormwater and retention/detention system facilities. Provide computations.

L. Structural Stability

Provide information on the structural stability of dikes, levees, structures and pit slopes.

M. Landfill Operation in Conjunction with Mining/Dewatering (in addition to above detailed requirements)

Provide the following:

1. Landfill location map and site map.

2. Date landfill started operating.

3. Expected life of landfill.

4. Type of waste accepted (Please indicate type of waste accepted in the past if different from waste accepted presently).

5. Methods of waste disposal. Indicate how and where the waste is and has been buried. Elaborate on waste buried below the water table.

6. Site engineering plans and information, to include:

a. Groundwater pollution control measures.

b. Leachate collection system and treatment. Has leachate been found at the site?

c. Location and type of liners.

7. Monitoring program for groundwater pollution control, if any.

a. Please indicate location of monitoring wells in a map showing areal extent and location of landfill.

b. Provide well logs and well construction detail.

c. Supply all water quality and water level data collected during the monitoring program, and

d. Supply any additional information or reports related to the effect of the landfill on groundwater levels or quality.

N. Evaluation - Impacts

Please answer the following questions:

1. Will the dewatering operation affect off-site building foundations?

2. Will the dewatering operation significantly affect adjacent lakes, domestic water use, or irrigation wells?

3. Will the dewatering operation cause saline water intrusion or cause potable water to be discharged to tide water?

4. Will the dewatering operation impact environmental features that have either a direct or indirect relationship to the water resources of the District (wetland habitat, natural water bodies, intermittent ponds, upland areas), preferred habitats for rare, endangered or threatened species?

In addition to responding to the above questions the Applicant must document any adverse impact on other users, pollution sources, saline water intrusion, adjacent water bodies, environmental features or land use that the proposed withdrawals may have.

O. Adjacent users

Submit the names and complete addresses of adjacent owners that are withdrawing water from either groundwater or surface water and are within 300 feet of:

1. a well or pump proposed by the applicant,

2. an existing but unused well or pump,

3. a well or pump not listed under facilities in the applicant's current permit, or

4. an existing well or pump currently in service if an increase in pumpage is proposed for the existing well or pump.

Note: Include four copies of all information and one completed copy of Application Form 0050.

D. Checklist for Industrial Water Use

The following water uses must utilize this checklist: power production, commercial and industrial processes, cooling and air conditioning, navigation, water-based recreation, aquacultural, diversion and impoundment into non-District facilities, and other uses for which a checklist is not specified.

This checklist is for a typical project. For complex projects, large withdrawals, or withdrawals in sensitive areas, additional information may be requested. Only applicable information need be submitted.

A. General

1. Describe the purpose of the application.

2. Indicate the quantity of water applied for as an annual allocation (gals/year). This quantity may equal the annual quantity which will be pumped at a future point in time, or may equal the applicant's existing pumpage if no future increases in withdrawals are anticipated. The requested allocation should equal the projected average day pumpage multiplied by 365 days/year.

3. Explain briefly the derivation of the requested allocation.

4. Indicate the maximum daily pumpage associated with the projected average day pumpage.

5. Indicate the maximum day to average day demand ratio used in calculating the projected maximum day pumpage. Explain briefly the derivation of this number.

6. Designate the future year in which the quantity of water (see No. 2 above) to be allocated will be used. The District will consider projected needs for a 10 year period or less. In Broward and Lee counties water use projections are considered for a five year period only.

7. If new pumps, wells, or culverts are needed, describe the reason for construction and placement of each.

8. Indicate the source of water.

9. Indicate the date on which the use of water was initiated or is proposed for initiation and the duration of the use of water.

B. Location

1. Provide a location map.

2. Provide a site map. Indicate the location of property boundaries, irrigated areas, wells, pumps, culverts, roads, canals, ditches, wastewater treatment facilities, water treatment plants, disposal points, irrigated areas, and the location of domestic, irrigation, and public water supply wells not owned by the applicant within 300 ft. of the applicant's facilities. Number wells, pumps, and culverts to correspond with Tables A, B, and C.

C. Facilities

1. Describe all existing and proposed wells by completing Table A for each well.

2. Describe all existing and proposed surface water pumps by completing Table B for each pump.

3. Describe all existing and proposed irrigation withdrawal culverts by completing Table C for each culvert.

4. Describe existing and proposed water treatment plants, plant capacity, treated water storage capacity and in-plant losses.

5. Describe existing fire-flow capability and standby capacity.

6. Describe the existing pump operation schedule. Include in the description which pumps are primary, secondary, standby, and pump rotation schedule.

7. Describe existing legal right to proposed well or wellfield sites.

D. Process

Describe the process and how water is used in the process. Indicate the nature of changes to the water by the process including thermal, physical, and chemical changes.

E. Water Usage

Fill out Table D using the most recent 12 months of pumpage records.

F. Water Problems

Explain any water problems currently experienced within one mile of the project site.

G. Wastewater Disposal

Describe the manner in which wastewater is disposed (i.e. evaporation, percolation ponds, drainage wells, canal discharge, spray irrigation, etc.).

H. Water Conservation

Describe any water conservation techniques or methods of water use optimization.

List other means and methods by which water will be conserved.

I. Impacts

Document any impact on other users, the saline water interface, adjacent water bodies, land uses, or pollution sources that the proposed withdrawals may have.

1. Will the proposed water use affect domestic, irrigation, or other public water supply wells?

2. Will the proposed water use affect adjacent lake levels?

3. Will the proposed water use cause saltwater intrusion?

4. Will the proposed water use affect environmental features that have either a direct or indirect relationship to the water resources of the District (wetland habitat,

natural water bodies, intermittent ponds, upland areas) preferred habitats for rare, endangered or threatened species?

5. Will the proposed water use enhance the rate of formation of sinkholes?

In addition to responding to the above questions the Applicant must document any adverse impact on other users, pollution sources, saline water intrusion, adjacent water bodies, environmental features or land use that the proposed withdrawals may have.

J. Present and Proposed Zoning

Submit evidence of compatible zoning. Include the status under the DRI process if applicable. If the project is a DRI, then a copy of the final approved development order must be supplied. For a new use of water submit a letter from the appropriate local government indicating that the project is compatible with the local government Comprehensive Plan.

K. Adjacent Uses of Water

Submit the names and complete addresses of adjacent owners that are withdrawing water from either groundwater or surface water and are within 300 feet of:

1. a well or pump proposed by the applicant,

2. an existing but unused well or pump,

3. a well or pump not listed under facilities in the applicant's current permit, or

4. an existing well or pump currently in service if an increase in pumpage is proposed for the existing well or pump.

L. Proposed Surface Water Management System

If the Applicant proposes a new surface water management system then an evaluation of the impact of the proposed withdrawal on the lake system and conversely, the impact of the control elevations of the surface water management system on the withdrawal and water availability at the project site must be submitted.

Note: Include four copies of all information and one completed copy of Application Form 0050.

TABLE A
DESCRIPTION OF WELLS

WELL NO.				
Map Designation				
Existing/Proposed				
Diameter (Inches)				
Total Depth				
Cased Depth				
Screened Interval				
Pumped or Flowing				
Work Value If Artesian (Yes/No)				
Pump Manufacturer and Model No.				
Pump (Centrifugal, Type Jet, Deep Jet, Turbine, etc.)				
Intake Depth (NGVD)				
Pump Capacity (GPM at ___ FT of head at ___ PSI)				
Active (Yes/NO)				
Year Drilled				
Type of Meter				
Florida Plane Coordinates				

TABLE B
DESCRIPTION OF SURFACE WATER PUMPS

DRAINAGE DISTRICT:				
Pump No.				
Map Designation				
Surface Water Body				
Existing or Proposed				
Pump Manufacturer and Model Number				
Pump Type				
Pump Capacity				
Pump Horse Power				
Pump Diameter				
Elevation of Intake (NGVD)				
Is pump a two way pump?				
Florida Plane Coordinates				

TABLE C
DESCRIPTION OF CULVERTS

CULVERT NO.				
Map Designation				
Water Body				
Existing or Proposed				
Diameter*				
Height**				
Width**				
Type of Culvert ***				
Culvert Length				
Invert Elevation (NGVD)				
Type of Control Device				
Irrigation or Drainage				
Florida Plane Coordinates				

*For Circular Culverts

**For Elliptical Culverts

***Corrugated Metal, reinforced concrete, etc.

TABLE D
WATER USE DATA FOR 12 MONTH PERIOD
FROM _____ TO _____

Month/Year	Raw Water Pumpage		Total Raw Water Pumpage (MGM)	Total Water Treated (MGM)
	Ave. Day (MGD)	Max. Day (MGD)		
Total Average	_____	*********	_____	_____
	_____	*********	_____	_____
		*********		
		*********		
		*********		

Ratio of water pumped to water treated _____.

Maximum day pumpage was _____ MGD.
and occurred on _____.

Ratio of maximum day pumpage to average day pumpage
was _____.

TABLE E
PAST WATER USE

Year	Past Population	Number of Units*	Total Annual (MG)	Average Day (MGD)	Maximum Day (MGD)
19					
19					
19					
19					
19					
19					
19					
19					
19					
19					

*Cumulative

TABLE F
PROJECTED WATER USE

Year	Projected Population	Number of Units*	Total Annual (MG)	Average Day (MGD)	Maximum Day (MGD)
19					
19					
19					
19					
19					
19					
19					
19					
19					
19					

On separate sheet of paper separate units into types of units, number of persons/unit, and water usage/unit for each year on a cumulative basis.

TABLE G

IRRIGATION SYSTEM AND CROP DESCRIPTION

Type of Irrigation System _____(See categories below)
Acres Served by this System _____Acres

NAME OF CROP				
Existing (and How Long) OR Proposed (and When)				
Acres Planted				
Number of Plantings Per Year				
Month of First Planting*				
Month of Last Harvest*				
Average Time From Planting to Harvest*				

*Complete these sections for seasonal crops only

TYPES OF IRRIGATION SYSTEMS

SEEPAGE: Water is conveyed from the source and distributed to the crop through open ditches, usually 50 to 200 feet apart, and depends on seepage from one ditch to the other ditch.

FURROW: Water is conveyed from the source and distributed to the crop through the furrows between the rows. Furrows usually less than 50 feet apart.

CROWN FLOODING: Water is conveyed from the source and distributed between the beds up to the crown of the beds of the crop, and held for a few hours.

SEMICLOSED: Water is conveyed from the source through closed pipe and distributed to the crop through open ditches between crop rows.

CLOSED PIPE: Water is conveyed from the source and distributed to the crop through closed pipe. This system is used almost exclusively for fish farms.

DRIP: Water is conveyed from the source through closed pipe and distributed to the crop by dripping at land surface near each plant through special emitters set in small diameter plastic pipe or tubing.

JET: Water is conveyed from the source through closed pipe and distributed to the crop at land surface near each plant through small spray emitters (jets) set in small diameter plastic pipe or tubing.

OVERHEAD: Water is conveyed from the source through closed pipe and distributed to the crop through nozzles 15 to 20 20 feet above land surface.

SPRINKLER: Water is conveyed from the source through closed pipe and distributed to the crop through nozzles 1 to 2 feet above land surface.

VOLUME GUN: Water is conveyed from the source through closed pipe or hose and distributed to the crop through a large rotating nozzle.

SUBIRRIGATION: Water is conveyed from the source through closed pipe and distributed to the crop through underground tile.

TRAVEL GUN: A volume gun that travels the length of the crop row while irrigating.

APPENDICES
TO THE
WATER USE
BASIS OF REVIEW

January, 1993

II. APPENDIX 1

URBAN SUPPLY

AND

DEMAND MANAGEMENT

BASIS OF REVIEW FOR
WATER USE PERMIT APPLICATIONS
WITHIN THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT

APPENDIX 1

URBAN SUPPLY AND DEMAND MANAGEMENT

1.0 Introduction

This appendix to the South Florida Water Management District Basis of Review for Water Use Permit Applications has been prepared to elaborate on the criteria and standards applicable to urban supply and demand management. An objective of the District, as expressed in the State Water Policy (Chapter 17-40, F.A.C.), is to conserve and protect natural resources and realize the full beneficial use of the water resource. The overall goal of these measures is to increase water use efficiency for all uses, reduce water demand of end users and promote wise use of the water resources. This goal requires implementation of sound water conservation practices. This appendix applies to all public water supply and commercial/industrial Individual water use permit applications. Chapter 17-40, F.A.C., requires periodic updates to Critical Water Supply Problem Area designations, as detailed in Chapter 40E-23, F.A.C.; thus, permittees are placed on notice that the status of their project location may be impacted by future District rule amendments. The provisions in this appendix shall supersede any conflicting criteria contained in the Basis of Review for Water Use Permit Applications within the South Florida Water Management District or any other appendix to the Basis of Review for Water Use. When the restrictions impose pursuant to a Chapter 40E-21, F.A.C., water shortage declaration are applicable to a permitted use, the specified water shortage restrictions shall supersede any terms or conditions of the permit. In this event, notice shall be provided to the permittee as required by subsection 373.246(6), F.S.

2.0 Glossary of Terms

2.01 Aquifer Storage and Recovery - Projects involving approved Class V injection wells for the injection and recovery of fresh water into a ground water reservoir.

2.02 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 water use systems, fixtures, devices, or methods.

2.03 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.

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

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

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

2.07 Reclaimed Water - Wastewater that has received at least secondary treatment and is reused after flowing out of a wastewater treatment facility.

2.08 Reuse - The deliberate application of reclaimed water, in compliance with Department and District rules, for a beneficial purpose.

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

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

2.11 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.

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

2.13 Xeriscape - A landscaping method that maximizes the conservation of water by the use of site-appropriate plants and an efficient watering system.

3.0 Review Procedures and Criteria

3.1 Demand Management - The water savings expected to result from the implementation of water conservation measures must be estimated and accounted for when calculating demand projections. For each proposed conservation measure, applicants must identify the components of demand affected by the conservation measure and reflect the estimated savings in demand for each year projected.

3.1.1 Potable Public Water Supply

3.1.1.1: Conservation Plans: All individual permit applicants for a potable public water supply permit must submit a water conservation plan at the time of permit application. The conservation plan shall be prepared and implemented for the service area incorporating, at a minimum, the following mandatory components. For those components which require ordinance adoption, such ordinance should incorporate the entire boundary of the enacting jurisdiction. The permittee shall provide a copy of the ordinances for each of the mandatory elements which require ordinance adoption. Potable public water supply utilities operated by private entities or public utilities providing service to an area beyond their political boundary are required to document the fact

they requested local governments within their service area to adopt ordinances concerning those mandatory water conservation elements which require ordinance adoption; documentation of the local government's response must also be provided. The mandatory water conservation elements are as follows:

a. The limitation of all lawn and ornamental irrigation to the hours, at a minimum, of 4:00 P.M. to 10:00 A.M. The permit applicant or enacting local government may adopt an ordinance which includes exemptions from the irrigation hour restrictions for the following circumstances, irrigation systems and/or users:

1. Irrigation using a micro-irrigation system;

2. Reclaimed water end users;

3. Preparation for or irrigation of new landscape;

4. Watering in of chemicals, including insecticides, pesticides, fertilizers, fungicides, and herbicides when required by law, recommended by the manufacturer, or constituting best management practices;

5. Maintenance and repair of irrigation systems;

6. Irrigation using low volume hand watering, including watering by one hose attended by one person, fitted with a self-canceling or automatic shutoff nozzle or both or

7. Users irrigating with 75% or more water recovered or derived from an aquifer storage and recovery system.

b. The Governing Board finds that the implementation and use of Xeriscape landscaping, as defined in section 373.185, F.S., contributes to the conservation of water. The Governing Board further supports adoption of local government ordinances as a significant means of achieving water conservation through Xeriscape landscaping. Where the local government, within the service area of the applicant, operating the public water supply utility, pursuant to section 125.568 or 166.048, F.S., determines that Xeriscape would be of significant benefit as a water conservation measure relative to the cost of Xeriscape implementation, the local government operating the public water supply utility is required to adopt a Xeriscape landscape ordinance meeting the requirements of section 373.185(2) (a)-(f), F.S. In the event such a Xeriscape ordinance is proposed for adoption, the permit applicant shall submit the draft ordinance to the District for determination of compliance with section 373.185(2)(a) - (f), F.S. If the ordinance which the

local government has or proposes to adopt includes an alternative set of requirements which do not encompass those contained in section 373.185(2)(a)-(f), F.S., eligibility for the incentive program will not be achieved. The District, in compliance with section 373.185, F.S., offers the following incentive program, to those local governments who are eligible, consisting generally of information and cost-benefit analysis assistance. Specifically, the information provided interested parties will consist of an explanation of the costs and benefits of Xeriscape landscapes; the types of plants suitable for Xeriscape landscapes within the local government's jurisdiction; the types of irrigation methods suitable for Xeriscape landscaping and the use of solid waste compost. Further, if requested, the District will assist local governments in determining whether the benefits of requiring Xeriscape landscaping outweigh the costs within that local government's jurisdiction; this assistance may consist of economic considerations, technical information or referral to other agencies that can provide information the local government may need to perform its cost-benefit determination.

c. The adoption of an ordinance requiring the installation of ultra-low volume plumbing fixtures in all new construction, such that plumbing fixtures are installed to comply with the following maximum flow volumes at 80 psi : Toilets: 1.6 Gal./Flush; Shower Heads: 2.5 Gal./Min.; and Faucets 2.0 Gal./Min.

d. The adoption of water conservation- based rate structures. Such rate structures should include at least one of the following alternative components: increasing block rates, seasonal rates, quantity based surcharges and/or time of day pricing as a means of reducing demands.

e. It is the policy of the District to encourage public water supply systems to have no more than 10% unaccounted-for water losses. 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.

f. The adoption of an ordinance requiring any person who purchases and installs an automatic lawn sprinkler system to install, operate and maintain a rain sensor device or automatic switch which will override the irrigation cycle of the sprinkler system when adequate rainfall has occurred.

g. The implementation of water conservation public education programs.

h. For those potable public water supply utilities who control, either directly or indirectly, a wastewater treatment plant, an analysis of the economic, environmental and technical feasibility of making reclaimed water available. Use of the Guidelines for Preparation of Reuse Feasibility Studies published by the Department in November, 1991 is suggested.

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

3.1.2 Commercial/Industrial

3.1.2.1 Conservation Plan - All individual permit applicants for a commercial/industrial 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.

b. If, in the applicant's determination, analysis of the audit results indicates the following measures would be cost effective, subsequent implementation of a leak detection and repair, recovery/recycling or other program providing for technological, procedural and/or programmatic improvements to the applicant/permittee's facilities and processes to decrease water consumption will be required within the first year of permit issuance or audit completion.

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

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

3.2 Reclaimed Water Reuse Criteria

3.2.1. Areas Not Designated a Critical Water Supply Problem Area - Based upon the statutory guidance and the delineation of feasibility factors found in the State Water Policy, Chapter 17-40, F.A.C., the Governing Board determines that, in those areas of the District which are NOT designated a Critical Water Supply Problem Area, when reclaimed water is readily available it must be used in place of higher quality water sources, unless it is demonstrated by the

applicant that its use is either not environmentally, economically or technically feasible. In determining whether reclaimed water is readily available, the District will consider the following factors:

a. Whether a suitable source of reclaimed water exists;
b. Whether the source is offered to or controlled by the applicant;
c. Whether the applicant is capable of accessing the source; and
d. Any other relevant information.

3.2.2 Designated Critical Water Supply Problem Areas - Based upon the statutory guidance and the delineation of feasibility factors found in the State Water Policy, Chapter 17-40, F.A.C., the Governing Board determines that, in those areas of the District which are designated as Critical Water Supply Problem Areas pursuant to Chapter 40E-23, F.A.C., reclaimed water is required to be used in place of higher quality water sources, unless it is demonstrated by the applicant that its use is either not environmentally, economically or technically feasible.

4.0 Limiting Conditions

4.1 Standard Limiting Conditions

4.1.1 Emergency Water Supply Preparedness

4.1.1.1 Within (two years of permit issuance or upon permit renewal for existing permittees), potable public water supply utilities are required to provide a study evaluating emergency water supply preparedness, including analysis of demand management measures, potential pumpage shifting and the feasibility of emergency interconnections for the purpose of supplying water on a short-term, emergency basis to adjoining utilities. The permittee must provide the District with a copy of the study. As to emergency interconnects, the feasibility study must assess the technical, physical and economic ability of the permittee to develop interconnecting pipes capable of delivering water to adjoining utilities to meet emergency, short-term water supply needs. (In the event of an interconnect being established, Individual public water supply permit allocations will not address the emergency usage.) It is the policy of the District to encourage emergency interconnects between adjoining public water supply utilities for the purpose of providing emergency water supply.

Thus, where the feasibility study indicates emergency interconnects are possible, the District encourages the adjoining utilities to implement the same.

4.1.2 Demand Management

4.1.2.1 Conservation plans - The water conservation plan required by criteria 3.1, of Appendix 1 of the Basis of Review for Water Use Permit

Applications within the South Florida Water Management District - January, 1993, must be implemented in accordance with the implementation schedule contained therein.

III. APPENDIX 2

IRRIGATION

DEMAND

MANAGEMENT

BASIS OF REVIEW FOR
WATER USE PERMIT APPLICATIONS
WITHIN THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT

APPENDIX 2

IRRIGATION DEMAND MANAGEMENT

1.0 Introduction

This appendix to the South Florida Water Management District Basis of Review for Water Use Permit Applications has been prepared to elaborate on the criteria and standards applicable to irrigation demand management. An objective of the District, as expressed in the State Water Policy (Chapter 17-40, F.A.C.), is to conserve and protect natural resources and realize the full beneficial use of the water resource. The overall goal of these measures is to increase water use efficiency, reduce water demand and promote wise use of the water resources. This goal requires implementation of sound water conservation practices, efficient use of available water resources and the development of incentives for irrigation water users to develop and use highly efficient irrigation methods. This appendix applies to all Individual irrigation water use permit applications. The provisions in this appendix shall supersede any conflicting criteria contained in the Water Use Basis of Review or any other appendix to the Water Use Basis of Review. When the restrictions imposed pursuant to a Chapter 40E-21, F.A.C., water shortage declaration are applicable to a permitted use, the specified water shortage restrictions shall supersede any terms or conditions of the permit. In this event, notice shall be provided to the permittee as required by subsection 373.246(6), F.S.

2.0 Glossary of Terms

2.01 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 (resource efficiency).

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

2.03 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 water use systems, fixtures, or devices.

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

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

2.06 Effluent - means water that is not reused after flowing out of a wastewater treatment facility.

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

2.08 Heat Stress Damage - Exposure to high temperature extremes such that the crop or plant is economically damaged.

2.09 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.

2.10 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.

2.11 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.

2.12 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.

2.13 Portable Guns - large sprinklers that discharge high volumes 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.

2.14 Reclaimed Water - Water that has received at least secondary treatment and is reused after flowing out of a wastewater treatment facility.

2.15 Reuse - The deliberate application of reclaimed water, in compliance with Department and District rules, for a beneficial purpose.

2.16 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 ground water bodies which are determined by the District to provide storage, using the factors stated in criteria 3.1.

2.17 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.

2.18 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.

2.19 Supplemental Crop Requirement (SCR) - The volume of water; as calculated by the method developed by the Soil Conservation Service and described in the publication: Irrigation Water Requirements, Technical Release No. 21, United Stated Department of Agriculture, Soil Conservation Service, Engineering Division, 1970; which represents the difference between the estimated evapotranspiration rate of a given crop and the effective rainfall available in a specific geographic area over a prescribed time period during a specific climatic event.

2.20 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.

2.21 Traveling Guns - Large sprinklers that discharge high volumes 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.

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

2.23 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.

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

2.25 Wind Stress Damage - Exposure to high wind such that the crop or plant is economically damaged.

2.26 Xeriscape - A landscaping method that maximizes the conservation of water by the use of site-appropriate plants and an efficient watering system.

3.0 Review Procedures and Criteria

3.1 Resource Efficiency - Resource efficiency shall be evaluated by using the following factors:

1. evaporation,

2. runoff to areas other than the relevant water storage system,

3. runoff and infiltration back into the relevant water storage system,

4. aquifer recharge potential gained through the retention/detention of stormwater and

5. the recycling of irrigation return flow,

6. related environmental and operational factors such as the ability to maintain historical surface and ground water levels and,

7. the ability to conserve the water resource.

3.1.1 Irrigation System Standards - The accepted standard irrigation system efficiency for a crop type will be required of all initial consumptive use permit 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, in Critical Water Supply Problem Areas, 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.

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

3.1.1.2 Container Standard - 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.

a. The effective date of this section shall be January 2, 1994 for the South Dade Water Use Basin described in Appendix I of Rule 40E-21, F.A.C.

3.2 Supplemental Crop Requirement - The supplemental crop requirement will be based upon the criteria defined in section 3.2.2.4.2 and 3.2.2.4.6 of the Basis of Review for Water Use Permit Applications within the South Florida Water Management District - January, 1993. The maximum monthly and annual allocations will be based on the supplemental crop requirement for a 2-in-10 year effective rainfall.

3.2.1 Citrus - Citrus supplemental crop requirements are based upon the criteria defined in section 3.2.2.4.2 of the Basis of Review for Water Use Permit Applications within the South Florida Water Management District - January, 1993. The maximum monthly allocation for citrus crops will be based on full replacement of evapotranspiration. The annual allocation for citrus crops will be based on the supplemental crop requirement for the 2-in-10 year effective

rainfall.

3.3 Allocation Coefficient - The allocation coefficient incorporates the irrigation system's effect on the relevant water storage system as it relates to increased resource efficiency. The supplemental crop requirement described in criteria 3.2, will be multiplied by the net irrigated acreage and the appropriate allocation coefficient listed in Table 3 - 1 in determining the allocation requirements, if the alternative allocation coefficients described in 3.3.1 below, are not utilized. Irrigation projects which possess or propose a surface water management (SWM) construction and operation permit which utilizes a retention/detention system or Works of the District permit under Chapters 40E-61 or 40E-63, F.A.C., using farm pumping reduction best management practices which result in increased storage and reduced runoff, are credited as more resource efficient due to the aquifer recharge potential gained through the retention and detention of stormwater and the recycling of irrigation water.

3.3.1 Alternative Allocation Coefficient - For those Applicants who request an allocation coefficient different than the criteria outlined in section 3.3, factors such as: (1) site-specific soil characteristics, (2) evapotranspiration and effective rainfall, (3) depth to background water level, (4) height of ground water mound, (5) irrigation field boundary conditions or (6) other specific information will be considered and required to be documented by the Applicant as it relates to increased resource efficiency.

TABLE 3 - 1

Allocation Coefficient Multiplier Including
Credit for Resource Efficiency

Irrigation System Type	Allocation Coefficient Multiplier	
	With SWM Permit	Without SWMPermit
Micro-irrigation		
Drip	1.18	1.18
Micro-sprinkler	1.18	1.18
Overhead Sprinkler		
Solid Set Sprinkler	1.33	1.25
Traveling Gun	1.43	1.33
Portable Gun	1.54	1.43
Nursery Container	5.00	2.86
Subirrigation		
Seepage, Furrow	2.50	1.67
Semi-Closed Flow-Through	2.50	1.67
Crown Flooding	2.50	1.67

3.4 Water Usage Accounting - A reliable, repeatable water use accounting system must be identified to monitor water usage from all irrigation withdrawal facilities, in accordance with permit conditions. For pumped systems, acceptable water use accounting systems include direct and indirect methods such as flowmeters, clocks which totalize pump operation, fuel consumption or other reliable water use accounting method. For non-pumped and gravity flow systems, acceptable direct methods include the use of rated water control structures. Acceptable indirect methods include the development of water diversion accounting systems that include the stage measurement of inside-farm and outside-farm canal water levels and the times of operation for each facility. Permit applicants must submit documentation of the water use accounting method and calibration method to staff for review and approval as a part of any permit application.

3.5 Conservation Plans

3.5.1 Landscape and Golf Course Conservation Plans - All 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 Xeriscape landscaping principles for proposed projects and modifications to existing projects where it is determined that Xeriscape is of significant benefit as a water conservation measure relative to the cost of Xeriscape 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.

3.6 Reclaimed Water Reuse Criteria

3.6.1 Areas Not Designated a Critical Water Supply Problem Area - Based upon the statutory guidance and the delineation of feasibility factors found in the State Water Policy, Chapter 17-40, F.A.C., the Governing Board determines that, in those areas of the District which are NOT designated a Critical Water Supply Problem Area, when reclaimed water is readily available it must be used in place of higher quality water sources, unless it is demonstrated, by the applicant, that its use is either not environmentally, economically or technically feasible. In determining whether reclaimed water is readily available, the District will consider the following factors:

a. Whether a suitable source of reclaimed water exists;
b. Whether the source is offered to or controlled by the applicant;
c. Whether the applicant is capable of accessing the source; and

d. Any other relevant information.

3.6.2 Designated Critical Water Supply Problem Areas - Based upon the statutory guidance and the delineation of feasibility factors found in the State Water Policy, Chapter 17-40, F.A.C., the Governing Board determines that, in those areas of the District which are designated as Critical Water Supply Problem Areas, pursuant to Chapter 40E-23, F.A.C., reclaimed water is required to be used in place of higher quality water sources, unless it is demonstrated by the applicant that its use is either not environmentally, economically or technically feasible.

4.0 Limiting Conditions

4.1 Standard Conditions

4.1.1 Every two years from the date of permit issuance, the permittee shall submit re-calibration data on each water pumping accounting facility, for those permittees whose accounting method(s) require re-calibration.

4.1.2 Monthly withdrawals, separated by each source as stated on the permit, shall be submitted to the District on a quarterly basis. The water accounting method and means of calibration shall be stated on each report.

4.1.3 By (one year from permit issuance) the Permittee shall equip all existing and proposed withdrawal facilities with approved water use accounting method(s) acceptable to the District as detailed in criteria 3.4, of Appendix 2 of the Basis of Review for Water Use Permit Applications within the South Florida Water Management District - January, 1993.

4.1.4 Conservation Plans and General Restrictions- The following conditions are generally applied to implement the water conservation plans contemplated in criteria 3.5, of Appendix 2 of the Basis of Review for Water Use Permit Applications within the South Florida Water Management District - January, 1993.

4.1.4.1 Landscape and Golf Course

a. Conservation Plans: Landscape and Golf Course permittees must comply with all plan requirements and the implementation schedule contained in the plan submitted pursuant to criteria 3.5.1, of Appendix 2 of the Basis of Review for Water Use Permit Applications within the South Florida Water Management District - January, 1993.

b. General Conservation Restrictions: Landscape and Golf Course irrigation is prohibited between the hours of 10:00 a.m. and 4:00 p.m., except as follows:

1. Irrigation using micro-irrigation system is allowed

anytime.

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

3. 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 plant establishment. Irrigation of newly seeded or sprigged golf course areas is allowed any time of day for one 60 day period.

4. 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.

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

6. The use of water to protect golf course turf from heat and wind stress damage is allowed anytime.

PART B

WATER USE MANAGEMENT SYSTEM

DESIGN AND EVALUATION AIDS

I. SALT MONITORING PROGRAM

II. AQUIFER PERFORMANCE TEST

III. STEP DRAWDOWN TEST

IV. GROUNDWATER LEVEL MONITORING PROGRAM

V. SUPPLEMENTAL CROP REQUIREMENT AND WITHDRAWAL CALCULATION

VI. BIBLIOGRAPHY

PART B

WATER USE MANAGEMENT SYSTEM

DESIGN AND EVALUATION AIDS

I. SALINE WATER TRACKING (SALT) PROGRAM

SALINE WATER INTRUSION MONITORING (SWIM) PROGRAM GUIDELINES

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.

PART B

WATER USE MANAGEMENT SYSTEM

DESIGN AND EVALUATION AIDS

II. AQUIFER PERFORMANCE TEST

AQUIFER PERFORMANCE TEST (APT)

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. 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.

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).

PART B

WATER USE MANAGEMENT SYSTEM

DESIGN AND EVALUATION AIDS

III. STEP DRAWDOWN TEST

STEP DRAWDOWN TEST

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.

PART B

WATER USE MANAGEMENT SYSTEM

DESIGN AND EVALUATION AIDS

IV. GROUNDWATER LEVEL MONITORING PROGRAM

GROUNDWATER LEVEL MONITORING PROGRAM

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 1 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.

PART B

WATER USE MANAGEMENT SYSTEM

DESIGN AND EVALUATION AIDS

V. SUPPLEMENTAL CROP REQUIREMENT

AND

WITHDRAWAL CALCULATION

SUPPLEMENTAL CROP REQUIREMENT AND WITHDRAWAL CALCULATION

Introduction

When little or no measurements of water requirements for crops are available, the supplemental water requirement for a crop is usually estimated from climatological data and crop growth-rate coefficients. For this purpose, 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 Blaney-Criddle Equation

1.1 The Blaney-Criddle equation in its basic form is

$$(1)\quad U = k \sum_{1}^{m} p\, t/100$$

where

U = crop evapotranspiration for a given period

k = an annual, seasonal, or monthly empirical consumptive use coefficient which varies according to he 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:

$$(2)\quad k = kt \times kc$$

where

kt = a climatic coefficient which is related to the mean air temperature; kt = .0173t-.314

kc = a coefficient reflecting the growth stage of the crop; values are shown in Tables C-1 and C-2

2.0 The irrigation water use allocation is calculated as follows:

(3) SUP = U - RE(d 2/10, s)

(4) Q = (SUP/EF) X A

where

SUP = supplemental crop requirement for the growing period in inches

RE = effective rainfall, which is normalized to the 2-in-10 year drought (d 2/10), and the soil type (s)

Q = allocation (acre inches)

EF = irrigation efficiency

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, the monthly coefficients are used (Table C-2).

2) For annual crops, the coefficients at certain percentages of the growing season are averaged, using the values given in Table C-1, to determine a monthly coefficient value. For example, if a crop with a four month growing season is to be planted in September, the coefficients for 5% through 25% are averaged to give a growth coefficient for September, the coefficients for 30% through 50% are averaged to give a coefficient for October, and so on.

2.2 Calculation of Monthly Supplemental Crop Requirement and Allocation

2.2.1 The Water Use Division utilizes a computer program to calculate the supplemental crop water requirement used in determining an irrigation water use allocation. The program approximates equations (1) and (2) as follows:

(5) F(M) = (T(M) X P(M)) / 100

(6) AKT(M) = (0.0173 x T(M)) - 0.314

(7) AKTF(M) = F(M) X AKT(M)

(8) U(M) = AKTF(M) X AKC(M)

(9) RT1(M) = (0.70917 X (RT(M) ** 0.82416) - 0.11556)

(10) U1(M) = 10 ** (0.02426 X U(M))

(11) F1 = .531747 + .295154 X D - .057697 X D **2 + .003804 X D **3

(12) RE(M) = RT1(M) X U1(M) X F1

(13) RE2(M) = RE(M) X F2

where

M = month of year

U(M) = average monthly evapotranspiration

RT(M) = average monthly rainfall (Table C-3)

F(M) = monthly evapotranspiration factor

T(M) = average monthly temperature (Table C-3)

P(M) = monthly percentage of annual daylight hours (Table C-3)

RE(M) = monthly effective rainfall

RE2(M) = monthly effective rainfall normalized to 2-in-10 year drought

AKT(M) = kt

AKC(M) = monthly crop growth coefficient (Tables C-1 and C-2)

RT1(M) = average monthly effective rainfall factor considering average monthly rainfall

U1(M) = average monthly effective rainfall factor considering average monthly evapotranspiration

D = net depth of application (see Figures C-1 through C-15); for small vegetables divide this number by 3

F1 = soil factor

F2 = ratio of 2-in-10 year growing-season effective rainfall to average annual rainfall (Table C-3)

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, and the largest monthly difference between evapotranspiration and 2-in-10 year effective rainfall is the basis of the allocation. The difference is divided by irrigation efficiency to determine the overall crop requirement in inches, and is multiplied by the crop 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.

Table C-1

Growth Coefficients for Annual Crops

GROWTH COEFFICIENT AT PERCENT OF GROWING SEASON

	5%	10%	15%	20%	25%	30%	35%	40%	45%	50%	55%	60%	65%	70%	75%	80%	85%	90%	95%	100%
DRY BEANS	.54	.59	.65	.72	.81	.90	.96	1.03	1.08	1.11	1.12	1.11	1.08	1.03	.96	.90	.83	.75	.67	.60
GREEN BEANS	.53	.55	.58	.61	.64	.68	.73	.79	.84	.89	.94	.98	1.02	1.05	1.08	1.10	1.11	1.12	1.12	1.11
GRAIN CORN	.46	.50	.53	.58	.64	.71	.82	.92	1.00	1.05	1.07	1.08	1.07	1.06	1.03	1.00	.97	.93	.89	.85
SILAGE CORN	.45	.47	.50	.54	.59	.64	.71	.80	.90	.98	1.03	1.06	1.07	1.08	1.07	1.06	1.04	1.02	1.00	.96
SWEET CORN	.47	.50	.54	.58	.64	.72	.82	.91	.99	1.05	1.07	1.08	1.08	1.07	1.07	1.06	1.05	1.03	1.02	1.00
MELONS	.45	.48	.52	.56	.61	.66	.71	.75	.80	.82	.82	.80	.79	.77	.76	.75	.73	.71	.69	.67
PEAS	.54	.59	.65	.72	.80	.88	.97	1.03	1.07	1.11	1.12	1.12	1.11	1.10	1.08	1.06	1.04	1.01	.97	.96
POTATO	.36	.41	.45	.51	.59	.72	.85	.97	1.08	1.17	1.25	1.31	1.35	1.37	1.37	1.36	1.34	1.30	1.27	1.23
SOYBEANS	.22	.26	.30	.33	.37	.41	.48	.55	.63	.72	.84	.92	.98	1.02	1.02	.93	.83	.77	.72	.68
TOMATO	.45	.46	.47	.48	.51	.56	.65	.76	.87	.95	1.01	1.03	1.02	.98	.95	.90	.85	.80	.75	.70
SMALL GRAIN	.33	.39	.47	.56	.64	.69	.74	.78	.80	.82	.83	.83	.82	.80	.76	.73	.66	.58	.48	.38

Table C-2

Growth Coefficients for Perennial Crops

CROP	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
ALFALFA	.63	.73	.86	.66	1.08	1.13	1.11	1.06	.99	.91	.78	.64
AVOCADO	.27	.42	.58	.70	.78	.81	.77	.71	.63	.54	.43	.30
CITRUS	.63	.66	.68	.70	.71	.71	.71	.71	.70	.68	.67	.64
GRAPES	.20	.24	.38	.60	.71	.80	.80	.76	.61	.50	.35	.23
PASTURE	.49	.57	.73	.85	.90	.92	.92	.91	.87	.79	.67	.55

Table C-3 Rainfall Stations

STATION: AVON PARK

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
MEAN RAINFALL	2.17	2.71	2.60	2.89	4.43	8.74	8.31	7.54	7.23	3.88	1.65	1.74
MEAN TEMPERATURE	63.46	64.71	68.12	72.82	77.45	80.76	81.93	82.37	80.81	75.64	68.67	64.25
ANNUAL DAYLIGHT (%)	7.42	7.08	8.37	8.67	9.44	9.37	9.56	9.16	8.32	8.03	7.30	7.29

TEMPERATURE AND RAINFALL ARE BASED ON 71 YEARS OF WEATHER DATA.

FACTOR FOR CONVERSION OF AVERAGE RAINFALL TO 2-IN-10 RAINFALL = .86

STATION: BELLE GLADE

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
MEAN RAINFALL	1.88	1.87	2.89	3.08	4.46	9.48	7.86	8.18	8.76	5.35	2.02	1.70
MEAN TEMPERATURE	63.17	64.15	66.92	70.73	74.72	78.41	80.10	80.55	79.55	74.95	68.55	64.19
ANNUAL DAYLIGHT (%)	7.46	7.11	8.38	8.65	9.40	9.32	9.52	9.13	8.32	8.05	7.33	7.34

TEMPERATURE AND RAINFALL ARE BASED ON 44 YEARS OF WEATHER DATA.

FACTOR FOR CONVERSION OF AVERAGE RAINFALL TO 2-IN-10 RAINFALL = .87

STATION: BIG CYPRESS

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
MEAN RAINFALL	1.69	2.59	1.83	2.06	5.53	8.80	7.63	6.87	7.63	5.11	1.69	1.01
MEAN TEMPERATURE	62.74	63.20	67.07	70.83	75.12	78.76	81.63	82.11	80.11	76.09	69.50	63.31
ANNUAL DAYLIGHT (%)	7.48	7.12	8.38	8.64	9.38	9.30	9.50	9.12	8.32	8.06	7.35	7.36

TEMPERATURE AND RAINFALL ARE BASED ON 15 YEARS OF WEATHER DATA.

FACTOR FOR CONVERSION OF AVERAGE RAINFALL TO 2-IN-10 RAINFALL = .85

STATION: CLEWISTON

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
MEAN RAINFALL	1.31	1.89	1.94	2.84	4.59	6.73	6.51	6.74	7.97	3.72	1.02	1.61
MEAN TEMPERATURE	63.45	65.57	69.40	73.51	77.18	80.23	81.72	82.09	81.21	76.31	69.77	64.47
ANNUAL DAYLIGHT (%)	7.45	7.10	8.38	8.66	9.40	9.33	9.52	9.13	8.32	8.04	7.33	7.33

TEMPERATURE AND RAINFALL ARE BASED ON 22 YEARS OF WEATHER DATA.

FACTOR FOR CONVERSION OF AVERAGE RAINFALL TO 2-IN-10 RAINFALL = .84

STATION: EVERGLADES

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
MEAN RAINFALL	1.63	1.68	2.00	2.33	4.96	9.26	8.37	7.34	10.14	4.42	1.40	1.34
MEAN TEMPERATURE	66.30	67.41	69.94	73.92	77.38	80.71	82.18	82.82	81.94	77.88	71.82	67.10
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 AND RAINFALL ARE BASED ON 43 YEARS OF WEATHER DATA.

FACTOR FOR CONVERSION OF AVERAGE RAINFALL TO 2-IN-10 RAINFALL = .86

STATION: FT. LAUDERDALE

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
MEAN RAINFALL	2.54	2.26	2.62	3.93	5.78	8.15	6.11	6.72	8.56	9.54	3.40	2.51
MEAN TEMPERATURE	67.74	68.11	70.44	74.27	77.40	80.24	81.76	82.33	81.34	77.84	72.59	68.71
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 AND RAINFALL ARE BASED ON 54 YEARS OF WEATHER DATA.

FACTOR FOR CONVERSION OF AVERAGE RAINFALL TO 2-IN-10 RAINFALL = .87

STATION: JUPITER

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
MEAN RAINFALL	3.66	2.49	3.26	2.82	4.89	6.37	5.79	6.26	8.63	10.37	3.18	2.38
MEAN TEMPERATURE	67.99	67.77	70.38	74.09	76.25	79.86	81.05	82.15	81.61	78.14	71.57	69.29
ANNUAL DAYLIGHT (%)	7.44	7.10	8.38	8.66	9.41	9.34	9.53	9.14	8.32	8.04	7.32	7.32

TEMPERATURE AND RAINFALL ARE BASED ON 32 YEARS OF WEATHER DATA.

FACTOR FOR CONVERSION OF AVERAGE RAINFALL TO 2-IN-10 RAINFALL = .87

STATION: KISSIMMEE

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
MEAN RAINFALL	2.35	2.84	3.11	2.70	3.98	7.32	7.52	6.88	6.44	3.92	1.95	2.17
MEAN TEMPERATURE	61.07	62.42	66.43	71.47	76.43	80.22	81.54	81.87	80.06	74.28	66.69	61.87
ANNUAL DAYLIGHT (%)	7.39	7.06	8.37	8.68	9.47	9.40	9.59	9.18	8.32	8.01	7.27	7.26

TEMPERATURE AND RAINFALL ARE BASED ON 62 YEARS OF WEATHER DATA.

FACTOR FOR CONVERSION OF AVERAGE RAINFALL TO 2-IN-10 RAINFALL = .85

STATION: LA BELLE

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
MEAN RAINFALL	1.62	2.26	2.74	2.94	4.11	9.06	8.18	7.54	7.69	3.86	1.31	1.35
MEAN TEMPERATURE	63.79	65.08	68.57	72.74	76.98	80.15	81.45	81.80	80.67	75.56	68.90	64.30
ANNUAL DAYLIGHT (%)	7.45	7.10	8.38	8.66	9.40	9.33	9.52	9.13	8.32	8.04	7.33	7.33

TEMPERATURE AND RAINFALL ARE BASED ON 40 YEARS OF WEATHER DATA.

FACTOR FOR CONVERSION OF AVERAGE RAINFALL TO 2-IN-10 RAINFALL = .86

STATION: LAKE PLACID

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
MEAN RAINFALL	1.83	2.45	2.65	3.25	3.90	8.22	7.85	6.88	7.15	3.90	1.74	1.41
MEAN TEMPERATURE	62.83	64.95	68.67	72.91	77.72	80.69	81.78	82.30	80.78	75.26	68.49	63.72
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 AND RAINFALL ARE BASED ON 36 YEARS OF WEATHER DATA.

FACTOR FOR CONVERSION OF AVERAGE RAINFALL TO 2-IN-10 YEAR = .85

STATION: LOXAHATCHEE

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
MEAN RAINFALL	2.44	2.56	3.18	3.60	4.59	9.50	8.22	8.35	9.78	7.89	2.29	2.22
MEAN TEMPERATURE	64.15	64.75	68.17	71.92	75.94	79.36	80.76	81.18	80.30	75.71	69.58	65.32
ANNUAL DAYLIGHT (%)	7.46	7.11	8.38	8.65	9.40	9.32	9.52	9.13	8.32	8.05	7.33	7.34

TEMPERATURE AND RAINFALL ARE BASED ON 28 YEARS OF WEATHER DATA.

FACTOR FOR CONVERSION OF AVERAGE RAINFALL TO 2-IN-10 RAINFALL = .87

STATION: MIAMI

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
MEAN RAINFALL	2.58	2.14	2.44	3.42	6.39	6.85	5.86	6.27	8.81	8.86	2.72	2.01
MEAN TEMPERATURE	67.51	67.94	70.88	73.89	77.41	80.28	81.56	82.16	81.00	77.54	72.18	68.77
ANNUAL DAYLIGHT (%)	7.50	7.13	8.38	8.63	9.36	9.28	9.48	9.13	8.32	8.07	7.37	7.38

TEMPERATURE AND RAINFALL ARE BASED ON 77 YEARS OF WEATHER DATA.

FACTOR FOR CONVERSION OF AVERAGE RAINFALL TO 2-IN-10 RAINFALL = .87

STATION: MOORE HAVEN

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
MEAN RAINFALL	1.54	1.90	2.40	2.87	4.65	8.11	7.58	6.87	7.58	4.24	1.42	1.23
MEAN TEMPERATURE	63.43	64.59	67.98	72.17	76.28	79.67	81.01	81.59	80.47	76.00	69.13	64.63
ANNUAL DAYLIGHT (%)	7.44	7.10	8.38	8.66	9.41	9.34	9.53	9.14	8.32	8.04	7.32	7.32

TEMPERATURE AND RAINFALL ARE BASED ON 51 YEARS OF WEATHER DATA.

FACTOR FOR CONVERSION OF AVERAGE RAINFALL TO 2-IN-10 RAINFALL = .85

STATION: NAPLES

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
MEAN RAINFALL	1.81	2.02	2.11	2.15	3.93	8.50	8.35	8.25	9.51	4.45	1.36	1.29
MEAN TEMPERATURE	65.56	66.58	69.81	73.74	77.41	80.82	82.34	82.91	81.97	77.00	71.26	66.52
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 AND RAINFALL ARE BASED ON 027 YEARS OF WEATHER DATA.

FACTOR FOR CONVERSION OF AVERAGE RAINFALL TO 2-IN-10 RAINFALL = .86

STATION: OKEECHOBEE

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
MEAN RAINFALL	1.75	2.00	3.05	3.09	4.15	7.39	6.84	6.22	7.25	4.81	1.46	1.40
MEAN TEMPERATURE	62.69	64.18	67.49	71.74	75.98	79.46	80.99	81.52	80.34	75.69	68.82	63.77
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 AND RAINFALL ARE BASED ON 48 YEARS OF WEATHER DATA.

FACTOR FOR CONVERSION OF AVERAGE RAINFALL TO 2-IN-10 RAINFALL = .85

STATION: ORLANDO

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
MEAN RAINFALL	2.30	2.43	2.81	2.99	4.21	6.61	7.85	7.04	7.13	4.62	1.72	2.33
MEAN TEMPERATURE	61.27	63.12	66.80	71.50	76.75	80.68	82.04	82.31	80.40	74.34	66.65	1.87
ANNUAL DAYLIGHT (%)	7.38	7.06	8.37	8.68	9.48	9.41	9.60	9.18	8.32	8.01	7.26	7.25

TEMPERATURE AND RAINFALL ARE BASED ON 56 YEARS OF WEATHER DATA.

FACTOR FOR CONVERSION OF AVERAGE RAINFALL TO 2-IN-10 RAINFALL = .85

STATION: POMPANO BEACH

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
MEAN RAINFALL	2.41	2.34	2.38	3.65	5.08	7.93	6.74	7.07	9.06	10.46	2.75	2.49
MEAN TEMPERATURE	67.10	67.46	70.70	74.19	77.02	79.95	81.43	81.82	81.00	77.20	72.24	68.08
ANNUAL DAYLIGHT (%)	7.48	7.12	8.38	8.64	9.38	9.30	9.50	9.12	8.32	8.06	7.35	7.36

TEMPERATURE AND RAINFALL ARE BASED ON 28 YEARS OF WEATHER DATA.

FACTOR FOR CONVERSION OF AVERAGE RAINFALL TO 2-IN-10 RAINFALL = .87

STATION: STUART

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
MEAN RAINFALL	2.34	2.46	2.98	3.15	4.48	7.09	6.49	5.97	8.65	6.06	2.31	2.24
MEAN TEMPERATURE	65.49	66.35	69.87	73.80	77.34	80.82	82.16	82.58	81.35	77.25	71.52	66.82
ANNUAL DAYLIGHT (%)	7.44	7.10	8.38	8.66	9.42	9.35	9.54	9.14	8.32	8.04	7.32	7.31

TEMPERATURE AND RAINFALL ARE BASED ON 34 YEARS OF WEATHER DATA.

FACTOR FOR CONVERSION OF AVERAGE RAINFALL TO 2-IN-10 RAINFALL = .86

STATION: TAMIAMI 4

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
MEAN RAINFALL	1.44	1.46	1.89	2.67	6.21	8.95	8.37	7.81	9.66	6.09	1.51	1.05
MEAN TEMPERATURE	67.12	68.75	70.82	73.29	76.93	80.56	82.41	83.19	82.56	78.67	72.95	68.13
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 AND RAINFALL ARE BASED ON 26 YEARS OF WEATHER DATA.

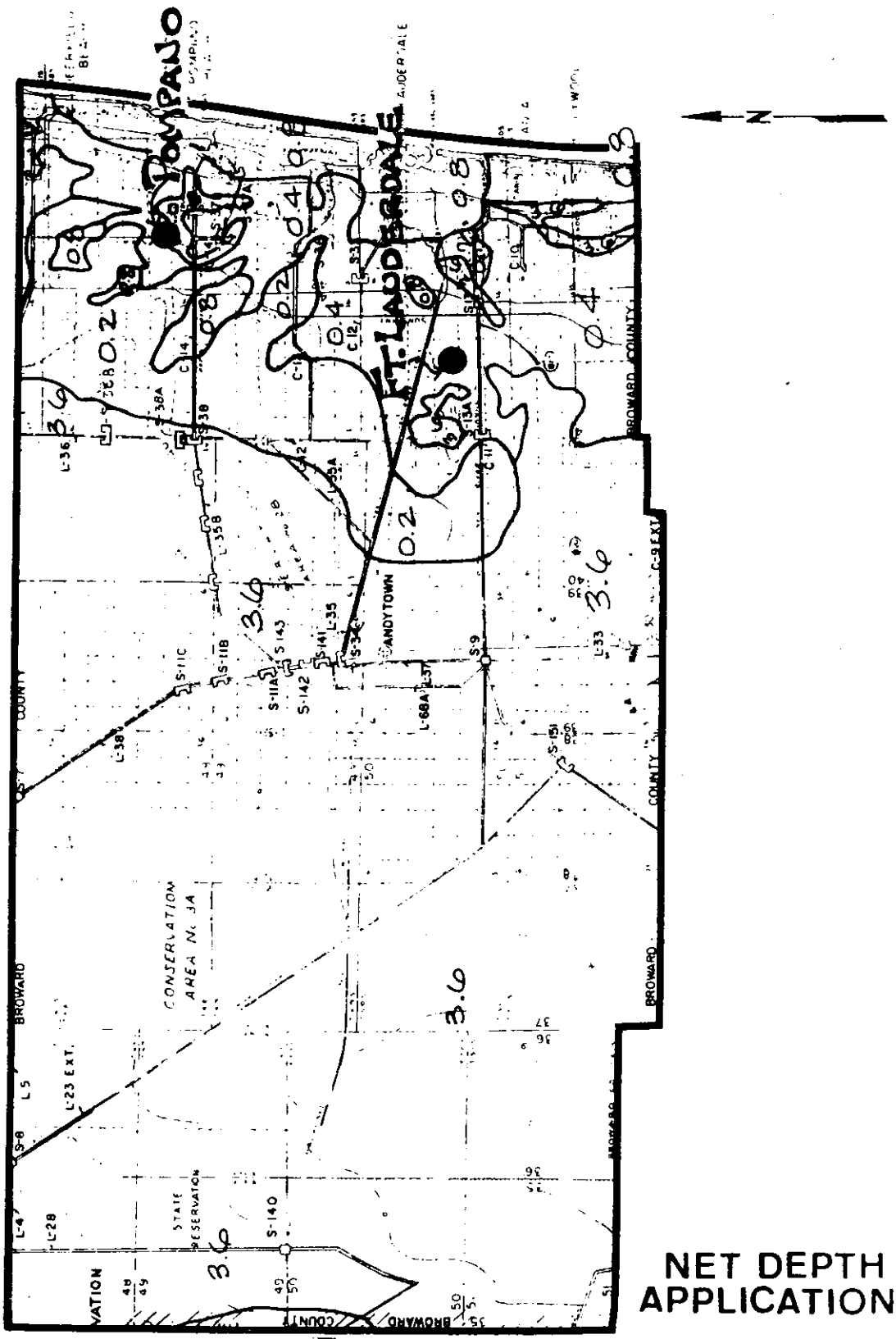
FACTOR FOR CONVERSION OF AVERAGE RAINFALL TO 2-IN-10 RAINFALL = .86

STATION: WEST PALM BEACH

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
MEAN RAINFALL	2.42	2.54	2.84	3.64	5.13	7.81	6.67	6.85	9.53	8.70	2.56	2.31
MEAN TEMPERATURE	66.33	66.88	70.19	74.22	77.70	80.62	82.47	82.78	81.72	77.71	71.98	67.63
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

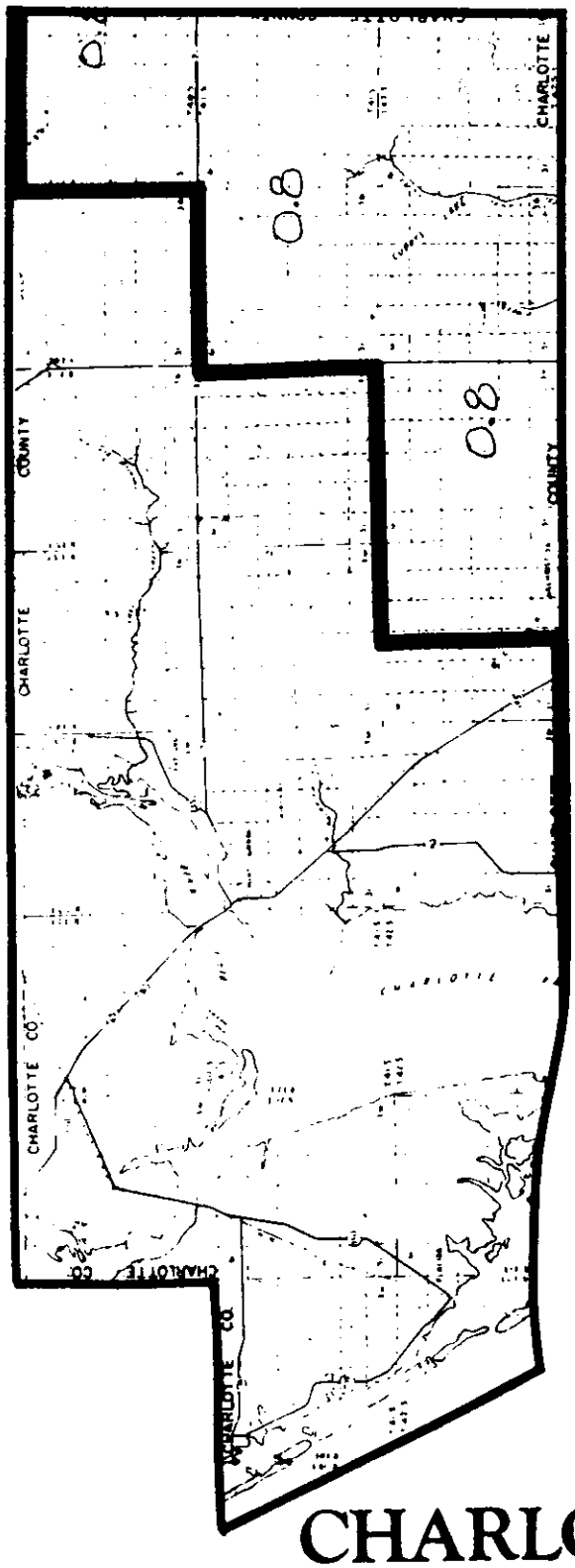
TEMPERATURE AND RAINFALL ARE BASED ON 29 YEARS OF WEATHER DATA.

FACTOR FOR CONVERSION OF AVERAGE RAINFALL TO 2-IN-10 RAINFALL = .87



BROWARD COUNTY

Figure C - 1

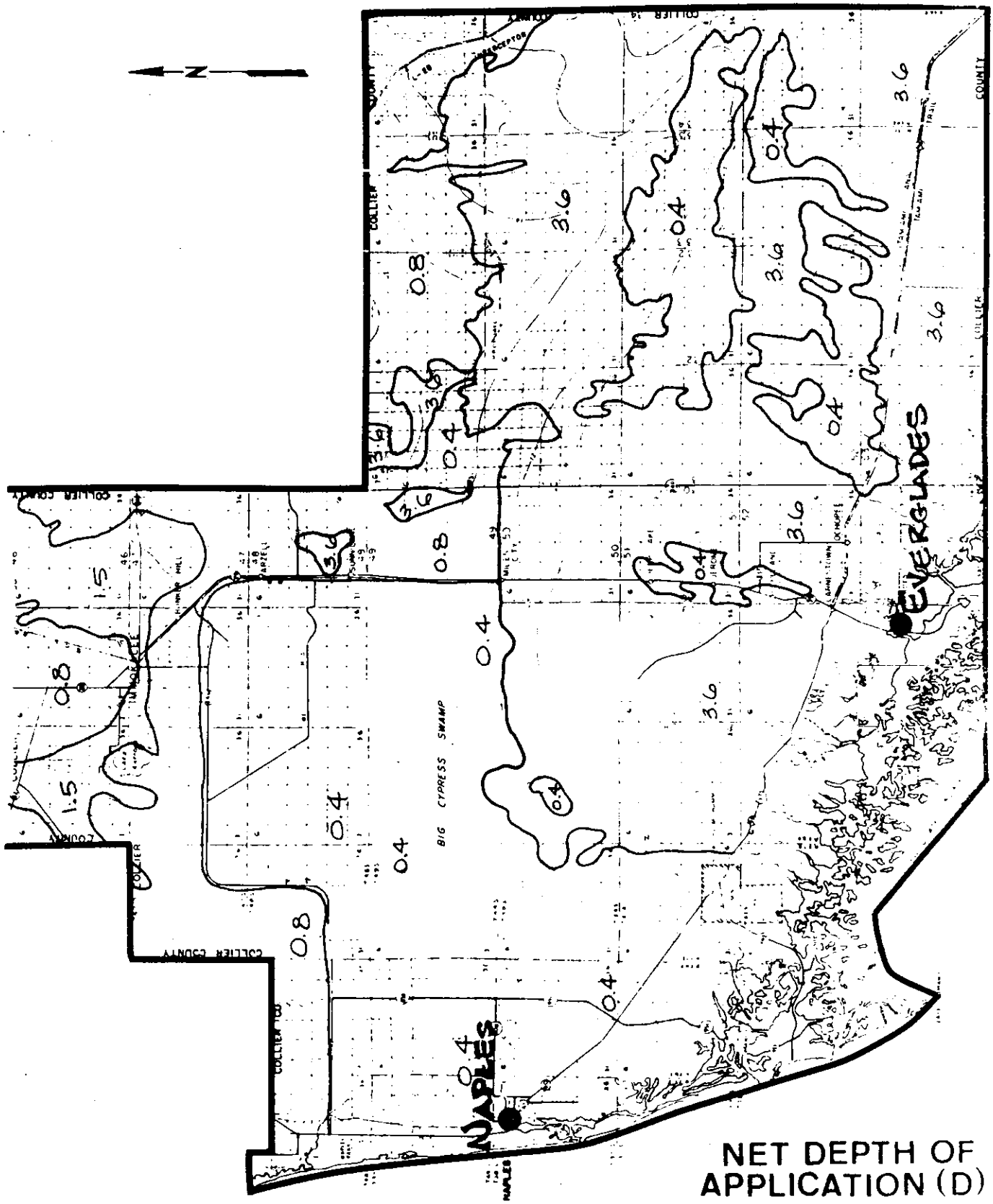


N

NET DEPTH OF APPLICATION (D)

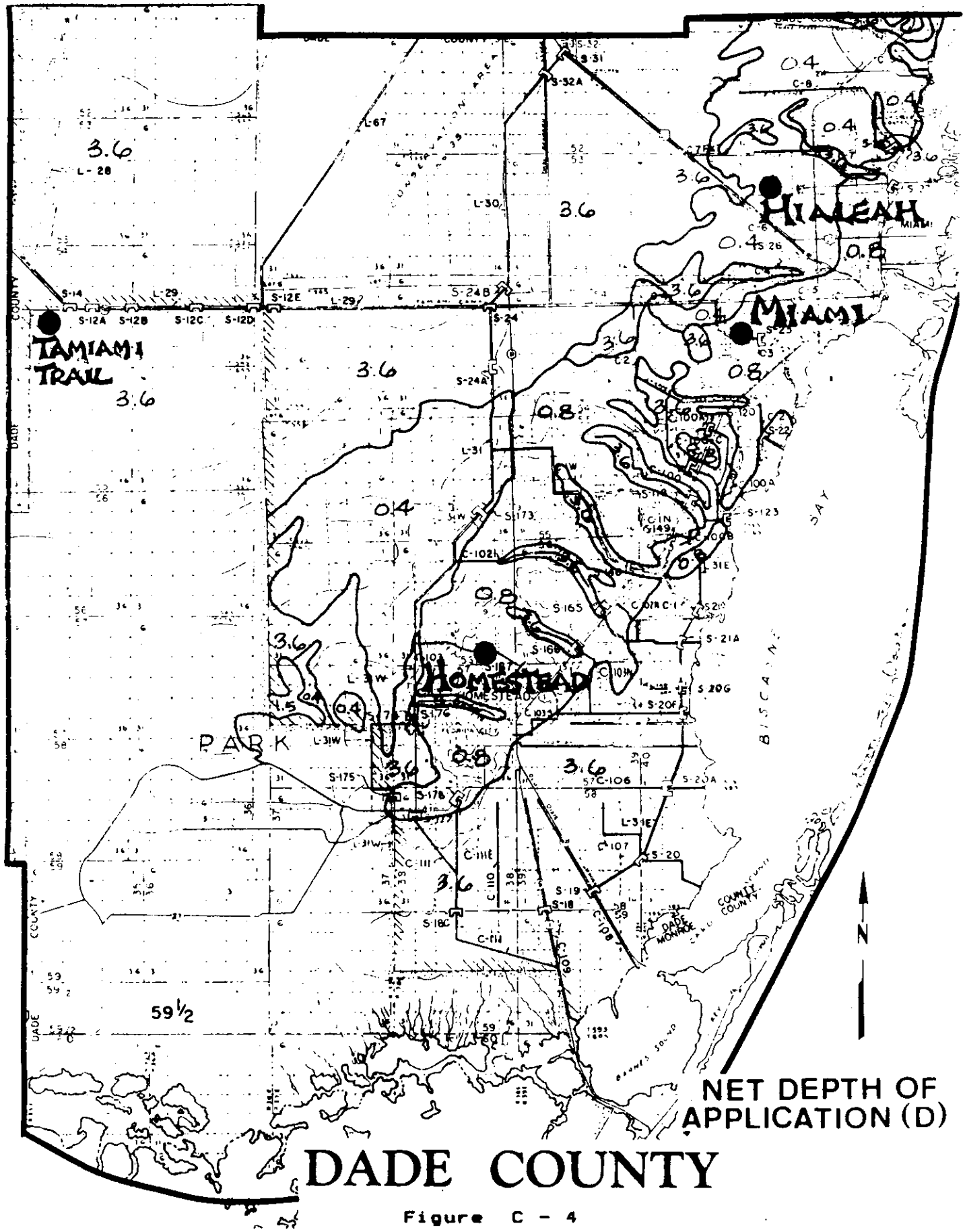
CHARLOTTE COUNTY

Figure C - 2



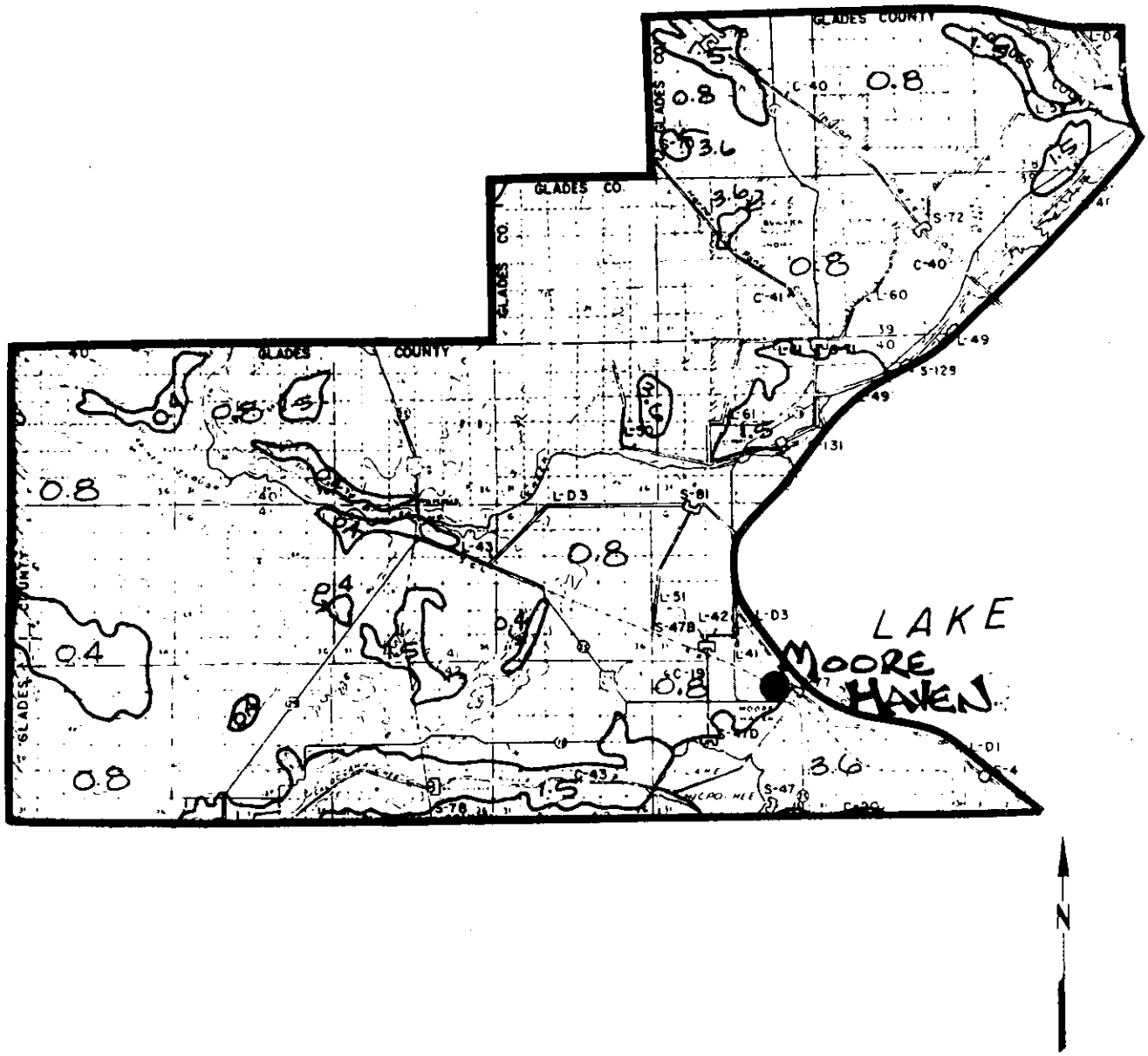
COLLIER COUNTY

Figure C - 3



DADE COUNTY

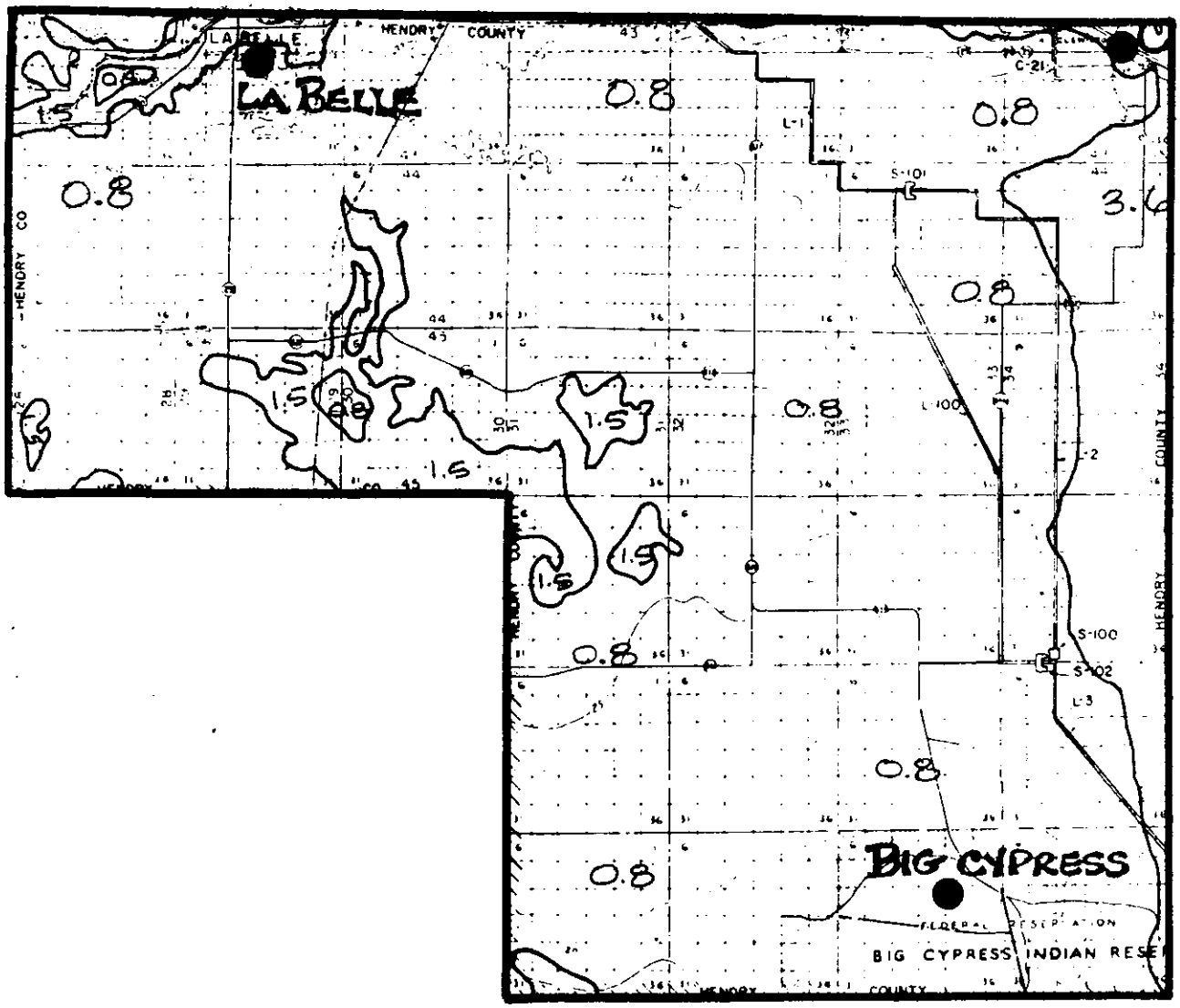
Figure C - 4



GLADES COUNTY

NET DEPTH OF APPLICATION (D)

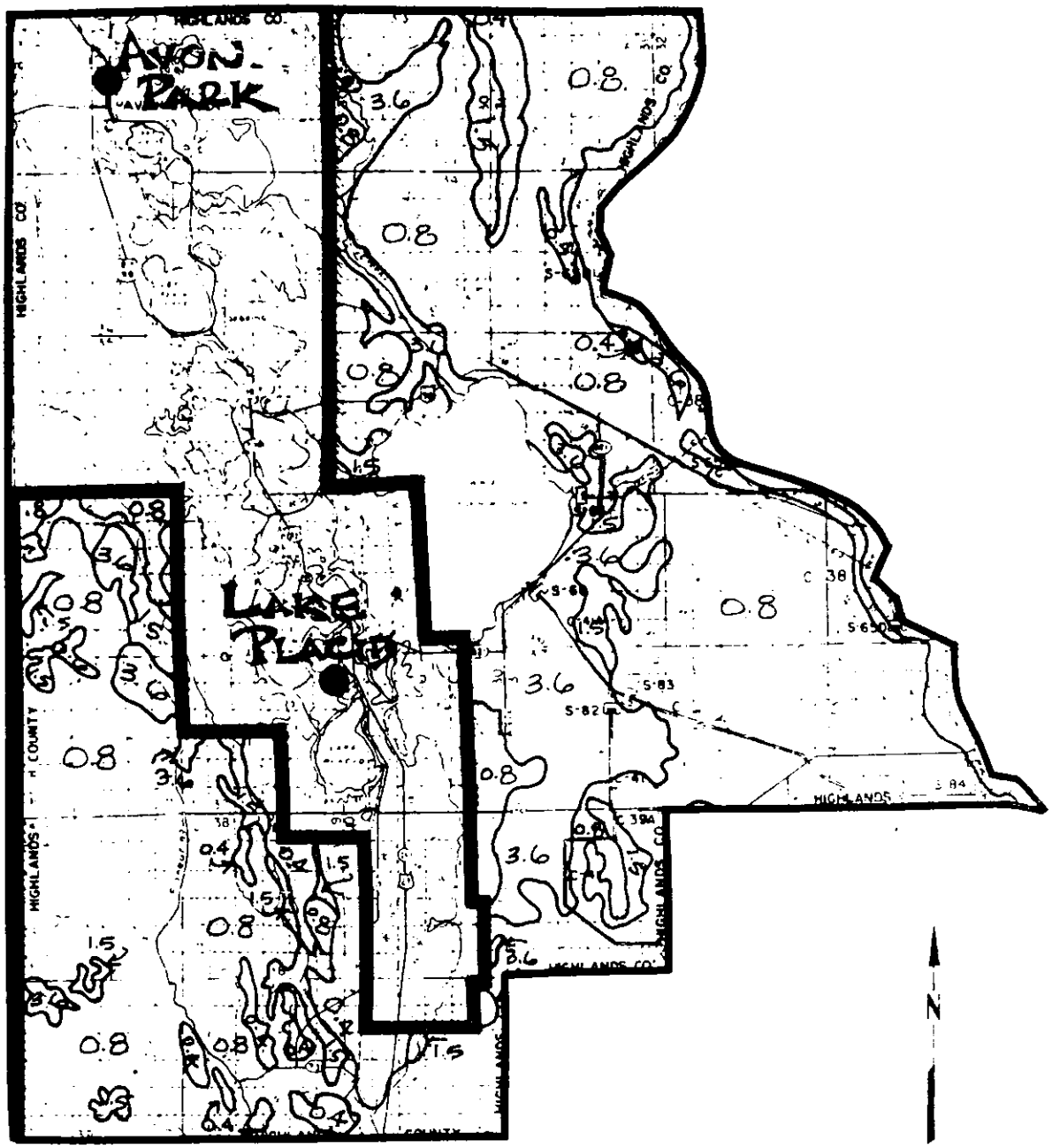
Figure C - 5



HENDRY COUNTY

NET DEPTH OF APPLICATION (D)

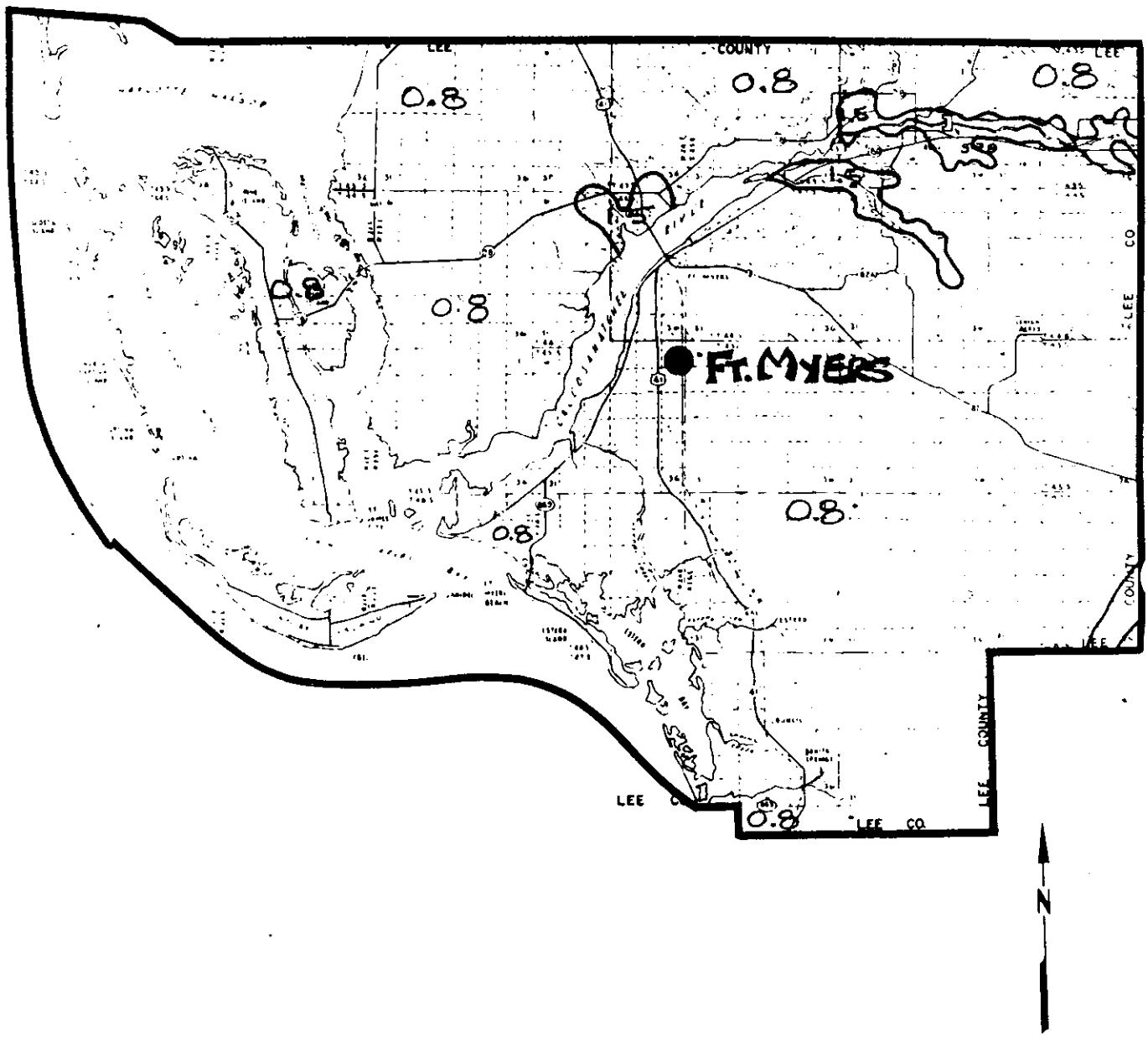
Figure C - 6



HIGHLANDS COUNTY

NET DEPTH OF APPLICATION (D)

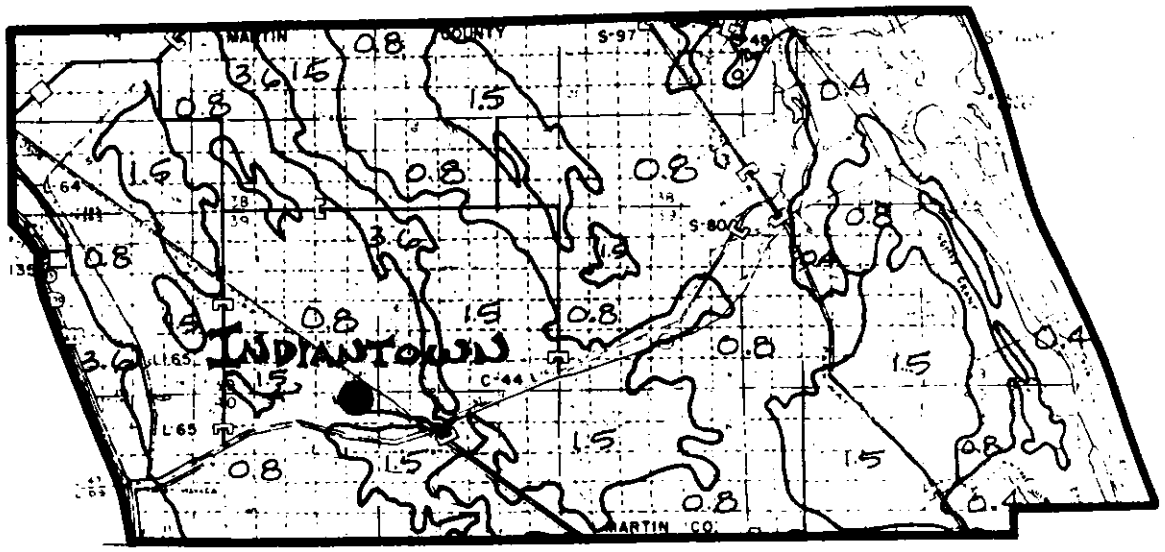
Figure C - 7



LEE COUNTY

NET DEPTH OF APPLICATION (D)

Figure C - 8

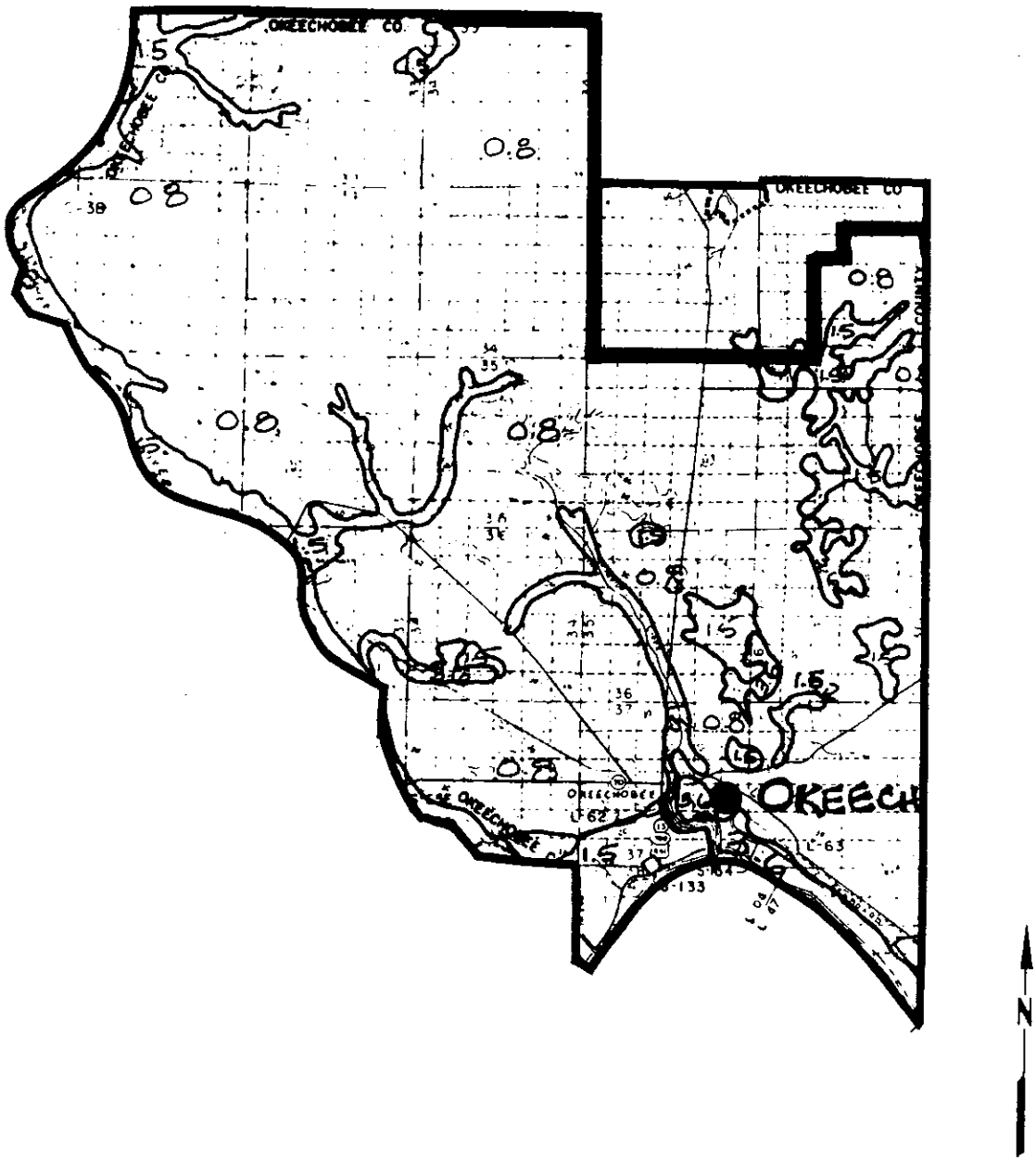


N

MARTIN COUNTY

NET DEPTH OF APPLICATION (D)

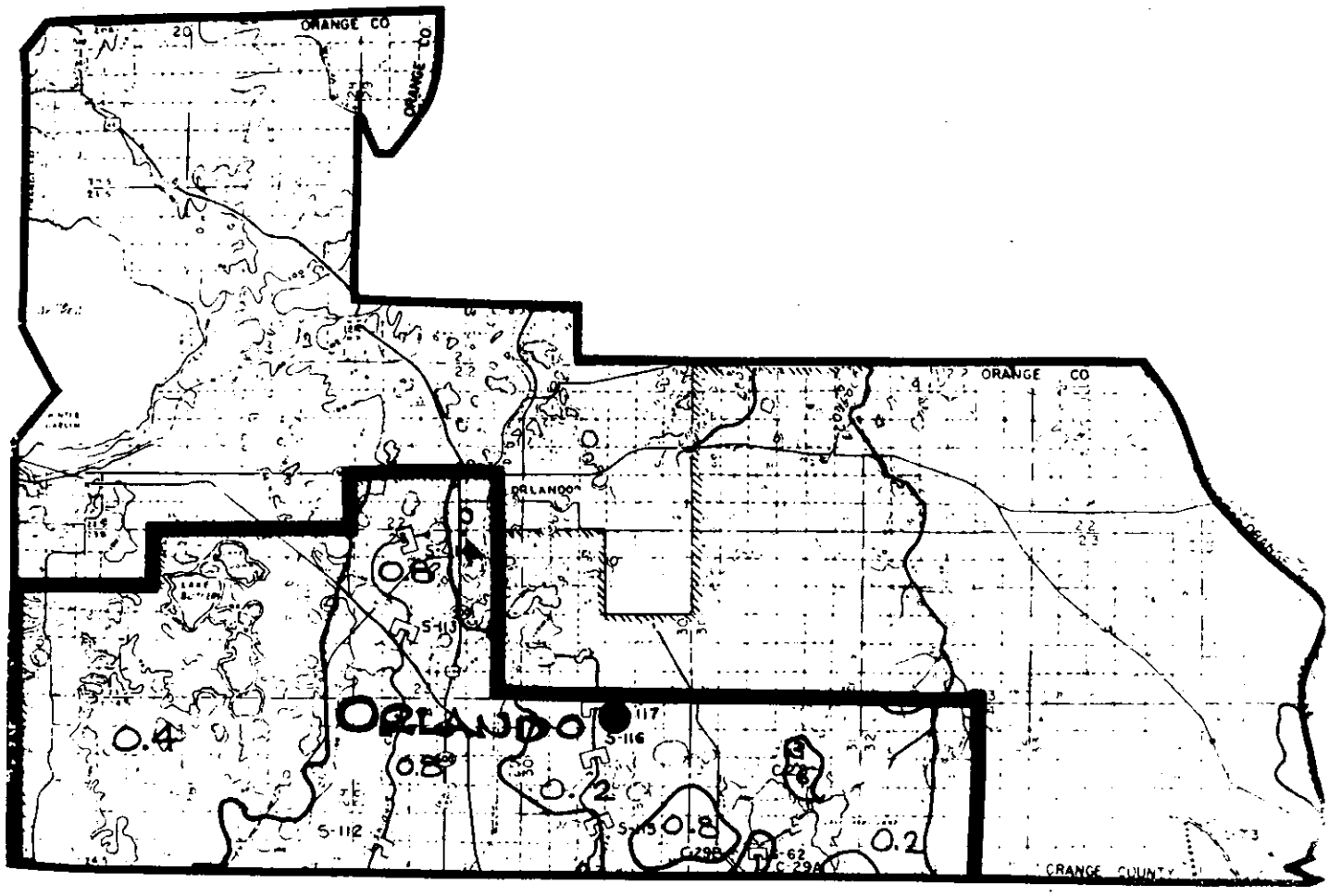
Figure C - 9



OKEECHOBEE COUNTY

NET DEPTH OF APPLICATION (D)

Figure C - 10

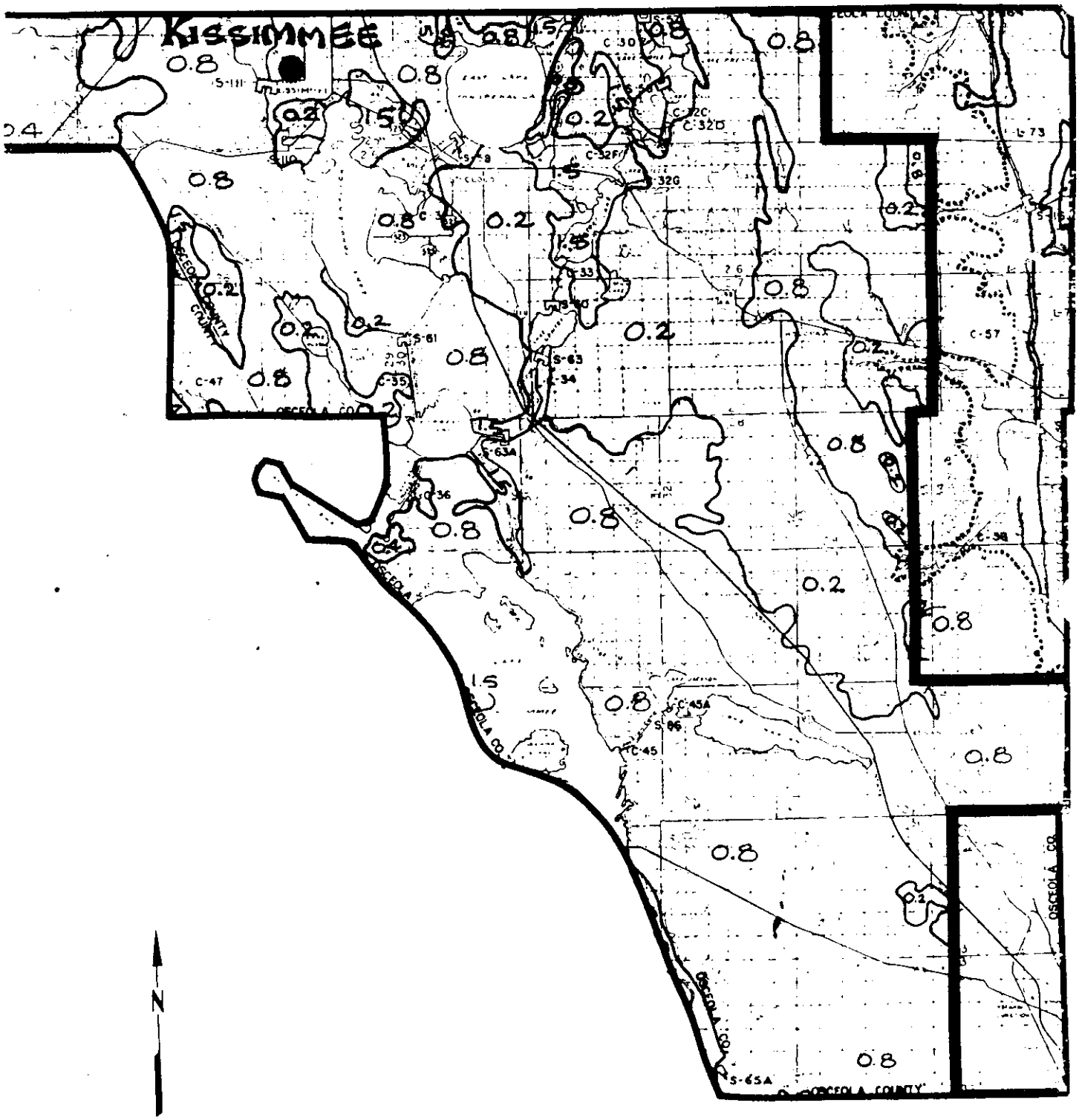


N

ORANGE COUNTY

NET DEPTH OF APPLICATION (D)

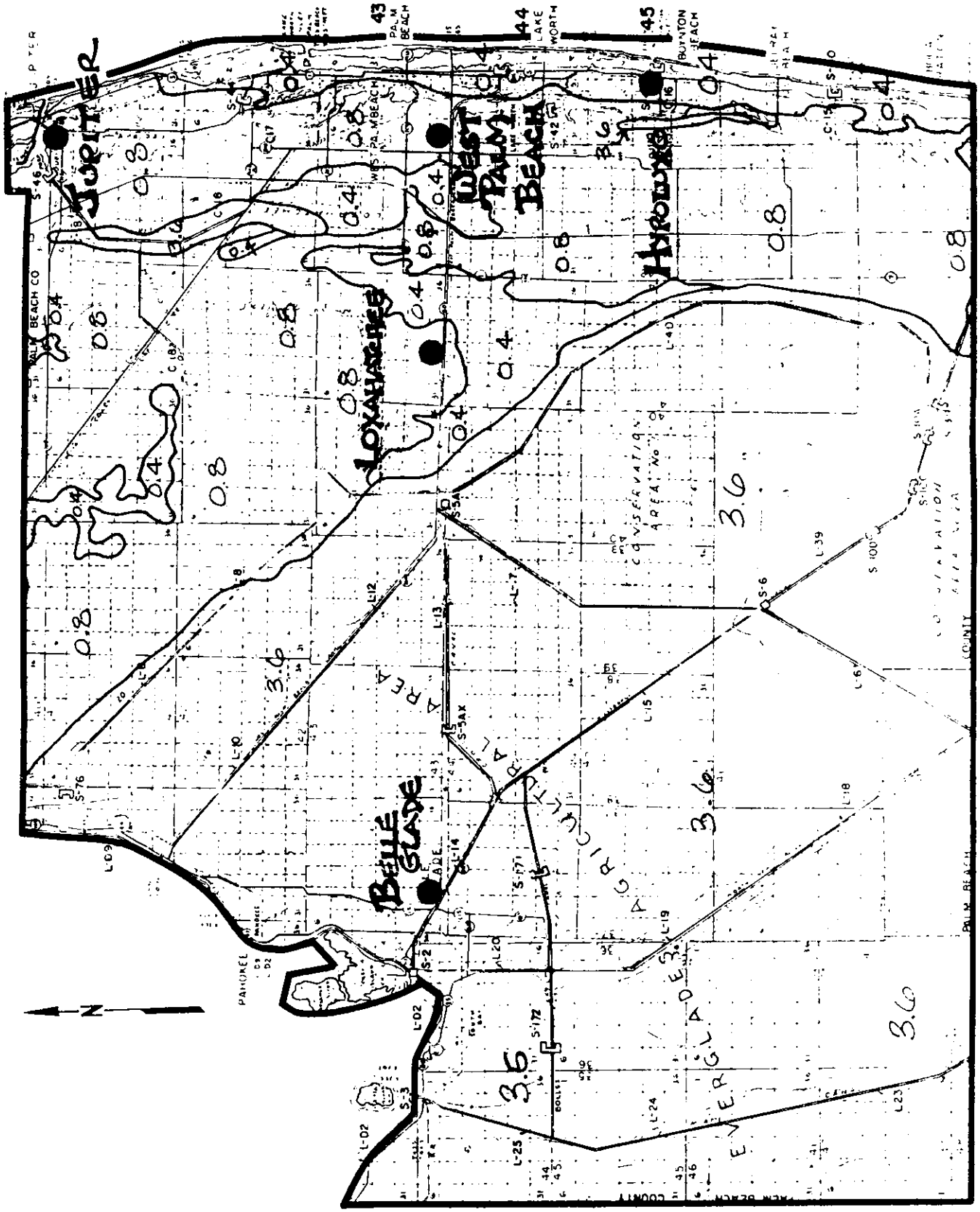
Figure C - 11



OSCEOLA COUNTY

NET DEPTH OF APPLICATION (D)

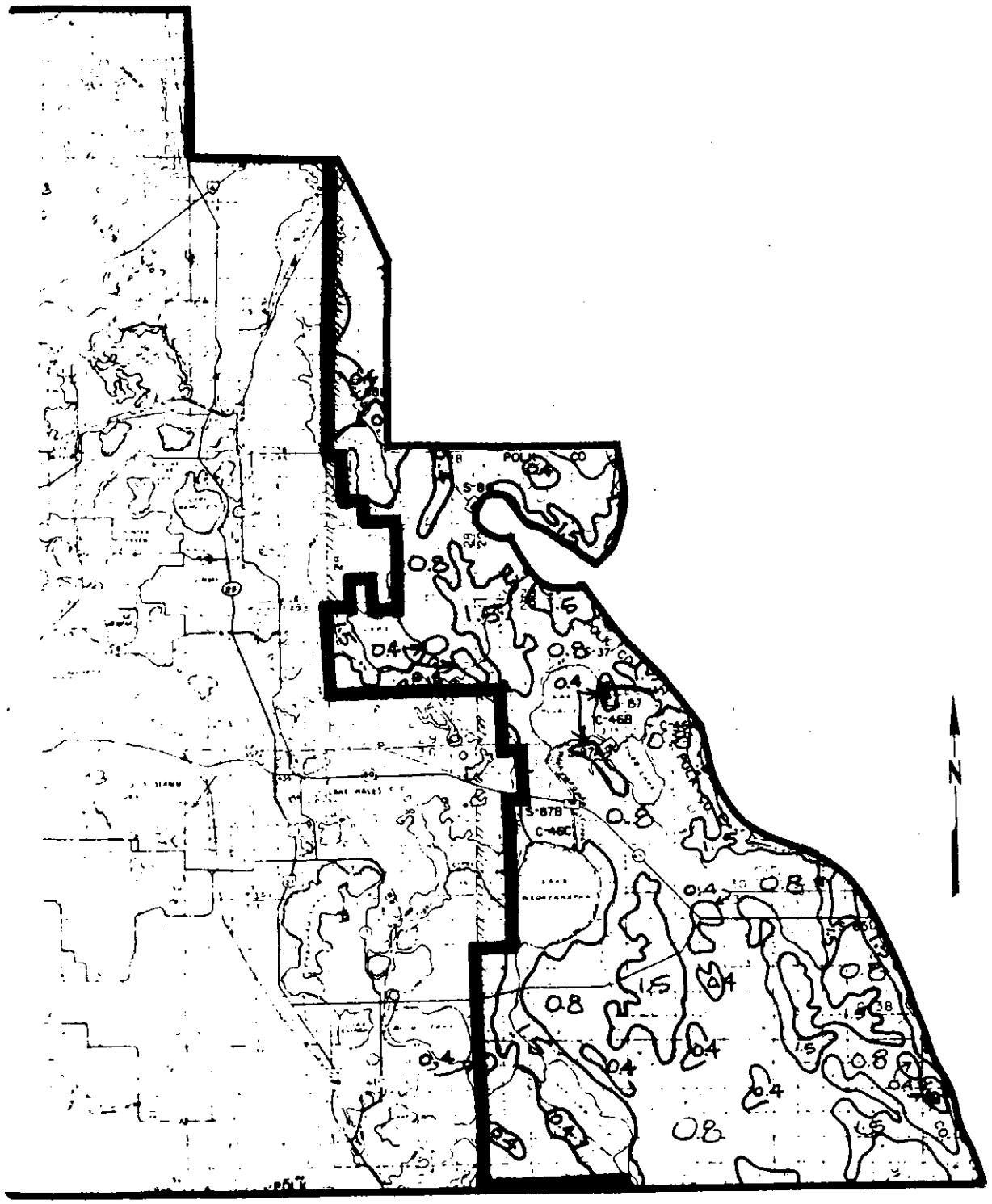
Figure C - 12



PALM BEACH COUNTY

Figure C - 13

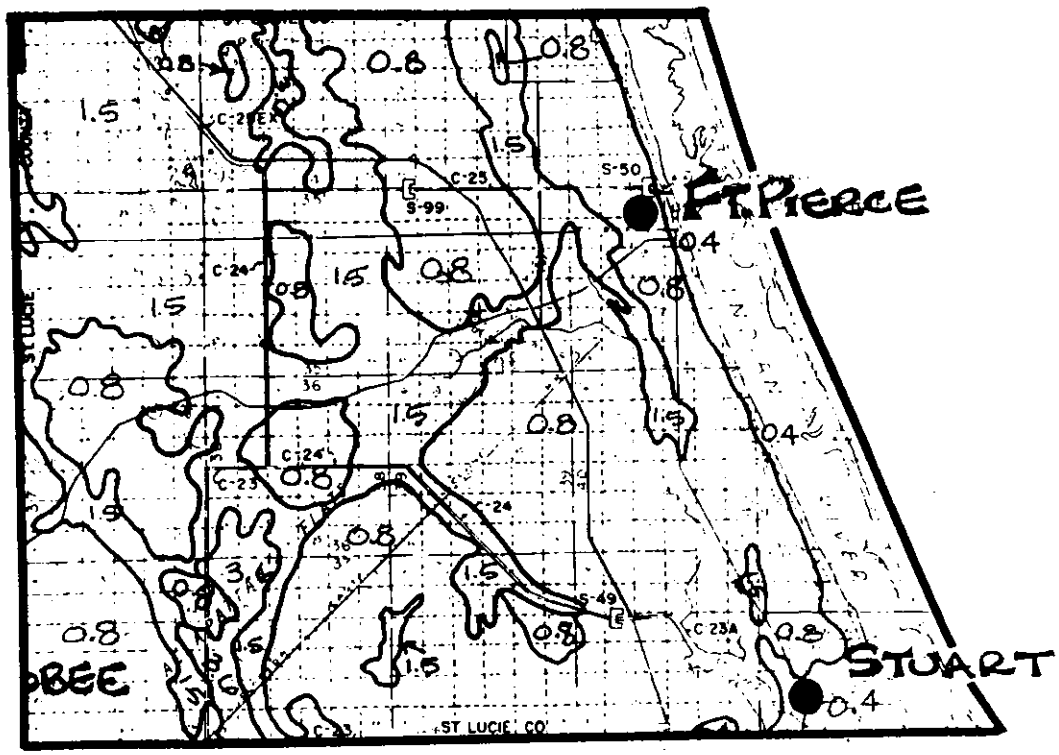
NET DEPTH OF APPLICATION (D)



POLK COUNTY

NET DEPTH OF APPLICATION (D)

Figure C - 14



N

ST. LUCIE COUNTY

NET DEPTH OF APPLICATION (D)

Figure C - 15

PART B

WATER USE MANAGEMENT SYSTEM

DESIGN AND EVALUATION AIDS

VI. BIBLIOGRAPHY

BIBLIOGRAPHY

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PART C

WATER MANAGEMENT RULES

I. GENERAL

II. CHAPTER 373 (PART II), F.S.
WATER RESOURCES

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PART C

WATER MANAGEMENT RULES

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.

PART C

WATER MANAGEMENT RULES

CHAPTER 373 (PART II), F.S.

WATER RESOURCES

PART II

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 Department of Environmental Regulation.

(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

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 business. Upon the determination by the Department of Environmental Regulation 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

Note.—Former ss. 370.052, 373.031.

373.207 Abandoned artesian wells.—

(1) 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:

(a) An initial inventory which accounts for all known abandoned artesian wells in the district.

(b) The location and owner of each known abandoned well.

(c) The methodology proposed by the district to accomplish the plugging of all known abandoned wells within the district on or before January 1, 1992.

(d) Data relating to costs to be incurred for the plugging of all wells, including the per-well cost and personnel costs.

(e) A schedule of priority for the plugging of wells, which schedule is established to mitigate damage to the ground water resource due to water quality degradation.

(2) Each water management district shall submit its work plan to the Secretary of Environmental Regulation no later than January 1, 1984. Thereafter, each water management district shall submit an annual update of its work plan until January 1, 1992, or until all wells identified by the plan are plugged, whichever is later.

History.—s. 8, ch. 83-310.

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 Regulation can show that the uncontrolled flow of water from the well does not have a reasonable and beneficial use, as defined in [1]s. 373.019(5).

(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.

[1]Note.—Renumbered as s. 373.019(4) by s. 37, ch. 79-65.

Note.—Former ss. 370.053, 373.041.

373.213 Certain artesian wells exempt.—Nothing in [1]ss. 373.203, 373.206, 373.209, or s. 373.213 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.

[1]Note.—Substituted by the editors for a reference to ss. 370.051-370.055 to conform to the renumbering by the reviser incident to compiling the Florida Statutes 1957 and the subsequent renumbering of those sections by s. 25, ch. 73-190. Section 370.054, as renumbered 373.051, was repealed by s. 1, part VI, ch. 72-299.

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 Regulation, 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.

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.

History.—s. 2, part II, ch. 72-299; s. 9, ch. 73-190.

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(4);

(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) 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.

History.—s. 3, part II, ch. 72-299; s. 10, ch. 73-190; s. 10, ch. 76-243; s. 35, ch. 95-81.

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 chapter 373 or chapter 378 prior to December 31, 1976, shall remain in full force and effect in accordance with its 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 [1]s. 373.019(4) 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 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.

[1]Note.—Substituted by the editors for a reference to s. 373.019(5) to conform to the renumbering by s. 37, ch. 79-65.

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 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) 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.

373.2295 Interdistrict transfers of groundwater.—

(1) As used in this section, "interdistrict transfer and use" means a consumptive water use which involves the withdrawal of groundwater from a point within one water management district for use outside the boundaries of that district.

(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 Regulation, 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 s. 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. 373.114 or s. 120.68.

(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) Any applicant who has submitted an application for interdistrict transfer and use of groundwater which is pending on July 11, 1987, may have the application considered pursuant to this section. New permits are not required for interdistrict transfers existing on July 11, 1987, for the duration of the permits issued for such uses.

(12) 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.

(13) 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.

(14) 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

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 which otherwise comply with the provisions of this part are pending for a quantity of water that is inadequate for both or all, or which for any other reason are in conflict, the governing board or the department shall have the right to approve or modify the application which best serves the public interest.

(2) In the event that two or more competing applications qualify equally under the provisions of subsection (1), the governing board or the department shall give preference to a renewal application over an initial application.

History.—s. 6, part II ch. 72-299

373.236 Duration of permits.—

(1) Permits may be granted for any period of time not exceeding 20 years. The governing board or the department may base duration of permits on a reasonable system of classification according to source of supply or type of use, or both.

(2) 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.

History.—s. 7, part II, ch. 72-299.

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 nonuse was due to extreme hardship caused by factors beyond his control.

(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.

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.

373.245 Violations of permit conditions.—Holders of consumptive use permits who violate conditions of such permits shall be liable to abutting consumptive use permitholders for damages caused by such permit violations. No cause of action shall accrue under this section until the complainant has first applied for and then been denied relief by the water management district for the permit violations complained of. The provisions of this section are supplemental, and nothing in this section is intended to preclude the use of any other existing cause of action, remedy, or procedure.

History.—s. 10, ch. 82-101.

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. Copies of the water shortage plan shall be submitted to the Speaker of the House of Representatives and the President of the Senate no later than October 31, 1983. 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 regular mail of any change in the condition of his permit or any suspension of his permit or of any other restriction on his 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 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.

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

PART C

WATER MANAGEMENT RULES

CHAPTER 17-40, F.A.C.

DER - WATER POLICY

CHAPTER 17-40
WATER POLICY

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17-40.001 Declaration and Intent.
Specific Authority: 373.026(7), 373.043, 403.805, F.S.
Law Implemented: 373.016, F.S.
History: New 5-5-81. Previously numbered as 17-40.01. Amended 12-5-88. Transferred to 17-40.110.

17-40.020 Definitions.
Specific Authority: 373.026(7), 373.043, 403.805, F.S.
Law Implemented: 373.016, F.S.
History: New 5-5-81. Previously numbered as 17-40.02. Amended 12-5-88. Transferred to 17-40.210.

17-40.030 General Water Policy.
Specific Authority: 373.026, 373.043, 403.805, F.S.
Law Implemented: 373.016, F.S.
History: New 5-5-81. Previously numbered as 17-40.03. Amended 12-5-88. Transferred to 17-30.310.

17-40.040 Water Use.
Specific Authority: 373.026, 373.043, 403.805, F.S.
Law Implemented: 373.016, Part II, 373, F.S.
History: New 5-5-81. Amended 2-4-82, 12-5-88. Previously numbered as 17-40.04. Transferred to 17-40.401.

17-40.050 Water Transport.
Specific Authority: 373.026, 373.043, 403.805, F.S.
Law Implemented: 373.016, Part II, 373, F.S.
History: New 5-5-81. Previously numbered as 17-40.05. Amended 12-5-88. Transferred to 17-40.402.

17-40.060 Water Quality.
Specific Authority: 403.061, 373.026, 373.043, 403.805, F.S.
Law Implemented: 373.039, 403.021, F.S.
History: New 5-5-81. Previously numbered as 17-40.06. Amended 12-5-88, Transferred to 17-40.403.

17-40.070 Surface Water Management.
Specific Authority: 373.026, 373.043, 403.805, F.S.
Law Implemented: 363.016, Part IV, 373, F.S.
History: New 5-5-81. Previously numbered as 17-40.07. Amended 12-5-88. Transferred to 17-40.404.

17-40.080 Minimum Flows and Levels.
Specific Authority: 373.026, 373.043, 403.805, F.S.
Law Implemented: 373.016, 373.042, 373.086, 373.175, 373.246, F.S.
History: New 5-5-81. Previously numbered as 17-40.08. Amended 12-5-88. Transferred to 17-40.405.

17-40.001(History) - 17-40.080(History)

17-40.090 District Water Management Plans.
Specific Authority: 373.026, 373.043, 403.805, F.S.
Law Implemented: 373.016, 373.033, 373.042, 373.106, 373.114, F.S.
History: New 5-5-81. Previously numbered as 17-40.09. Amended 12-5-88. Transferred to 17-40.501.

17-40.100 Review and Application.
Specific Authority: 373.026, 373.043, 403.805, F.S.
Law Implemented: 373.016, 373.033, 373.042, 373.106, 373.114, F.S.
History: New 5-5-81. Previously numbered as 17-40.10. Amended 12-5-88. Transferred to 17-40.601.

PART I
GENERAL WATER POLICY

17-40.110 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 Rcsources Act, Chapter 373, Florida Statutes, and the Air and Water Pollution Control Act, Chapter 403, Florida Statutes. Additionally, numerous goals and policies within the State Comprehensive Plan, Chapter 187, Florida Statutes, address water resources and natural systems protection.

(2) This Chapter is intended to clarify water policy as expressed in Chapters 187, 373, and 403, Florida Statutes, and to otherwise provide guidance to the Department and Districts in the development of programs, rules, and plans. Local governments shall consider state water policy in the development of their comprehensive plans required by Chapter 163, Florida Statutes, as required by Section 403.0891(3)(a), F.S.

(3) This Chapter does not repeal, amend or otherwise alter any rule now existing or later adopted by the Department or District. However, procedures are included in this Chapter which provide for the review and modification of Department and District rules to assure consistency with the provisions of this Chapter.

(4) 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.

Specific Authority: 373.026(10), 373.043, 403.061(33), F.S.
Law Implemented: 373.016, 373.114, 403.061(33), 403.0891, F.S.
History: New 5-5-81. Previously numbered as 17-40.01. Amended 12-5-88. Previously numbered 17-40.001, Amended 8-14-90, 12-17-91.

17-40.090---17-40.110(History)

17-40.120 Department Rules.

State water policy shall also include the following Department rules:

(1) Water Quality Standards, Chapter 17-3, F.A.C.

(2) Surface Water Quality Standards, Chapter 17-302, F.A.C.

(3) Surface Water Improvement and Management, Chapter 17-43, F.A.C.

Specific Authority: 373.026(7), 373.026(10), 373.043, 403.061(33), 403.805, F.S.
Law Implemented: 373.016, 373.114, 403.061(33), 403.0891, F.S.
History: New 8-14-90.

PART II
DEFINITIONS

17-40.210 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) "Consumptive use" means any use of water which reduces the supply from which it is withdrawn or diverted.

(3) "Department" means the Department of Environmental Regulation.

(4) "Detention" means the delay of stormwater runoff prior to its discharge.

(5) "District" means a Water Management District created pursuant to Chapter 373, Florida Statutes.

(6) "Drainage basin" means a subdivision of a watershed.

(7) "Effluent", unless specifically stated otherwise, means water that is not reused after flowing out of any wastewater treament facility or other works used for the purpose of treating, stabilizing, or holding wastes.

(8) "Florida Water Plan" means the State Water Use Plan formulated pursuant to Section 373.036, Florida Statutes, together with the water quality standards and water classifications adopted by the Department in Chapters 17-3 and 17-302, F.A.C.

(9) "Governing Board" means the governing board of a water management district.

(10) "Ground water" means water beneath the surface of the ground, whether or not flowing through known and definite channels.

(11) "Nutrient limitations" means those numeric values which establish a maximum or minimum allowable nutrient loading or concentration, as appropriate, for a specific nutrient. Nutrient limitations are established through an individual permit or other action within the regulatory authority of the Department or a District. These limitations serve to implement state water quality standards.

(12) "Reasonable-beneficial use" means the use of water in such quantity as is necessary for economic and efficient utilization for a purpose and in a manner which is both reasonable and consistent with the public interest.

(13) "Reclaimed water" means water that has received at lease secondary treatment and is reused after flowing out of a wastewater treatment facility.

(14) "Retention" means the prevention of stormwater runoff from direct discharge.

(15) "Reuse" means the deliberate application of reclaimed water, in compliance with Department and District rules, for a beneficial purpose.

(a) For example, said uses may encompass:

1. Landscape irrigation (such as irrigation of golf courses, cemeteries, highway medians, parks, playgrounds, school yards, retail nurseries, and residential properties);

2. Agricultural irrigation (such as irrigation of food, fiber, fodder and seed crops, wholesale nurseries, sod farms, and pastures);

3. Aesthetic uses (such as decorative ponds and fountains);

4. Groundwater recharge (such as slow rate, rapid-rate, and absorption field land application systems) but not including disposal methods described in Rule 17-40.210(15)(b), F.A.C.;

5. Industrial uses (such as cooling water, process water, and wash waters);

6. Environmental enhancement of surface waters resulting from discharge of reclaimed water having received at least advanced wastewater treatment or from discharge of reclaimed water for wetlands restoration;

7. Fire protection; or

8. Other useful purpose.

(b) Overland flow land application systems, rapid-rate land application systems providing continuous loading to a single percolation cell, other land application systems involving less than secondary treatment prior to application, septic tanks, and groundwater disposal systems using Class I wells injecting effluent or wastes into Class G-IV waters shall be excluded from the definition of reuse.

(16) "Secretary" means the Secretary of the Department of Environmental Regulation.

(17) "State water quality standards" means water quality standards adopted by the Environmental Regulations Commission pursuant to Chapter 403, Florida Statues, including standards comprised 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, and the moderating provisions contained in Rules 17-3 and 17-4, F.A.C.

(18) "State Water Use Plan" means the plan formulated pursuant to Section 373.036, Florida Statutes, for the use and development of waters of the State.

(19) "Stormwater" means the water which results from a rainfall event.

(20) "Stormwater management program" means the institutional strategy for stormwater management, including urban, agricultural, and other stormwater.

(21) "Stormwater management system" means a system which is designed and constructed or implemented to control stormwater, incorporating methods to collect, convey, store, absorb, inhibit, treat, use, or reuse stormwater to prevent or reduce flooding, over-drainage, environmental degradation and water pollution or otherwise affect the quantity and quality of discharges from the system.

(22) "Stormwater utility" means the entity through which funding for a stormwater management program is obtained by assessing the cost of the program to the beneficiaries based on their relative contribution to its need. It is operated as a typical utility which bills services regularly, similar to water and wastewater services.

(23) "Surface water" means water upon the surface of the earth, whether contained in bounds created naturally or artificially or diffused. Water from natural springs shall be classified as surface water when it exits from the spring onto the earth's surface.

(24) "Water" or "waters in the state" means any and all water on or beneath the surface of the ground or in the atmosphere, including natural or artificial watercourses, lakes, ponds, or diffused surface water and water percolating, standing, or flowing beneath the surface of the ground, as well as all coastal waters within the jurisdiction of the state.

17-40.210(15)(b) - 17-40.210(24)

(25) "Watershed" means the land area which contributes to the flow of water into a receiving body of water.

(26) "Wetlands" means those areas that are inundated or saturated by surface or ground water with a frequency sufficient to support, and under normal circumstances do or would support, a prevalence of vegetative or aquatic life that requires saturated or seasonably saturated soil conditions for growth and reproduction, such as swamps, marshes, bayheads, cypress ponds, sloughs, wet prairies, wet meadows, river overflows, mud flats and natural ponds. This definition does not alter the Department's jurisdiction over dredging and filling activities in wetlands as defined in Section 403.911(7), F.S.

Specific Authority: 373.026(10), 373.043, 403.061(33), F.S.
Law Implemented: 373.016, 373.026(7), 373.114, 403.061(33), 403.0891, F.S.
History: New 5-5-81. Previously numbered as 17-40.02. Amended 12-5-88. Previously numbered 17-40.020, Amended 8-14-90, 12-17-91.

PART III
GENERAL PROVISIONS

17-40.310 General Policies

The following statement of general water policy shall provide a basis for 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) Assure availability of an adequate and affordable supply of water for all reasonable-beneficial uses. Uses of water authorized by a permit shall be limited to reasonable-beneficial uses.

(2) Reserve from use that water necessary to support essential non-withdrawal demands, including navigation, recreation, and the protection of fish and wildlife.

(3) Champion and develop sound water conservation practices and public information programs.

(4) Advocate and direct the reuse of reclaimed water as an integral part of water management programs, rules, and plans consistent with protection of the public health and surface and ground water quality.

(5) Encourage the use of water of the lowest acceptable quality for the purpose intended.

(6) Utilize, preserve, restore, and enhance natural water management systems and discourage the channelization or other alteration of natural rivers, streams and lakes.

(7) 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 which provide for compatible uses.

(8) Protect aquifers from depletion through water conservation and preservation of the functions of high recharge areas.

(9) Identify existing and future public water supply areas and protect them from contamination.

(10) Mitigate adverse impacts resulting from prior alteration of natural hydrologic patterns and fluctuations in surface and ground water levels.

(11) Establish minimum flows and levels to protect water resources and the environmental values associated with marine, estuarine, freshwater, and wetlands ecology.

(12) Encourage nonstructural solutions to water resource problems and give adequate consideration to nonstructural alternatives whenever structural works are proposed.

(13) 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 of such areas.

(14) Manage the construction and operation of facilities which dam, divert, or otherwise alter the flow of surface waters to prevent increased flooding, soil erosion or excessive drainage.

(15) Encourage the development of local and regional water supplies within districts rather than transport water across District boundaries.

(16) Restore and protect the quality of ground and surface water by ensuring high quality treatment for stormwater and wastewater.

(17) Develop interstate agreements and undertake cooperative programs with Alabama and Georgia to provide for coordinated management of surface and ground waters.

Specific Authority: 373.026(10), 403.0891, 373.043, 403.061(33), F.S.

Law Implemented: 373.016, 373.026(7), 373.114, 403.061(33), 403.0891, F.S.

History: New 7-1-81. Previously numbered as 17-40.03. Amended 12-5-88. Previously numbered as 17-4.030, Amended 8-14-90, 12-17-91.

PART IV
RESOURCE PROTECTION AND MANAGEMENT

17-40.401 Water Use and Reuse.

The following shall apply to those areas where the use of water is regulated pursuant to Part II of Chapter 373, Florida Statutes:

(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 or available to be taken;
(j) The availability of reclaimed water for and the practicality of reuse, or the use of waters of more suitable quality;
(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 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

(3) Water shall 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.

(4) Conservation of water shall be required unless not economically or environmentally feasible.

17-40.401(1) - 17-40.401(4)

(5) As required by Section 373.0391(2)(e), F.S., the Districts shall designate areas that have water supply problems which have become critical or are anticipated to become critical within the next 20 years. The Districts shall identify such critical water supply problem areas during preparation of a District Plan pursuant to Rule 17-40.501, F.A.C., and shall adopt these designations by rule by November 1, 1991. A reasonable amount of reuse of reclaimed water from domestic wastewater treatment facilities shall be required within designated critical water supply problem areas unless such reuse is not economically, environmentally, or technically feasible. The Districts shall periodically update their designations of critical water supply problem areas by rule. Such updates shall occur within one year after updates of the District Plan prepared pursuant to Rule 17-40.501, F.A.C. After completion of the District Plan or updates pursuant to Rule 17-40.501, F.A.C., the Districts may limit areas where reuse shall be required to areas where reuse is specified as a remedial or preventive action pursuant to Rule 17-40.501(2), F.A.C. Any such limitation of areas where reuse shall be required shall be designated by rule.

(6) A reasonable amount of reuse of reclaimed water from domestic wastewater treatment facilities may be required outside of areas designated pursuant to Rule 17-40.401(5), F.A.C., as subject to critical water supply problems, provided:

(a) Reclaimed water is readily available; and

(b) The district has adopted rules for reuse in these areas.

(7) The Department encourages local governments to implement programs for reuse of reclaimed water. These rules shall not be deemed to preempt any such local reuse programs.

(8) In implementing consumptive use permitting programs, the Department and the Districts are required under Section 187.101(3), F.S., to 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.

(9) 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, should be considered for modification, to curtail or abate the adverse impacts, unless the impacts can be mitigated by the permittee.

Specific Authority: 373.026, 373.043, F.S.
Law Implemented: 187.101(3), 373.016, 373.0391(2)(e), Part II, 373, 403.064, F.S.
History: New 5-5-81. Amended 2-4-82, 12-5-88. Previously numbered as 17-40.04. Previously numbered as 17-40.040, Amended 8-14-90, 12-17-91.

17-40.401(5) - 17-40.401(History)

17-40.402 Water Transport.

The following shall apply to the transfers of water where such transfers are regulated pursuant to Part II of Chapter 373, Florida Statutes:

(1) The transport or use of water across District boundaries shall require approval of each involved District.

(2) In deciding whether the transport and use of water across District boundaries is consistent with the public interest pursuant to Section 373.223, Florida Statutes, the Districts should 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 transport 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 transport takes place;

(e) The transport plan incorporates a regional approach to water supply and distribution including, where appropriate, plans for eventual interconnection of water supply sources; and

(f) The transport is otherwise consistent with the public interest based upon evidence presented.

Specific Authority: 373.026, 373.043, 403.805, F.S.
Law Implemented: 373.016, Part II, 373, F.S.
History: New 5-5-81. Previously numbered as 17-40.05. Amended 12-5-88. Previously numbered 17-40.050.

17-40.403 Water Quality.

(1) Water quality standards shall be enforced pursuant to Chapter 403, Florida Statutes, to protect waters of the State from point and non-point sources of pollution.

(2) State water quality standards adopted by Department rule shall be a part of the Florida Water Plan.

Specific Authority: 403.061, 373.026, 373.043, 403.805, F.S.
Law Implemented: 373.039, 403.021, F.S.
History: New 5-5-81. Previously numbered as 17-40.06. Amended 12-5-88. Previously numbered 17-40.060.

17-40.402 - 17-40.403(History)

17-40.404 Surface Water Management.
Specific Authority: 373.026, 373.043, 403.805, F.S.
Law Implemented: 363.016, Part IV, 373, F.S.
History: New 5-5-81. Previously numbered as 17-40.07. Amended 12-5-88. Previously numbered 17-40.070, Repealed 2-20-91.

17-40.405 Minimum Flows and Levels.

(1) In establishing minimum flows and levels pursuant to Section 373.042, consideration shall be given to the protection of water resources, natural seasonal fluctuations in water flows or levels, and environmental values associated with coastal, estuarine, 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) Established minimum flows and levels shall be a consideration where relevant to:

(a) The construction and operation of water resource projects;
(b) The issuance of permits pursuant to Part II, Part IV, and Section 373.086, Florida Statutes; and
(c) The declaration of a water shortage pursuant to Section 373.175 or Section 373.246, Florida Statutes.

Specific Authority: 373.026, 373.043, 403.805, F.S.
Law Implemented: 373.016, 373.042, 373.086, 373.175, 373.246, F.S.
History: New 5-5-81. Previously numbered as 17-40.08. Amended 12-5-88. Previously numbered 17-40.080.

17-40.420 Surface Water Protection and Management.

(1) Surface Water Protection and Management Goals. The following goals are established to provide guidance for Department, District and local government stormwater management programs:

(a) It shall be a goal of surface water management programs to protect, preserve and restore the quality, quantity and environmental values of water resources. A goal of surface water management programs includes effective stormwater management for existing and new systems which shall seek to protect, maintain and restore the functions of natural systems and the beneficial uses of waters.

(b) The primary goals of the state's stormwater management program are to maintain, to the maximum extent practicable, 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 beneficial uses; to reduce the loss of fresh water resources by encouraging the reuse 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.

(c) 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 beneficial 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.

(d) 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 17-25, F.A.C., (February 1, 1982), by developing watershed management and stormwater master plans or District-wide or basin specific rules.

(e) The concept of developing comprehensive watershed management plans in designated watersheds is intended not only to prevent existing environmental, water quantity, and water quality problems from becoming worse but also to reduce existing flooding problems, to improve existing water quality, and to preserve or restore the values of natural systems.

17-40.420(1)(a) - 17-40.420(1)(e)

(2) 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. All such programs shall be mutually compatible with the State Comprehensive Plan (Chapter 187, Florida Statutes), the Local Government Comprehensive Planning and Land Development Regulation Act (Chapter 163, Florida Statutes), the Surface Water Improvement and Management Act (Sections 373.451-.4595, 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 state water quality standards and maintain the water quality of those waters which meet or exceed state water quality standards.

(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 shall be the chief administrators of the state stormwater management program. Districts shall set regional stormwater management goals and policies on a watershed basis, including watershed stormwater pollutant load reductions necessary to preserve or restore beneficial uses of receiving waters. Such goals and policies shall be implemented through District SWIM plans, through preparation of watershed management plans in other designated priority watersheds and through appropriate regulations.

(c) Local governments shall establish stormwater management programs which 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.

(3) Surface Water Management.
The following shall apply to the regulation of surface water pursuant to Part IV, Chapter 373, Florida Statutes.

(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.

17-40.420(2) - 17-40.420(3)(a)

(b) In determining the harm to water resources and consistency with the objectives of the Department or District, consideration should be given to:

1. The impact of the facilities on:

a. water quality;

b. fish and wildlife;

c. wetlands, floodplains, and other environmentally sensitive lands;

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 Section 373.042, 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 areas;

d. facility failure; or

e. other actions adversely affecting off-site water flows or levels.

(4) Minimum Stormwater Treatment Performance Standards.

(a) When a stormwater management system complies with rules establishing the design and performance criteria for stormwater management systems, there shall be a rebuttable presumption that such systems will comply with state water quality standards. The Department and the Districts, pursuant to Section 373.436, F.S., shall adopt rules that specify design and performance criteria for new stormwater management systems which:

1. Shall be designed to 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. Shall be designed to 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.

17-40.420(3)(b) - 17-40.420(4)(a)2.

3. The minimum treatment levels specified in subparagraphs 1. and 2. above may be replaced by basin specific design and performance criteria adopted by a District in order to achieve the pollutant load reduction goals established in paragraph (c).

(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 beneficial uses of waters. The Districts shall establish pollutant load reduction goals and adopt them as part of a SWIM plan, other watershed management plan, or District-wide or basin specific rules.

(d) Watershed management goals shall be developed by the District for all watersheds within the boundaries of each District and shall be consistent with the SWIM Program and the EPA National Pollutant Discharge Elimination System (NPDES) program. The primary purpose shall be to reduce pollutant discharges from watersheds such that the water quality in receiving waters is restored or maintained consistent with applicable state water quality standards.

(e) Watershed specific stormwater pollutant load reduction goals shall be developed for older stormwater management systems on a priority basis as follows:

1. Goals shall be developed according to the schedule established by EPA for those waters receiving stormwater discharges from systems required to obtain NPDES stormwater permits.

2. Goals shall be developed by 1994 for SWIM water bodies that have an adopted SWIM plan and that do not receive stormwater discharges from systems required to obtain NPDES stormwater discharge permits.

3. Goals shall be developed for other watersheds by 1996. These goals shall be considered in local comprehensive plans submitted or updated in accordance with Section 403.0891(3)(a), F.S.

Specific Authority: 373.026, 373.043, 403.061, 403.087, F.S.
Law Implemented: 163.3161-163.3243, 186, 187, 373.016, 373.046, 373.114, Part IV, 373, 403.061, 403.0891, F.S.
History: New 2-20-91.

17-40.420(4)(a)3. - 17-40.420(History)

PART V
WATER PROGRAM DEVELOPMENT

17-40.501 District Water Management Plans.

(1) As required by Section 373.036(4), F.S., a water management plan shall be prepared by each District which is consistent with the provisions of this Chapter and Section 373.036, Florida Statutes. The District Plan shall include an assessment of water needs and sources for the next 20 years. The District Plan shall identify specific geographical areas that have water resource problems which have become critical or are anticipated to become critical within the next 20 years. Identification of critical water supply problem areas needed for imposition of reuse requirements pursuant to Rule 17-40.401(5), F.A.C., may be accomplished before publication of the complete District Plan.

(2) Based on economic, environmental, and technical feasibility analyses, a course of remedial or preventive action shall be specified for each current and anticipated future critical problem.

(3) Remedial or preventive measures may include, but are not limited to, water resource projects; water resources restoration projects pursuant to Section 403.0615, Florida Statutes; purchase of lands; conservation of water; reuse of reclaimed water; enforcement of Department or District rules; and actions taken by local government pursuant to a Local Government Comprehensive Plan, local ordinance, or zoning regulation.

(4) District Plans shall also provide for identifying areas where collection of data, water resource investigations, water resource projects, or the implementation of regulatory programs are necessary to prevent water resource problems from becoming critical.

(5) By November 1, 1989, each District shall prepare a detailed plan of study for the preparation of the District Plan.

(6) District Plans shall be developed expeditiously and may be phased. All District Plans shall be completed no later than November 1, 1994.

(7) At a minimum, District Plans shall be updated every five years after the initial plan development.

Specific Authority: 373.043, F.S.
Law Implemented: 189.4156, 373.036(4),373.0391(2)(e),403.064, F.S.
History: New 5-5-81. Previously numbered as 17-40.09. Amended 12-5-88. Previously numbered 17-40.090, Amended 8-14-90, 12-17-91.

17-40.501 - 17-40.501(History)

PART VI
WATER PROGRAM ADMINISTRATION AND EVALUATION

17-40.601 Review and Application.

(1) This Chapter shall be reviewed periodically, but in no case less frequently than once every four years. Revisions, if any, shall be adopted by rule.

(2) Within 12 months after adoption or revision of this Chapter, the Districts shall have revised their rules 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, Florida Statutes, 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 to consider implementation of programs pursuant to Sections 373.033, 373.042, 373.106, Part III, or Part IV of Chapter 373, Florida Statutes, 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 policy 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.

(8) Duplication of water quality and quantity permitting functions should be eliminated where appropriate through delegation of Department responsibilities to Districts.

(9) 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.

Specific Authority: 373.026, 373.043, F.S.
Law Implemented: 373.016, 373.033, 373.042, 373.106, 373.114, F.S.
History: New 5-5-81. Previously numbered as 17-40.10. Amended 12-5-88. Previously numbered 17-40.100. Amended 12-17-91.

17-40.601 - 17-40.601(History)

PART C

WATER MANAGEMENT RULES

CHAPTER 40E-2

CONSUMPTIVE USE

CHAPTER 40E-2
CONSUMPTIVE USE

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Rules of the South Florida Water Management District
CONSUMPTIVE USE
Chapter 40E-2

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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, Florida Statutes, and Chapters 17-40 and, Title 40E, FAC.

(2) The rules in this chapter implement the comprehensive water use permit system contemplated in part II of Chapter 373, Florida Statutes.

(3) Additional rules relating to water use are found in Chapter 40E-20 (General Water Use Permits), Chapter 40E-21 (The Water Shortage Plan), Chapter 40E-22 (Regional Water Shortage Plans) and Chapter 40E-23 (Critical Water Supply Problem Areas).

(4) Standards for the construction, repair and abandonment of water wells are found in Chapter 40E-3 (Water Wells) and Chapter 40E-30 (General Permits for Water Wells).

Specific Authority 373.044, 373.113, 373.171, F.S.
Law Implemented 373.103(1), 373.203, 373-216-249, F.S.
History - New 9-3-81, Amended 7-4-82, 2-24-85, 11-17-91.
Formerly 16K-2.01.

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 373.226, Florida Statutes, for existing water users to file initial applications.

Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.103(1), 373.216, 373.226 F.S.
History - New 9-3-81.
Formerly 16K-2.011.

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. An individual water use permit may be obtained by meeting the requirements of this chapter. Chapter 40E-20 provides the requirements for qualifying for a general water use permit.

(3) Under certain circumstances the Board or the Executive Director may issue a temporary water use permit pursuant to rule 40E-2.441 and section 373.244, Florida Statutes.

Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.103(1), 373.219, 373.244 F.S.
History - New 9-3-81.
Formerly 16K-2.03(1),(2).

40E-2.051 Exemptions.

No permit is required under rule 40E-2.041 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 well for each single family dwelling or duplex.

(2) Water used strictly for fire fighting purposes, and

(3) Water used 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 the water is obtained from one well for each single family dwelling or duplex.

Specific Authority 373.044, 373.113, 373.171 F.S.
Law Implemented 373.219 F.S.
History - New 9-3-81, Amended 2-24-85.
Formerly 16K-2.025.

40E-2.091 Publications Incorporated by Reference.

(1) The following documents are hereby published by reference and incorporated into this chapter:

(a) "Basis of Review for Water Use Permit Applications Within the South Florida Water Management District - January, 1993".

(2) The document listed in subsection (1) is published by the District and is

available from the District upon request.

Specific Authority 373.044, 373.113, 373.171 F.S.
Law Implemented 373.219, 373.223, 373.224, 373.229, 373.232, 373.233, 373.236, 373.239 F.S.
History - New 9-3-81, Amended 2-24-85, 11-21-89, 1-4-93.
Formerly 16K-2.035(1).

40E-2.101 Content of Application.

(1) Applications for permits required by this chapter shall be filed with the District. The application shall contain:

(a) Form 0645 Surface Water Management Permit Applications and/or Water Use Permit Applications, as incorporated by reference in subsection 40E-1.901(1), F.A.C.;

(b) The information required in subsection 373.229(1), Florida Statutes; and

(c) Information sufficient to show that the use meets the criteria and conditions established in Rule 40E-2.301.

(2) In addition to the information specified in subsection (1), the application shall contain:

(a) the information required in the appropriate checklist of Part II of the document described in Rule 40E-2.091(a).

(3) The application must be signed by the user or his authorized agent.

Specific Authority 373.044, 373.113, 373.171 F.S.
Law Implemented 373.103(1), 373.219, 373.223, 373.229 F.S.
History - New 9-3-81, Amended 12-1-82, 2-24-85, 11-21-89, Repromulgated 1-4-93.

40E-2.301 Conditions for Issuance of Permits.

(1) In order to obtain a permit under this chapter, an applicant must give reasonable assurances that the proposed water use:

(a) will not cause significant inland movement of surface saline water, the saline water interface, or does not cause either significant upconing of saline water that may be beneath freshwater or vertical leakage of connate saline water, or otherwise reduce the amount of potable water,

(b) will not adversely impact offsite land uses existing at the time or application,

(c) will not cause adverse environmental impacts,

(d) will not cause pollution of the aquifer,

(e) is otherwise a reasonable-beneficial use as defined in subsection 373.019(4), Florida Statutes, and Rule 17-40.040,

(f) will not interfere with presently existing legal uses,

(g) is in accordance with the State of Florida general water policy on water transport being Rule 17-40.050,

(h) makes use of a reclaimed water source unless the applicant, in any geographic location, demonstrates that its use is either not economically, environmentally or technically feasible; or in areas not designated as Critical Water Supply Problem Areas pursuant to Chapter 40E-23, F.A.C., the applicant demonstrates reclaimed water is not readily available, and

(i) is consistent with Sections 373.016, 373.036, Florida Statutes, Rules 17-40.001, 17-40.030, 17-40.040 and otherwise in accordance with the public interest.

(2) In addition to the conditions specified in subsection (1), the applicant must show that the following conditions and criteria will be met:

(a) for all water uses, the general and specific criteria in the document described

in Rule 40E-2.091(1)(a).
Specific Authority 373.044, 373.113, 373.171 F.S.
Law Implemented 373.023, 373.185, 373.219, 373.223, 373.226, 373.236 F.S.
History - New 9-3-81, Amended 2-24-85, 1-4-93.
Formerly 16K-2.035(2).

40E-2.321 Duration of Permit.

(1) Unless revoked or otherwise modified, the duration of a water use permit issued pursuant to this chapter is:

(a) for public water supply and industrial water uses, the lesser of either the period required for the projected use to meet the allocated amount or 10 years.

(b) for mining water uses, the period required to complete the operation, not to exceed 3 years.

(c) for irrigation uses except golf, a period not to exceed the basin expiration date as specified in the *document described in Rule 40E-2.091 of the location of the project.*

(d) for golf uses a period not to exceed the lesser of the either the period based on the basin expiration date or 3 years.

(e) notwithstanding the above, for Broward and Lee Counties water use permits shall not exceed five years.

(f) for all other uses, the lesser of either the period required for the projected use to meet the allocated amount or a period not to exceed 10 years.

(2) Water use permits expire automatically unless the permittee requests an extension before the expiration date.
Specific Authority 373.044, 373.113, 373.171 F.S.
Law Implemented 373.236 F.S.
History - New 9-3-81, Amended 2-24-85.

40E-2.331 Modification of Permits.

(1) A permittee or the Executive Director shall apply to the Board for approval of any modification of an unexpired permitted use pursuant to Section 373.239, Florida Statutes.

(2) Applications for modification shall contain the information required in Rule 40E-2.101, will be evaluated using the criteria specified in Rule 40E-2.301 and will be subject to the limiting conditions specified in Rule 40E-2.381.

(3) Proposed increases in allocation will be treated as new uses to the extent the proposed allocation exceeds the existing allocation.
Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.223, 373.229, 373.239 F.S.
History - New 9-3-81.
Formerly 16K-2.09(1).

40E-2.351 Transfer of Permits.

Upon written request a permit may, at the District's option, be transferred. However, no transfer shall be approved unless the use remains the same. Upon approval, all terms and conditions of the permit shall be binding on the transferee.
Special Authority 373.044, 373.113 F.S.
Law Implemented 373.223, 373.229, 373.239 F.S.
History - New 9-3-81.
Formerly 16K-2.09(2).

40E-2.381 Limiting Conditions.

(1) The Board may impose on any permit granted under this chapter such reasonable conditions as are necessary to assure that the permitted use or withdrawal will be consistent with the overall objectives of the District and will not be harmful to the water resources of the District, including but not limited to, those limiting conditions specified in the documents incorporated by reference in this chapter by Rule 40E-2.091.

(2) In addition, the following standard limiting conditions shall be attached to all permits issued pursuant to this chapter unless waived or modified by the Board.

(a) The permittee shall obtain all necessary Federal, State, local and special district authorizations prior to the use or withdrawal of water.

(b) The permit does not convey any property right to the permittee, nor any rights and privileges other than those specified in the permit and Chapter 40E-2.

(c) In the event of a declared water shortage, water withdrawal reductions will be ordered by the District in accordance with the Water Shortage Plan, Chapter 40E-21.

(d) Permittee shall mitigate to the satisfaction of the District any adverse impact on existing legal uses caused by withdrawals. When adverse impacts occur, or are imminent, District reserves the right to curtail withdrawal rates. Adverse impacts include but are not limited to:

1. reduction in well water levels that impairs the ability of an adjacent well to produce water (an adjacent well may be domestic well, lawn irrigation well, public water supply well, etc.),

2. significant reduction in levels in an adjacent water body such as a lake, pond, or a canal system,

3. saline water intrusion or induction of pollutants into the water supply of an adjacent water use, resulting in a significant reduction in water quality, and

4. change in water quality that causes impairment or loss of a well or water body.

(e) Permittee shall mitigate to the satisfaction of the District any adverse impact on existing off-site land use as a consequence of withdrawals permitted herein. If increased withdrawals cause an adverse impact on existing land use the District reserves the right to curtail future withdrawal rates. Adverse impacts include but are not limited to:

1. significant reduction in water levels in an adjacent water body (such as a lake, pond, or canal system),

2. land collapse or subsidence caused by reduction in water levels, and

3. damage to crops and other vegetation, causing financial harm to the landowner.

(f) Authorized representatives of the District shall be permitted to enter, inspect, and observe the permitted system to determine compliance with special conditions.

(g) If any condition of the permit is violated, the permit shall be subject to review and possible modification, enforcement action, or revocation.

(h) Application for a permit modification may be made at any time.

(i) To the extent permitted under Florida law, the permittee shall hold and save the District harmless from any and all damages, claims or liabilities which may arise by reason of the design, construction, operation, maintenance or use of any facility authorized by the permit.

Specific Authority 373.044, 373.113, 373.171 F.S.
Law Implemented 373.219(1) F.S.

History - New 9-3-81, Amended 2-24-85, 7-31-87.

40E-2.441 Temporary Permits.

The Board or the Executive Director may issue temporary water use permits under the provisions of section 373.224, Florida Statutes.

Specific Authority 373.044,373.113 F.S.
Law Implemented 373.244 F.S.
History - New 9-3-81.

40E-2.451 Emergency Authorization.

(1) Permission to begin use, withdrawal, or diversion or 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. A serious set of unforseen 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) The Executive Director may grant emergency authorization at his discretion. The emergency authorization shall be presented to the Board for concurrence at its next meeting. The failure to receive the Board's concurrence shall invalidate the emergency authorization.

Specific Authority 373.044, 373.113 F.S.
Law Implemented 120.60(5), 373.219 F.S.
History - New 9-3-81.
Formerly 16K-2.11.

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-21.611 through 40E-21.691.

Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.246 F.S.
History - New 9-3-81, Amended 7-4-82.
Formerly 16K-2.12(2).

40E-2.511 Declaration of Water Shortage.

Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.246 F.S.
History - New 9-3-81, Repealed 5-30-82.
Formerly 16K-2.12(1).

40E-2.521 Change, Suspension or Restriction of Permits During Water Shortage.

Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.042, 373.246 F.S.
History - New 9-3-81, Repealed 5-30-82.
Formerly 16K-2.13.

40E-2.531 Procedures Under Water Shortage.

Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.246 F.S.
History - New 9-3-81, Repealed 5-30-82.
Formerly 16K-2.13.

40E-2.541 Declaration of Emergency Due to Water Shortage.

Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.246(7) F.S.
History - New 9-3-81, Repealed 5-30-82.
Formerly 16K-2.14.

40E-2.551 Procedures Under Emergency Due to Water Shortage.

Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.246(7) F.S.
History - New 9-3-81, Repealed 5-30-82
Formerly 16K-2.15

PART C

WATER MANAGEMENT RULES

CHAPTER 40E-3

WATER WELLS

CHAPTER 40E-3
WATER WELLS

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Rules of the South Florida Water Management District
WATER WELLS
Chapter 40E-3

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40E-3.011 Policy and Purpose.

(1) The purpose of Chapter 40E-3, Florida Administrative Code, is to implement the duties and responsibilities of the District under Part III, Chapter 373, Florida Statutes, and those responsibilities and duties delegated to the District by the Department of Environmental Regulation relative to regulating the construction, repair, or abandonment of wells and the licensing of water well contractors. It is the policy of the Board that these rules are a reasonable necessity to insure the protection and management of water resources and the health, safety, and general welfare of the people of this District.

(2) The rules in this chapter implement the regulation of wells and water well contractors and include the following parts:

(a) Part I of this chapter establishes a permitting system for the construction, repair or abandonment of wells.

(b) Part II of this chapter establishes the minimum standards for the construction, repair or abandonment of wells.

(3) Additional rules relating to well construction are found in Chapter 40E-5, Florida Administrative Code, (Artificial Recharge).

(4) Rules relating to Water Well Contractor Licensing are found in Chapter 17-531, Florida Administrative Code, adopted by reference in Rule 40E-3.037 (Governing Water Well Contractors in Florida).

Specific Authority 373.044, 373.113, 373.171, F.S.
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 F.S.
History--New 1-1-85, Amended 12-18-89.

40E-3.021 Definitions.

When used in this chapter:

between a well casing or liner pipe and a borehole wall or the space between two casings or liner pipes.

(2) "Aquifer" means a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield useful quantities of groundwater to wells and springs.

(3) "Casing Diameter" or "Diameter of Casing" means the largest inside diameter of the final casing.

(4) "Contractor" means any person licensed by the Department, or a water management district, in accordance with Chapter 17-531, Florida Administrative Code, and engaged in the business of construction, repair, or abandonment of wells.

(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) "Drive Shoe" means any device specifically designed, fabricated, and installed to protect the end of a well casing or liner pipe from collapse or other damage while the casing or liner pipe is being driven into place in a well.

(7) "Gang Well" means a system where two (2) or more water wells are coupled together with a common header or manifold.

(8) "Grout" means a mixture of water, Portland cement (American Concrete Institute type I, American Concrete Institute type II, Class H, American Concrete Institute type III, or any other types of cement approved by the District), and sand (not more than two parts of sand to one part of cement by weight), and other additives listed under subsection 40E-3.021(13), Florida Administrative Code, or other additives approved by the District. Grout composition shall not exceed six (6) gallons of water per cubic foot of cement.

(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) "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.

(11) "Monitoring Well" means a well used primarily to monitor hydrologic parameters such as water levels or water quality.

(12) "Neat Cement Grout" means grout without addition of sand but may include bentonite (not to exceed 5 lbs per 94 lb sack of cement), calcium chloride (not to exceed 3 lbs per 94 lb sack of cement) or retarder (not to exceed 1 lb per 94 lb sack of cement), or other admixtures approved by the District to reduce permeability or shrinkage, increase fluidity, adjust slurry weight and/or control set time. Neat cement ground composition shall not exceed six (6) gallons of water per cubic foot of cement.

(13) "Observation Well" means a well used primarily to observe the elevation of the water table or potentiometric surface or to determine water quality in the aquifer.

(14) "Production Well" means a water well but specifically excludes a test hole, an observation well or a monitoring well.

(15) "Public Water Supply Well" means a well constructed for the purpose of supplying water to a public water system.

(16) "Public Water System" means a system for the provision to the public of piped

water for human consumption, if such a system has at least 15 service connections or regularly serves at least 25 individuals daily at least 60 days out of the year.

(17) "Sand-point Well" means any device which is driven into place in unconsolidated earth materials, and which consists of a pipe with an attached perforated metal tube or screen designed to permit the passage of water.

(18) "Test Hole" means an artificial hole in the ground drilled, bored, cored, washed, or jetted, the intended use of which includes obtaining data for engineering and/or for geophysical or geological exploration; prospecting for minerals or products of mining or quarrying; not for the purposes of either producing, disposing of, or searching for water.

(19) "Water Use Permit" means a permit issued under Chapter 40E-2 or 40E- 20, Florida Administrative Code.

(20) "Water Well" means a well as defined in section 373.303(7), Florida Statutes.

(21) "Well Casing" means a metallic or non-metallic pipe installed in a borehole to prevent caving, provide structural strength, seal off zones of poor water quality, or prevent the interchange of waters between aquifers.

(22) "Well Completion" means termination of all well construction, repair or abandonment activities in accordance with Part II.

(23) "Well Completion Report" means a form "0124" completed and signed by the person constructing the well in accordance with this chapter.

Specific Authority 373.044, 373.113, 373.171 F.S.
Law Implemented 373.019, 373.106, 373.303, 373.306 F.S.
History--New 1-1-85, Amended 12-18-89.

40E-3.031 Implementation.

The effective date for rules established in this Chapter:

(a) for Rule 40E-3.037, October 1, 1984

(b) for the remainder of the chapter, January 1, 1985.

Specific Authority 373.044, 373.113, 373.171 F.S.
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 F.S.
History--New 1-1-85.

40E-3.032 Delegation.

(1) The authority for general administration of Part I of Chapter 40E-3, Florida Administrative Code, is delegated to the executive director of the District. It is the policy of the Board that in making this delegation the executive director may 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), Florida Statutes.

Specific Authority 373.044, 373.113, 373.171 F.S.
Law Implemented 373.308, 373.309(2), 373.339, 373.342 F.S.
History--New 1-1-85.

40E-3.037 Water Well Contractor Licensing.

Chapter 17-531, Florida Administrative Code, which requires the licensing of water well contractors and includes the Department's Water Well Contractor Disciplinary Guidelines and Procedures Manual, April, 1989 which is incorporated by reference at subsection 17-531.450(5), Florida Administrative Code, is adopted by reference and made

part of this rule. The licensing program shall be administered and enforced by the District under the authority delegated to it by the Department of Environmental Regulation.

Specific Authority 373.044, 373.113, 373.171, 373.333 F.S.
Law Implemented 373.103, 373.308, 373.309, 373.323, 373.324, 373.326, 373.329, 373.333 F.S.
History--New 1-1-85, Amended 12-18-89.

40E-3.038 Violations of Contractor Licensing Requirements.

(1) Violations of contractor licensing requirements of this chapter are specifically listed at Rules 17-531.380, 17-531.450, and 17-531.500, Florida Administrative Code.

(2) Actions which may be taken by the District upon determination that a violation has occurred are outlined in Chapter 17-531 and Rule 40E-1.612, Florida Administrative Code.

Specific Authority 373.044, 373.113, 373.171, 373.333 F.S.
Law Implemented 373.323, 373.326, 373.333, 373.336 F.S.
History--New 12-18-89.

40E-3.039 Penalties.

Penalties for violation of this chapter shall be as provided by Chapter 373, Florida Statutes, and Chapter 17-531, Florida Administrative Code, including the Water Well Contractors Disciplinary Guidelines and Procedures Manual as adopted by the Department and delegated to the water management districts.

Specific Authority 373.044, 373.113, 373.171 F.S.
Law Implemented 373.308, 373.309, 373.333, 373.336 F.S.
History--New 1-1-85, Amended 12-18-89.

40E-3.0391 Enforcement.

Once the District determines that a violation of licensing provisions of Chapter 40E-3 or 17-531, Florida Administrative Code, has occurred, the District may take enforcement action pursuant to Chapter 373, Florida Statutes, and applicable portions of Chapter 40E-1, Florida Administrative Code.

Specific Authority 373.044, 373.333, 373.119, 373.136, 373.171 F.S.
Law Implemented 373.119, 373.129, 373.306, 373.333, 373.336 F.S.
History--New 12-18-89.

PART I REGULATION OF WELLS

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), Chapter 40E-4 (Surface Water Management), Chapter 40E-20 (General Water Use Permits) or Chapter 40E-40 (General Surface Water Management Permits).

Specific Authority 373.044, 373.113, 373.171 F.S.
Law Implemented 373.303, 373.308, 373.309, 373.316, 373.326, 373.342 F.S.
History--New 1-1-85.

40E-3.041 Permits Required.

(1) Unless expressly exempt by law or District rule, a well construction permit must be obtained from the District prior to the construction, repair or abandonment of any well within the District.

(2) A well construction permit must be obtained prior to the construction of any gang well, regardless of the size or depth of the individual wells comprising such gang well, for the purpose of procuring or obtaining water other than for dewatering.

(3) No test hole shall be converted to a water well until a well construction permit is obtained.

(4) No monitoring or observation well shall be converted to a production well until a well construction permit or modification thereof is obtained for each production well.

Specific Authority 373.044, 373.113, 373.171 F.S.
Law Implemented 373.103, 373.309, 373.313, 373.316 F.S.
History–New 1-1-85.

40E-3.051 Exemptions.

The following wells are exempt from Rules 40E-3.101 and 40E-3.201. This exemption does not relieve the applicant from obtaining permits which may be required under Chapter 40E-2 (Consumptive Use), Chapter 40E-4 (Surface Water Management), Chapter 40E-20 (General Water Use Permits) or Chapter 40E-40 (General Surface Water Management Permits).

(1) The wells set forth in Section 373.316, Florida Statutes.

(2) The wells excluded from the definition of "well" under Section 373.303, Florida Statutes.

(3) The wells set forth in Section 373.326(2), Florida Statutes, provided the provisions of Section 373.326(2), Florida Statutes, are satisfied and the well is constructed, repaired or abandoned in accordance with the standards of this chapter and the well completion report is submitted in accordance with Rule 40E-3.411.

(4) A well constructed solely for the purpose of a test hole.

(5) The construction, repair or abandonment of a water well with a casing diameter of less than six inches by a licensed contractor, excluding public water supply wells, provided a well completion report is submitted in accordance with Rule 40E-3.411 and provided that the well is constructed, repaired or abandoned in accordance with the standards of this chapter.

(6) Wells intended for use as injection wells which have received a permit under Chapter 17-28. Such wells are exempt from the construction standards in Part II provided the applicable standards of Chapter 17-28 are met.

(7) Wells intended for monitoring purposes only which are part of an approved permit issued by the Department of Environmental Regulation.

(8) In addition, wells which satisfy the requirements of Part IV of this Chapter are exempt from the provisions of 40E-3.301, 40E-3.321, 40E-3.411, 40E-3.501, 40E-3.512, 40E-3.517 and 40E-3.351.

Specific Authority 373.044, 373.113, 373.171 F.S.
Law Implemented 373.303, 373.308, 373.309, 373.313, 373.316, 373.326 F.S.
History–New 1-1-85.

40E-3.0511 Exceptions and Variances.

(1) The board finds that compliance with all the requirements of Part I 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 may 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) Oral variance requests from the contractors will be received and oral decisions rendered by the District when, in the opinion of the District, an emergency situation exists and warrants such verbal request and decision. Approved oral variances must be detailed and submitted in writing by the applicant to the District along with an application form within ten days of the verbal approval.

(5) 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.

(6) Upon issuance of a variance the District may impose such special conditions as may be necessary to protect the intent and purpose of Part III, Chapter 373, Florida Statutes and this chapter.

Specific Authority 373.044, 373.113, 373.171 F.S.
Law Implemented 373.303, 373.308, 373.309, 373.313, 373.316, 373.326 F.S.
History--New 1-1-85, Amended 12-18-89.

40E-3.101 Content of Application.

(1) Permits will only be issued to the owner or his agent on whose property the well is located.

(2) Applications for permits required by this chapter shall be filed with the District. The application shall contain:

(a) Form "0123" Application to the South Florida Water Management District for the construction, repair or abandonment of water wells,

(b) The name, address, telephone number & license number of the licensed contractor who will be constructing the wells,

(c) The name, address and telephone number of the property owner and his agent, if applicable, on whose property the well is to be drilled,

(d) The location of the well (to the nearest one-quarter section, or latitude and longitude to the nearest second, or Florida coordinate system (state planar coordinates) to the nearest one hundred feet, and site map of the well location, depicting land marks and providing a scale,

(e) The expected depth of the well,

(f) The proposed use of the well,

(g) The estimated daily volume of the proposed use,

(h) The specification for well construction including the size(s) of the casing to be used, the proposed construction, repair, or abandonment specifications including casing types, diameters and depths; open hole or screened intervals, sizes and screen openings; and proposed grouting materials;

(i) The proposed method of construction and completion of the well, or the method of plugging and abandoning of the well,

(j) The proposed pump capacity,

(k) The anticipated starting date,

(l) The District water use permit number, if applicable,

(m) A well completion report and log for any hole which becomes a water well.

(3) The application must be signed by the owner and his authorized agent, if applicable. The application must also be signed by a licensed contractor, if applicable under Rule 40E-3.051(3).

(4) The required fee pursuant to section 40E-3.201 shall be submitted with the permit application.

Specific Authority 373.044, 373.113, 373.171 F.S.
Law Implemented 373.308, 373.309, 373.313, 373.326, 373.342 F.S.
History–New 1-1-85, Amended 12-18-89.

40E-3.201 Permit Application Fees.

In order to conform with the requirement of Section 373.109, Florida Statutes, the following schedule of non-refundable fees are established:

(1) $30.00 for a permit application for the construction or repair of any well with a casing diameter of six inches or greater excluding public water supply wells.

(2) For a permit application for the construction or repair of any public water supply well:

(a) $35.00 for a public water supply well with a casing diameter of less than 6 inches,

(b) $55.00 for a public water supply well with a casing diameter of 6 inches or greater.

(3) No permit application fee shall be required for the abandonment of any well.

(4) Applicants are exempt from the schedule of permit application fees if:

(a) The construction or repair of a well is for a governmental entity.

Specific Authority 373.044, 373.113, 373.171 F.S.
Law Implemented 373.109, 373.308, 373.309, 373.313 F.S.
History–New 1-1-85.

40E-3.301 Conditions for Issuance of Permits.

(1) In order to obtain a permit under this chapter an applicant must submit a permit application as specified in Rule 40E-3.101.

(2) The permit application fee shall accompany the original application according to the fee schedule provided in Rule 40E-3.201.

(3) An applicant must certify that:

(a) the proposed well will comply with the criteria set forth in Part II of this chapter,

(b) the applicant or owner has obtained a water use permit under Chapters 40E-2 or 40E-20, if applicable,

(c) the proposed well will not otherwise adversely affect the water resources.

(4) The application must be complete and meet the requirements of Chapter 373, Florida Statutes, and this chapter.

Specific Authority 373.044, 373.113, 373.171 F.S.
Law Implemented 373.103, 373.306, 373.308, 373.309, 373.313, 373.342 F.S.
History–New 1-1-85.

40E-3.321 Duration of Permits.

Each permit shall be valid for a period of six (6) months. In the event construction, repair or abandonment is not completed within that time, the District may extend the time limit upon written request by the permittee, provided that the conditions of the original permit application have not changed.

Specific Authority 373.044, 373.113, 373.171 F.S.
Law Implemented 373.308, 373.309, 373.313, 373.326, 373.342 F.S.
History–New 1-1-85.

40E-3.341 Suspension and Revocation.

(1) The District 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:

(a) Material misstatement or misrepresentation in the application for a permit;

(b) Failure to comply with the provisions set forth in the permit;

(c) Disregard or violation of any provisions of these rules and regulations or Part III of Chapter 373, Florida Statutes; or

(d) 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.

Specific Authority 373.044, 373.113, 373.171 F.S.
Law Implemented 373.103, 373.306, 373.308, 373.309, 373.313, 373.342 F.S.
History–New 1-1-85.

40E-3.411 Well Completion Report.

(1) Well completion reports are required for the construction, repair or abandonment of all wells regardless of whether a permit application is required under Rule 40E-3.101. Well completion reports shall be filed with the District within 30 days of the completion of the work.

(2) The water well contractor shall keep or cause to be kept by a registered driller in his employ an accurate log of all construction repair or abandonment activities. 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 thirty 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) The District may also require that samples be taken during construction and furnished to it with the completion report. If samples are required, the District shall provide containers and instructions.

Specific Authority 373.044, 373.113, 373.171 F.S.
Law Implemented 373.308, 373.309, 373.313, 373.326, 373.342 F.S.
History–New 1-1-85.

40E-3.451 Emergency Authorization.

(1) Emergency permits may be issued by the executive director or his designee

when one of the following conditions exist that justify 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 of this District 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, and unforeseeable circumstances exists 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.

(3) The applicant for an emergency permit shall submit the application and fee in accordance with Rule 40E-3.101 and any other requested information within twenty-four hours after making oral application.

(4) Rule 40E-3.411 and Part II of this chapter shall apply to all construction performed under an emergency permit unless the rules are waived by the executive director or his designee.

Specific Authority 373.044, 373.149, 373.171 F.S.
Law Implemented 373.308, 373.309, 373.313, 373.326, 373.342 F.S.
History–New 1-1-85.

40E-3.461 Inspection.

(1) The Department or the District is authorized to inspect any well or abandoned well, including those wells permitted under section Part II within its jurisdiction as it deems necessary to insure conformity with applicable standards. Such inspection may include but not be limited to geophysical logging, water level measurements, or other methods. Duly authorized representatives of the Department or the District may, upon proper identification and at reasonable times, enter upon and shall be given access to any premises for the purpose of such inspection.

(2) If, upon the basis of such inspection, the District finds the standards of Part II have not been met, the District may give the owner and contractor, if applicable, a written notice stating which rules have been violated and may order that necessary corrective action be taken within a reasonable length of time to be prescribed in such order.

(3) A site inspection may be conducted by an authorized representative of the District or the Department prior to issuing a permit for construction of a public water supply well.

(4) The District 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 representative may be on site to observe the grouting. If the District is properly notified and a representative is not at the site at the appointed time, the grouting may be accomplished in his absence.

(5) If, upon basis of an inspection, the District finds any well is an abandoned well, the well shall be plugged in accordance with Part II.

Specific Authority 373.044, 373.149, 373.171 F.S.
Law Implemented 373.103, 373.308, 373.309, 373.319 F.S.
History–New 1-1-85.

PART II CONSTRUCTION, REPAIR AND ABANDONMENT STANDARDS

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 must comply with these standards regardless of whether a permit is required under Part I.

Specific Authority 373.044, 373.113, 373.171 F.S.
Law Implemented 373.308, 373.309, 373.313 F.S.
History--New 1-1-85.

40E-3.502 Construction Methods.

Wells must be so constructed, cased, grouted, plugged, capped, or sealed as to prevent uncontrolled surface flow, uncontrolled movement of water from one aquifer or zone to another, contamination of groundwater or surface water resources, or other adverse impacts. The following 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 which wells shall be constructed, repaired or abandoned in accordance with Chapter 17-555, Florida Administrative Code.

Specific Authority 373.044, 373.309, 373.171 F.S.
Law Implemented 373.306, 373.308, 373.309, 373.113 F.S.
History--New 1-1-85, Amended 12-18-89.

40E-3.504 Location.

Wells shall be located so as not to pose a threat of contamination to the water resource.

Specific Authority 373.044, 373.309, 373.171 F.S.
Law Implemented 373.306, 373.308, 373.309, 373.113 F.S.
History--New 1-1-85.

40E-3.507 Casing and Liner Pipe Standards.

(1) Well casing and liner pipe shall be new or shall be pipe or casing in like new condition. Such casing or pipe shall not be used unless free of leaks, corrosion, and dents; is straight and true, and is not out of round. Welded or seamless black or galvanized pipe or casing, or stainless steel pipe or casing, or approved types of nonmetallic pipe shall be used for well casing or liner pipe. Well casing installed by driving, shall not have less than the dimensions and weights specified in Table 1 unless otherwise approved by the District and shall conform to the American Society for Testing and Materials (ASTM) A53-77A Type S, Grade A except as noted below.

(2) Black or galvanized steel casing or liner pipe set into place without driving shall not have less than the dimensions and weights specified in Table 2 and shall conform to the American Petroleum Institute (API) Standard 5L, Grade A.

Table 1
MINIMUM DIMENSIONS AND WEIGHTS FOR
BLACK OR GALVANIZED STEEL CASING
OR LINER PIPE INSTALLED BY DRIVING

nominal size (in.)	outside diameter (in.)	wall thickness (in.)	plain end weight (lbs/ft)
3	3.500	0.216	7.58
3.5	4.000	0.226	9.11
4	4.500	0.237	10.79
		or .188	or 8.62
5	5.563	0.258	14.62
6	6.625	0.280	18.97
8	8.625	0.277	24.70
10	10.750	0.307	31.20
12	12.750	0.330	43.77

(3) Black or galvanized steel casing installed by driving with a nominal size between 12 and 30 inches shall have a minimum wall thickness of 0.375 inches and shall be of weights as specified by American National Standards for Wrought Steel and Wrought Iron Pipe ANSI B36.10- 1970, for standard pipe. Pipe larger than 30 inches shall have a minimum wall thickness of 0.500 inches and shall be of weights as specified by American National Standards for Wrought Steel and Wrought Iron Pipe ANSI B36.10-1970, for standard pipe.

Four inch nominal size pipe with a wall thickness of 0.188 shall be certified by the manufacturer to be in accordance with American Petroleum Institute (API) Standard 5L or ASTM A589-73, A120-77, A53-77A, A252-77A Grade 2.

Table 2
MINIMUM DIMENSIONS AND WEIGHTS FOR
BLACK OR GALVANIZED STEEL CASING
OR LINER PIPE SET INTO PLACE
WITHOUT DRIVING

nominal size (in.)	outside diameter (in.)	wall thickness (in.)	plain end weight (lbs/ft)
3	3.500	0.125	4.51
3.5	4.000	0.134	5.53
4	4.500	0.142	6.61
5	5.500	0.154	8.79
5.5	6.000	0.164	10.22
6	6.625	0.185	12.72
8	8.625	0.188	16.90

(4) Black or galvanized steel casing or liner pipe set into place without driving,

with an outside diameter less than 3.500 inches shall have a wall thickness of not less than 0.125 inches. Black or galvanized steel casing or liner pipe with a nominal size between 8 and 16 inches shall have a wall thickness of not less than 0.250 inches. Steel casing or liner pipe with a nominal size of 16 inches or more shall have a wall thickness of not less than 0.375 inches.

(5) Stainless steel pipe used for casing or liner pipe shall be Schedule 10S of the American National Standards Institute (ANSI B 36.19-1976), or stronger classification.

(6) Polyvinyl Chloride (PVC) pipe may be used for well casing or liner pipe. Any PVC pipe used to construct a water well shall have been marked by the manufacturer, under a method specified by the National Sanitation Foundation, Ann Arbor, Michigan, as suitable for use in potable water systems. Any PVC pipe larger than 4.5 inches outside diameter used for well construction or repair shall have a working pressure rating of not less than 200 p.s.i at 73 degrees F or shall be ASA Schedule 40. Other nonmetallic pipe may be approved by the District.

(7) Steel well casing and liner pipe may be joined in a watertight manner by threaded couplings or electrical welding methods. PVC pipe shall be joined by solvent bonded or threaded couplings or other approved method which shall meet the strength requirements of casing as specified in (6) above.

(8) Nonmetallic and stainless steel well casing or liner pipe shall not be installed or seated by driving unless prior approval is obtained from the District.

(a) 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 exempted by the District.

Specific Authority 373.044, 373.309, 373.171 F.S.
Law Implemented 373.306, 373.308, 373.309, 373.113 F.S.
History--New 1-1-85.

40E-3.512 Well Construction Requirements.

(1) In the construction of a well, reasonable caution shall be taken to maintain the premises in sanitary condition and to minimize the entrance of contaminants into the water resource. Water and materials used in construction shall be reasonably free of contamination.

(2) For wells which penetrate multiple aquifers or zones the well shall be completed so as to prevent cross-contamination of different aquifers or zones if significantly different water quality exists between these aquifers or zones and to prevent leakage of water from one aquifer or zone to another aquifer or zone.

(3) For wells finished into unconsolidated aquifers, casing shall extend from above top of grade to the well screen.

(a) The well screen shall be attached to the casing with a watertight seal; or

(b) sealed against the casing with a packer; or

(c) the screen assembly shall overlap the casing by at least ten (10) feet).

(4) For wells finished into consolidated aquifers, a continuous casing shall extend from above top of grade into the top of the aquifer. For artesian wells the casing shall penetrate the entire thickness of the overlying formations above the aquifer or producing zone within the aquifer.

(5) Notwithstanding the provisions of (4) above the District may grant waivers for seating of casing within the confining zone above an artesian aquifer on a case by case basis when, in the opinion of the District, extending casing to the top of the aquifer would present undue hardship, 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 adversely affect the water resources.

(6) In all cases casing shall extend from land surface to a minimum of three (3) feet below land surface.

Specific Authority 373.044, 373.309, 373.171 F.S.
Law Implemented 373.306, 373.308, 373.309, 373.113 F.S.
History--New 1-1-85.

40E-3.517 Grouting and Sealing.

Wells shall be grouted and sealed 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 artesian pressure in artesian aquifers. All wells shall be constructed and sealed using a method which insures that an open or unnaturally permeable annular space does not remain when a well is completed.

(1) The casing shall be centered in the borehole prior to grouting and sealing. 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 and other approved material introduced through the pipe. Grouting or sealing of the annular space shall be completed using the pipe or other approved methods. A tremie pipe, or other approved method, may also be used to complete grouting when the total volume of grout to be emplaced exceeds that which can be safely emplaced in one continuous operation. The minimal set time for grouting of casing before drilling operations may continue, shall be 12 hours.

(2) Wells less than four inches in diameter must have a minimum of a one inch annular space for grouting. Wells equal to or greater than four inches in diameter must have an annular space equal to or greater than two inches for grouting.

(3) Wells constructed in unconsolidated formations by any method which creates an annular space shall be grouted no more than ten (10) feet above the top of the screen to land surface.

(4) The District may grant individual exceptions or, with the concurrence of the Department, may exempt any areas of the District from the requirements of grouting the annular space of that part of the well which penetrates an unconsolidated formation, except that the uppermost three feet of the casing must be grouted to provide protection from contaminated surface water.

(5) All other wells shall be grouted from the bottom of the casing to land surface.

(6) Grouting and sealing of water wells shall be accomplished by the practices and methods recommended by section A1-8.4 of AWWA A100-66, AWWA Standard for Deep Wells, American Water Works Association, Inc., or other methods approved by the District.

(7) Wells constructed by methods which require driven well casing are exempt from Rule 40E-3.517(2) and (3), provided the following conditions are met:

(a) Casing shall be driven from land surface to its final depth in a borehole smaller in diameter than nominal outside diameter of the casing used, or be driven from land surface to its final depth ahead of the drill bit;

(b) A drive shoe as defined in Rule 40E-3.021(7) is used;

(c) No annular space exists after casing is installed;

(d) The uppermost three feet of the casing must be grouted to provide protection from contaminated surface water;

(e) The well is sealed in accordance with Rule 40E-3.517(8) and (9);

(f) All other requirements of this part are met.

(8) Temporary Well Seals.

Whenever there is a temporary interruption in work on the well during construction, repair, or abandonment the well opening shall be sealed with a substantial watertight cover. Except for those areas of the District designated by the District with the concurrence of the Department, any well in which pumping equipment is installed seasonally or periodically shall, whenever pumping equipment is not installed, be capped with a watertight cap or valve. If a temporary well seal is installed, an unobstructed inspection port must be provided for wells six (6) inches or greater in diameter.

(9) Permanent Well Seals.

Wells located on ground subject to flooding shall be properly sealed to prevent the movement of contaminants and surface water into the well. The upper end of the well casing shall include a watertight seal with any vent above the 100-year flood level. Pumping equipment and any necessary pipe or electrical connections shall be so installed as to prevent inadvertent introduction of contaminants into the well. Pumping equipment and any necessary piping or electrical connections installed within the casing shall be installed through a well seal. An unobstructed inspection port equipped with a temporary removable plug shall be provided and accessible at the wellhead for wells six (6) inches or greater in diameter.

Specific Authority 373.044, 373.309, 373.171 F.S.
Law Implemented 373.306, 373.308, 373.309, 373.113 F.S.
History--New 1-1-85.

40E-3.525 Explosives.

The use of explosives in well construction or development is prohibited unless specifically approved pursuant to Chapter 17-532, and section 40E-3.0511, Florida Administrative Code.

Specific Authority 373.044, 373.309, 373.171 F.S.
Law Implemented 373.306, 373.308, 373.309, 373.113 F.S.
History–New 1-1-85, Amended 12-18-89.

40E-3.529 Flowing Wells.

If the well flows at land surface, each well shall be provided with a valve pursuant to section 373.206, F.S.

Specific Authority 373.044, 373.309, 373.171 F.S.
Law Implemented 373.306, 373.308, 373.309, 373.113 F.S.
History–New 1-1-85.

40E-3.531 Abandoned Well Plugging.

(1) Any well which was not constructed in accordance with the standards of Part II and fails to be corrected upon written notice in accordance with Rule 40E-3.461(2) shall be deemed an abandoned well.

(2) Any well which is an abandoned artesian well under Section 373.203(3), Florida Statutes, shall be plugged in accordance with paragraph (3).

(3) All abandoned wells shall be plugged by filling them from bottom to top with neat cement grout within a time specified by the District, unless otherwise provided in writing by the District. The plugging shall be to restore or improve the hydrologic conditions which existed before the well was constructed. The work shall be accomplished by a licensed water well contractor.

(4) Request to abandon a well shall be submitted on the application form provided by the District.

Specific Authority 373.044, 373.309, 373.171 F.S.
Law Implemented 373.306, 373.308, 373.309, 373.113 F.S.
History--New 1-1-85.

PART III DRILLER REGISTRATION STANDARDS

40E-3.700 Scope of Part III.
Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.308, 373.323, 373.326 F.S.
History--New 1-1-85, Repealed 12-18-89.

40E-3.721 Driller Registration.
Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.308, 373.323, 373.326 F.S.
History--New 1-1-85, Repealed 12-18-89.

40E-3.725 Responsibility of Contractor.
Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.308, 373.323, 373.326 F.S.
History--New 1-1-85, Repealed 12-18-89.

40E-3.727 Type of Registration.
Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.308, 373.323, 373.326 F.S.
History--New 1-1-85, Repealed 12-18-89.

40E-3.733 Exemptions.
Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.308, 373.323, 373.326 F.S.
History--New 1-1-85, Repealed 12-18-89.

40E-3.752 Refusal, Suspension, or Revocation of Registration.
Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.308, 373.323, 373.326 F.S.
History--New 1-1-85, Repealed 12-18-89.

40E-3.763 Examinations.
Specific Authority 373.044, 373.113 F.S.

Law Implemented 373.308, 373.323, 373.326 F.S.
History--New 1-1-85, Repealed 12-18-89.

PART IV SPECIFIC GEOGRAPHIC THRESHOLDS

40E-3.800 General Permit for Wells.
Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.309, 373.313, 373.326, 373.342 F.S.
History--New 1-1-85, Transferred to 40E-30.011
1-7-85.

40E-3.810 General Permit for Construction, Repair or Abandonment of Wells.
Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.309, 373.313, 373.326, 373.342 F.S.
History--New 1-1-85 Transferred to 40E-30.042
1-7-85.

40E-3.815 Notice of Intent.
Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.309, 373.313, 373.326, 373.342 F.S.
History--New 1-1-85, Transferred to 40E-30.112
1-7-85.

40E-3.820 Request for Additional Information.
Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.309, 373.313, 373.326, 373.342 F.S.
History--New 1-1-85, Transferred to 40E-30.141
1-7-85.

40E-3.825 Thresholds for South Dade County.
Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.309, 373.313, 373.326, 373.342 F.S.
History--New 1-1-85, Transferred to 40E-30.302
1-7-85.

PART C

WATER MANAGEMENT RULES

CHAPTER 40E-20

GENERAL WATER USE PERMITS

CHAPTER 40E-20
GENERAL WATER USE PERMITS

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Rules of the South Florida Water Management District
GENERAL WATER USE PERMITS
Chapter 40E-20

40E-20.011 Policy and Purpose
40E-20.031 Implementation
40E-20.042 General Permit for Water Use
40E-20.112 Notice of Intent
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40E-20.381 Limiting Conditions

40E-20.011 Policy and Purpose.

The rules in this chapter grant general permits for water use for certain specified uses which have been determined to be reasonable-beneficial, not interfering with existing legal uses and consistent with the public interest. The purpose of this chapter is to set forth the requirements for qualifying for a general water use permit and the conditions under which it may be exercised. Non-exempt uses or withdrawals not qualifying for a general water use permit under this chapter are required to obtain individual permits. The District reserves the right to require an individual permit for any use or withdrawal which does not comply with this chapter, is not a reasonable-beneficial use or which is harmful to the water resources of the District, interferes with a presently existing legal use of water, is inconsistent with the overall objectives of the District, or is otherwise contrary to the public interest.

Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.103(4), 373.219 F.S.
History–New 9-3-81.
Formerly 16K-2.031(4), 16K-2.032(4).

40E-20.031 Implementation.

(1) This rule specifies the effective dates of the water use general permits granted in this chapter.

(2)(a) If the use or withdrawal meets the conditions of Subsection 40E-20.302(2), the effective date is December 12, 1977.

(b) If the use or withdrawal meets the conditions of Subsection 40E-20.302(1)(b)1.a. or 40E-20.302(1)(b)2., or the use or withdrawal was located within Sanibel, Captiva or North Captiva Islands, Lee County, the effective date is January 29, 1979.

(c) If the use or withdrawal meets the conditions of Subsection 40E-20.302(1)(b)1.c., the effective date is September 3, 1981.

(d) If the use or withdrawal meets the conditions of Subsection 40E-20.302(1)(b)1.b., except Sanibel, Captiva or North Captiva Islands, or Subsection 40E-20.302(1)(b)1.d., e., f., g., or h., the effective date is December 1, 1982.

(3) If the use or withdrawal meets the conditions of subsections 40E-20.302(3),

or 40E-20.302(4), the effective date is July 31, 1987.
Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.103(1), 373.216 F.S.
History--New 9-3-81, Amended 12-1-82, 7-31-87.

40E-20.042 General Permit for Water Use.

(1) All persons using or withdrawing water, who are not exempt under Rule 40E-2.051 and who meet the conditions specified in Rule 40E-20.302, are hereby granted a general permit to use and withdraw water subject to the requirements of this chapter.

(2) No use or withdrawal of water shall commence under this general permit until the permittee receives a written authorization to proceed from the District, except for permits issued pursuant to subsection 40E-20.302(4), and except in those instances when short-term dewatering applicants file a Notice of Intent pursuant to subsection 40E-20.112(3) and commence work pursuant to subsection 40E-20.302(4).

(3) The District shall act upon the Notice of Intent within 5 days for permits issued pursuant to subsection 40E-20.302(2), 45 days for permits issued pursuant to 40E-20.302(3), or 60 days for all other general permits from the receipt of a complete Notice of Intent and all requested additional information.
Specific Authority 373.044, 373.113 F.S.
Law Implemented 120.60(2), 373.103(4), 373.219 F.S.
History--New 9-3-81, Amended 7-31-87.
Formerly 16K-2.031(1), 16K-2.032(1)(a).

40E-20.112 Notice of Intent.

Except in those circumstances detailed in subsection (4), prior to commencement of any use or withdrawal of water authorized in this chapter the permittee shall file with the District, a written Notice of Intent to Use Water, form number 0645, Surface Water Management Permit Applications and/or Water Use Permit Applications, or Notice of Intent to Short-Term Dewater, form number 0445, as incorporated by reference in subsection 40E-1.901(1), F.A.C. Authorized uses or withdrawals in existence prior to January 29, 1979 are not required to file a Notice of Intent.

(1) Persons qualifying for a general permit under Subsection 40E-20.302(1) shall file the Notice of Intent at least sixty days prior to using or withdrawing water, and shall include the following information:

(a) the permittee's name and address;
(b) the date on which use or withdrawal commenced or is expected to commence;
(c) the source of the water supply;
(d) the estimated amount of water to be withdrawn;
(e) the use to be made of the water;
(f) a description of land served by the use or withdrawal;
(g) the location of point(s) of withdrawal;
(h) the number and size of wells or other withdrawal facilities; and
(i) a statement that all applicable conditions in Rule 40E-20.381 will be met.

(2) Persons qualifying for a general permit under subsection 40E-20.302(2), shall file Form RC-17, Notice of Intent to Use Water in Conjunction with Oil Well Drilling in Lee, Collier and Hendry Counties, as incorporated by reference in subsection 40E-1.901(1), F.A.C., at least five days prior to using or withdrawing water, and shall include the following information:

(a) the name of the permittee;
(b) the name of the proposed project;
(c) the location of the project;
(d) a brief description of the project;
(e) the name of the water well driller;
(f) a brief statement of facts which show why the proposed use or withdrawal qualifies for a general permit;
(g) a statement that all necessary Federal, State, local and special district authorizations have been received or will be received prior to initiation of drilling or any activity at the site, where required;
(h) the date on which use or withdrawal is expected to commence;
(i) the estimated amount of water to be withdrawn from each well;
(j) the volume and location of surface discharges of salt water, if any;
(k) the environmental impact of the water withdrawal, if any;
(l) the location of any surface water use other than the permittee within 300 feet of the proposed water wells; and
(m) a statement that all applicable conditions in Rule 40E-20.381 will be met.

(3) Persons qualifying for a general permit under subsection 40E-20.302(3), shall file form 0445, Notice of Intent to Short-term Dewater, as incorporated by reference in subsection 40E-1.901(1), F.A.C., at least 45 days prior to using or withdrawing water, and shall include the following information:
(a) the name and address of the permittee;
(b) the name and location of the proposed project, including a site map;
(c) a brief description of the project, including:
1. a detailed statement of why dewatering is necessary;
2. the maximum depth of the excavation, if applicable;
3. the method of proposed excavation;
4. evidence of site ownership, lease, easement or an affidavit of ownership;
5. a recent aerial photo and topographic map of the site;
6. description of all existing and proposed pumps, including pump size, pump ratings and estimated withdrawal in million gallons per day;
7. description of all existing and proposed culverts;
(d) the name and address of the dewatering contractor, if different from permittee;
(e) a statement, if applicable, that the contractor expects to commence dewatering pursuant to subsection 40E-20.302(4) while the Notice of Intent is under review;
(f) the site's surface water management permit number, if any;
(g) the date on which dewatering is expected to commence and be completed;
(h) a statement explaining how possible adverse environmental impacts will be avoided during the dewatering operation;
(i) the proposed discharge location, if any, and;
(j) a statement that all applicable conditions in rule 40E-20.381 will be met.

(4) Persons are not required to file a Notice of Intent to qualify for a short-term dewatering general permit if the conditions of subsection 40E-20.302(4) are satisfied.

Specific Authority 373.044, 373.113, 373.118 F.S.
Law Implemented 373.103(4), 373.118, 373.223, 373.229 F.S.

History--New 9-3-81, Amended 7-31-87, 11-21-89.
Formerly 16K-2.031(3), 16K-2.032(3).

40E-20.141 Request for Additional Information.

(1) If the information provided in the Notice of Intent required by Rule 40E-20.112 is not sufficient to determine whether the use or withdrawal qualifies for a general permit or meets the conditions in Rule 40E-20.381, the District may request the permittee to submit additional information, including any information required in Rule 40E-2.101.

(2) If additional information is required it shall be requested within 30 days of receipt of the Notice of Intent.

Specific Authority 373.044, 373.113 F.S.
Law Implemented 120.60(2), 373.219 F.S.
History--New 9-3-81.

40E-20.302 Conditions for Issuance of Authorization.

(1)(a) The use or withdrawal of water not exceeding the thresholds in paragraph (b) qualify for a general permit.

(b) Thresholds

1. 10,000 gallons average per day or 20,000 gallons maximum per day within the following areas:

a. Stuart Peninsula (see Figure 20-1).

BEGINNING at the Southeasterly end of Roosevelt Bridge (U.S. Highway No. 1 Bridge) over the St. Lucie River in Section 5, Township 38 South, Range 41 East, City of Stuart, Martin County, Florida; thence, Northerly, Easterly, Southeasterly, Southerly and Southwesterly along the Southerly and Southwesterly bank of the St. Lucie River to the Northerly bank of Willoughby Creek; thence, Northwesterly along said Northerly bank to Indian Street; thence, Southwesterly along Indian Street, Indian Avenue and its Westerly prolongation to the East bank of the South Fork of the St. Lucie River; thence, Northerly along said Easterly Bank to the POINT OF BEGINNING.

b. Lee County (see Figure 20-2).

All of Lee County as described in Section 7.36, Florida Statutes.

c. Lighthouse Point Peninsula (see Figure 20-3).

A parcel of land in Section 31, Township 37 South, Range 41 East, Section 1 and 12, Township 38 South, Range 40 East and Sections 5, 6, 7 and 8, Township 38 South, Range 41 East, Martin County, Florida, being specifically described as follows:

BEGINNING at the Southeast corner of said Section 7; thence, Westerly along the South line of said Section 7 to the West line of the East one-quarter of said Section 7; thence, Northerly along said West line to the South line of the North one-quarter of said Section 7; thence, Westerly along said South line and along the South line of the North one-quarter of said Section 12 to the West line of said Section 12; thence, Northerly along the West line of said Section 12 to Bessey Creek; thence, Northeasterly along Bessey Creek to the South Bank of the North Fork of the St. Lucie River; thence, Easterly and Southerly along said South bank and the Westerly bank of the South Fork of the St. Lucie River to the South line of said Section 8; thence, Westerly along the South line of said Section 8 to the Southeast corner of said Section 7 and the POINT OF BEGINNING.

d. Coastal Collier County (see Figure 20-4).

BEGINNING at the Northeast corner of Section 1, Township 47 South, Range 27

East; Thence, Westerly along the Township line between Townships 46 and 47 to the Northwest corner of Section 6, Township 47 South, Range 27 East; Thence, Southerly along the Section lines to the Southwest corner of Section 6, Township 47 South, Range 27 East; Thence, Westerly along the Section lines to the Southeast corner of Section 5, Township 48 South, Range 25 East; Thence, Northerly along the Section line to the Northeast corner of said Section 5; Thence, Westerly along the Township line between Townships 47 and 48 to the Gulf of Mexico; Thence, Southerly along said Gulf, including all islands and the waters of said Gulf within the jurisdiction of the State of Florida, to the intersection thereof with the North boundary line of the Everglades National Park; Thence, along said North boundary line to the Southeast corner of Section 12, Township 53 South, Range 30 East; Thence, Northerly along the Section lines to the Northeast corner of Section 13, Township 52 South, Range 30 East; Thence, Westerly along the Section lines to the Southwest corner of Section 7, Township 52 South, Range 30 East; Thence, Northerly along the Section lines to the Northeast corner of Section 1, Township 52 South, Range 29 East; Thence, Westerly along the Section lines to the Northwest corner of Section 6, Township 52 South, Range 29 East; Thence, Northerly along the Section lines to the Northeast corner of Section 25, Township 51 South, Range 28 East; Thence, Westerly along the Section lines to the Northeast corner of Section 25, Township 51 South, Range 27 East; Thence, Northerly along the Section lines to the Northeast corner of Section 25, Township 50 South, Range 27 East; Thence, Westerly along the Section lines to the Northeast corner of Section 27, Township 50 South, Range 26 East; Thence, Northerly along the Section lines to the Southeast corner of Section 34, Township 48 South, Range 26 East; Thence, Easterly along the Section lines to the Southeast corner of Section 36, Township 48 South, Range 27 East; Thence, Northerly along the Section lines to the POINT OF BEGINNING.

e. Southwestern Glades County (see Figure 20-5).

BEGINNING at the Southwest corner of Section 31, Township 42 South, Range 28 East; Thence, Northerly along the Section lines to the Northwest corner of Section 6, Township 42 South, Range 28 East; Thence, Easterly along the Section lines to the Northeast corner of Section 1, Township 42 South, Range 29 East; Thence, Southerly along the Section lines to the Southeast corner of Section 36, Township 42 South, Range 29 East; Thence Westerly along the Section lines to the Southwest corner of Section 33, Township 42 South, Range 29 East; Thence, Northerly along the Section lines to the Northwest corner of said Section 33; Thence, Westerly along the Section lines to the Northeast corner of the West one-half of Section 31, Township 42 South, Range 29 East; Thence Southerly along the North/South quarter line to the intersection thereof with the South line of said Section 31; Thence, Westerly along the Section lines to the POINT OF BEGINNING.

f. Northwestern Hendry County (see Figure 20-6).

BEGINNING at the Northwest corner of Section 6, Township 43 South, Range 28 East; Thence, Southerly along the Section lines to the Southwest corner of Section 31, Township 43 South, Range 28 East; Thence, Easterly along the Section lines to the Southeast corner of Section 36, Township 43 South, Range 29 East; Thence, Northerly along the Section lines to the Northeast corner of Section 1, Township 42 South, Range 29 East; Thence, Westerly along the Section lines to the Southwest corner of Section 33, Township 42 South, Range 29 East; Thence, Northerly along the Section line to the Northwest corner of said Section 33; Thence, Westerly along the Section lines to the Northwest corner of the East one-half of Section 32, Township 42 South, Range 29 East; Thence, Southerly along

the North/South quarter line to the intersection thereof with the South line of said Section 32; Thence, Westerly along the Section lines to the POINT OF BEGINNING.

g. The Savannas and Jensen Beach Peninsula (see Figure 20-7).

Begin at the intersection of the South line of Section 22, Township 35 South, Range 40 East and the center line of U. S. Highway 1; Thence, Northerly along said center line to the North line of the South one-half (S½) of said Section 22; Thence, Easterly along said North line and the North line of the South one-half (S½) of Section 23, Township 35 South, Range 40 East to the Westerly bank of the Indian River; Thence, Southeasterly along said bank to the Northerly bank of the St. Lucie River; Thence, Northwesterly and Northerly along the North bank of the St. Lucie River and the East bank of the North Fork of the St. Lucie River to the North line of the South one-half (S½) of Section 4, Township 36 South, Range 40 East; Thence, Easterly along said North line and the North line of the South one-half (S½) of Section 3, Township 36 South, Range 40 East to the intersection thereof with the center line of U. S. Highway 1; Thence, Northerly along said center line to the POINT OF BEGINNING.

h. Coastal Juno Beach (see Figure 20-8)

BEGINNING at the intersection of the centerline of Old Dixie Highway (Alternate A1A) with the centerline of PGA Boulevard in Section 6, Township 42 South, Range 43 East; Thence, Northerly, along said centerline of Old Dixie Highway, to the intersection thereof with the centerline of the Loxahatchee River; Thence, Easterly, along said centerline and the centerline of the Jupiter Inlet, to the Westerly shoreline of the Atlantic Ocean; Thence Southerly, along said shoreline, to the intersection thereof with the South line of Section 3, Township 42 South, Range 43 East; Thence, Westerly, along said Section line and along the South line of Section 4, Township 42 South, Range 43 East, to the intersection thereof with the centerline of U. S. Highway 1 (State Road 5); Thence, Northerly, along said centerline, to the intersection thereof with the centerline of PGA Boulevard; Thence, Westerly, along said centerline, to the POINT OF BEGINNING.

2. 100,000 gallons per day within the remainder of the District.

(2) Persons using or withdrawing water in conjunction with oil well drilling within Lee, Collier and Hendry Counties qualify for a general permit under the following conditions:

(a) the maximum daily groundwater pumpage does not exceed 0.7 million gallons for any one oil drilling site;

(b) the maximum total installed capacity does not exceed 1,000 gallons per minute for any one oil drilling site; and

(c) the person has received a Department of Natural Resources permit, a Department of Environmental Regulation water quality certificate or waiver, if required, and the approval of the Big Cypress Advisory Committee, if required, for the proposed site.

(3) Persons using or withdrawing water in conjunction with short-term construction dewatering such as; well pointing, utility construction, lake construction, exploratory testing, and other minor uses; qualify for a general permit, not to exceed the thresholds described in subparagraph (3)(b)1., below, by satisfying the following conditions and providing the following reasonable assurances:

(a) If the dewatering operation is associated with a surface water management system, the applicant must have:

1. submitted a surface water management permit application which is deemed

complete, pursuant to Rule 40E-1.603, and

2. received a preliminary staff recommendation of approval of such application.

(b) The proposed dewatering operation:

1. will not exceed a maximum of ten million gallons per day, with a maximum of nine hundred (900) million gallons total pumpage;

2. will retain all dewatering discharge on either the permittee's land or on adjacent lands or on other existing drainage or runoff facilities which are at all times capable of legally handling the additional dewatering discharge and in which a right to discharge exists, provided discharge to tidal waters is restricted; unless specific authority is granted by the District for conditional discharge to tidewater; except saline water, as defined in the document incorporated in Rule 40E-2.091, may be discharged to tidewater;

3. will not dewater to a depth below 0.0 NGVD within 1000 feet of saline water, except in the case of saline water discharge, as defined in the document incorporated in Rule 40E-2.091;

4. will not adversely impact any water well for either an exempt or permitted use;

5. will not occur within 100 feet of a waste water treatment plant percolation pond;

6. will not occur within one mile of a known landfill;

7 will not cause an exchange of saline and fresh water or movement of a plume of contaminated groundwater;

8. will not adversely impact off-site land uses existing at the time of application;

9. will not cause adverse environmental impacts;

10. will not cause violation of state water quality standards for either surface or ground water;

11. will meet the applicable general and specific criteria in the documents described in paragraph 40E-2.091(1)(a);

12. will satisfy any applicable District criteria for above ground impoundments;

13. is otherwise not inconsistent with reasonable-beneficial use as defined in subsection 373.019(4), Florida Statutes, and rule 17-40.04; and

14. will not interfere with presently existing legal uses.

(4) Persons who use or withdraw water in conjunction with short-term dewatering operations are authorized to do so provided the permittee reasonably assures that the applicable conditions of subparagraph 40E-20.381 will be satisfied and provided the permittee satisfies all the conditions below.

(a) The proposed dewatering operation:

1. may not exceed a maximum of ten (10) million gallons per day, with a maximum of two hundred (200) million gallons total pumpage;

2. may not discharge off-site, except to either the permittee's land or adjacent lands or on other existing drainage or runoff facilities which are at all times capable of legally handling the additional dewatering discharge and to which a right to discharge exists, provided discharge to tidal waters is restricted; saline water, as defined in the document incorporated in Rule 40E-2.091, may be discharged to tidewater;

3. may not dewater to a depth below 0.0 NGVD within 1000 feet of saline water except in the case of saline water discharge, as defined in the document incorporated in Rule 40E-2.091;

4. may not adversely impact existing off-site land uses;

5. may not cause an exchange of saline and fresh water or movement of a plume of contaminated groundwater;

6. may not adversely impact any water well for either an exempt or permitted use;

7. may not cause a violation of state water quality standards for either surface or groundwater;

8. may not occur within 100 feet of a waste water treatment plant percolation pond;

9. may not occur within one mile of a known landfill;

10. may not cause adverse environmental impacts; or

11. is not inconsistent with reasonable beneficial use as defined in subsection 373.019(4), Florida Statutes, and rule 17-40.04.

Specific Authority 373.044, 373.113, 373.118, F.S.
Law Implemented 373.103(4), 373.118, 373.219, 373.223, F.S.
History–New 9-3-81, Amended 12-1-82, 2-24-85, 3-29-87, 7-31-87.
Formerly 16K-2.031(1), 16K-2.032(1)(b).

40E-20.321 Duration of Permit.

(1) The duration of the general permit authorized in Subsection 40E-20.302(1) shall be 20 years, determined as follows:

(a) for uses in existence on January 29, 1979, the 20 year period begins on that date,

(b) for uses not in existence on January 29, 1979, the 20 year period begins with the date of filing of the Notice of Intent required in Paragraph 40E-20.112(1)(a)

(2) The duration of the general permit authorized in Subsection 40E-20.302(2) shall be from the date of first withdrawal until completion of the oil well drilling activities at the site or the expiration of the Department of Natural Resources permit for that site, which ever occurs last.

(3) The duration of the general permit authorized in subsection 40E-20.302(3) shall not exceed six (6) months from the date of notice of authorization.

(4) The duration of the general permit authorized in subsection 40E-20.302(4), shall not exceed ninety (90) days after commencing dewatering.

(5) Extension of time shall be granted by the District for good cause shown.

Specific Authority 373.044, 373.113, 373.118, F.S.
Law Implemented 373.118, 373.236 F.S.
History–New 9-3-81, Amended 7-31-87.
Formerly 16K-2.031(2)(j), 16K-2.032(2)(d).

40E-20.341 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 Section 373.243 and Chapter 120, Florida Statutes, and Rule 40E-1.609.

Specific Authority 373.044, 373.113 F.S.
Law Implemented 120.60(6), 373.103(4),373.219, 373.229 F.S.
History–New 9-3-81.
Formerly 16K-2.031(5), 16K-2.032(5).

40E-20.351 Transfer of Permits.

Transfer of permits shall be made in accordance with Rule 40E-2.351.

Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.223, 373.229, 373.239 F.S.
History--New 12-1-82.

40E-20.381 Limiting Conditions.

(1) All general permits authorized in this chapter shall be subject to the limiting conditions of rule 40E-2.381.

(2) In addition to the limiting conditions specified in subsection (1), the following limiting conditions shall apply to general permits issued pursuant to subsections 40E-20.302(1) and (2):

(a) A drillers log shall be furnished to the District within 30 days of completion of each new well. The log shall show total depth and casing depth.

(b) A specific capacity test shall be performed on one water well and the data provided to the District within six months of well completion.

(c) If the permitted use is located within one mile of a brackish or salt water body of water then within 15 days after each well has been placed in service, a sample of water shall be taken and submitted to an independent laboratory for chemical analysis for chloride ion concentration. The results of the analysis shall be provided to the District within six months of well completion.

(3) In addition to the limiting conditions specified in subsection (1), the following limiting conditions shall apply to general permits issued pursuant to subsections 40E-20.302(3) and (4):

(a) The permittee shall comply with turbidity and general water quality standards for discharge into receiving water bodies as detailed in Chapter 17-3, Florida Administrative Code.

(b) If the permittee's dewatering operation creates shoaling in adjacent water bodies, the permittee shall be responsible for clearing such shoaling.

(c) If, in the opinion of District staff, the dewatering operation is the cause of adverse water resource impacts, then District staff will so notify the permittee; any further damages resulting from continued operation will be considered in potential subsequent assessment of civil penalties.

(d) The special conditions of this permit do not supplant the requirements of other agencies with pertinent jurisdiction but are in addition to them.

(e) If any condition of the permit is violated, the permit shall be subject to review and possible modification, enforcement action, or revocation.

(f) The excavation shall be constructed using good construction practice. In the event the excavation, through erosion, side wall collapse, etc., endangers the properties of adjacent owners, in the opinion of District staff, then District staff will so notify the permittee; any further damages resulting from continued operation, before a method to stop such occurrences is found and instituted, will be considered in potential subsequent assessment of civil penalties.

(g) Permittee shall immediately notify the District if any water related problems develop.

(4) The general water use permit shall be subject to other reasonable conditions as are necessary to assure that the permitted uses are reasonable-beneficial uses, do not interfere with presently existing legal uses of water and are consistent with the public

interest.

Specific Authority 373.044, 373.113, 373.118 F.S.
Law Implemented 373.118, 373.219, 373.223 F.S.
History--New 9-3-81, Amended 2-24-85, 7-31-87.
Formerly 16K-2.031(2), 16K-2.032(2).

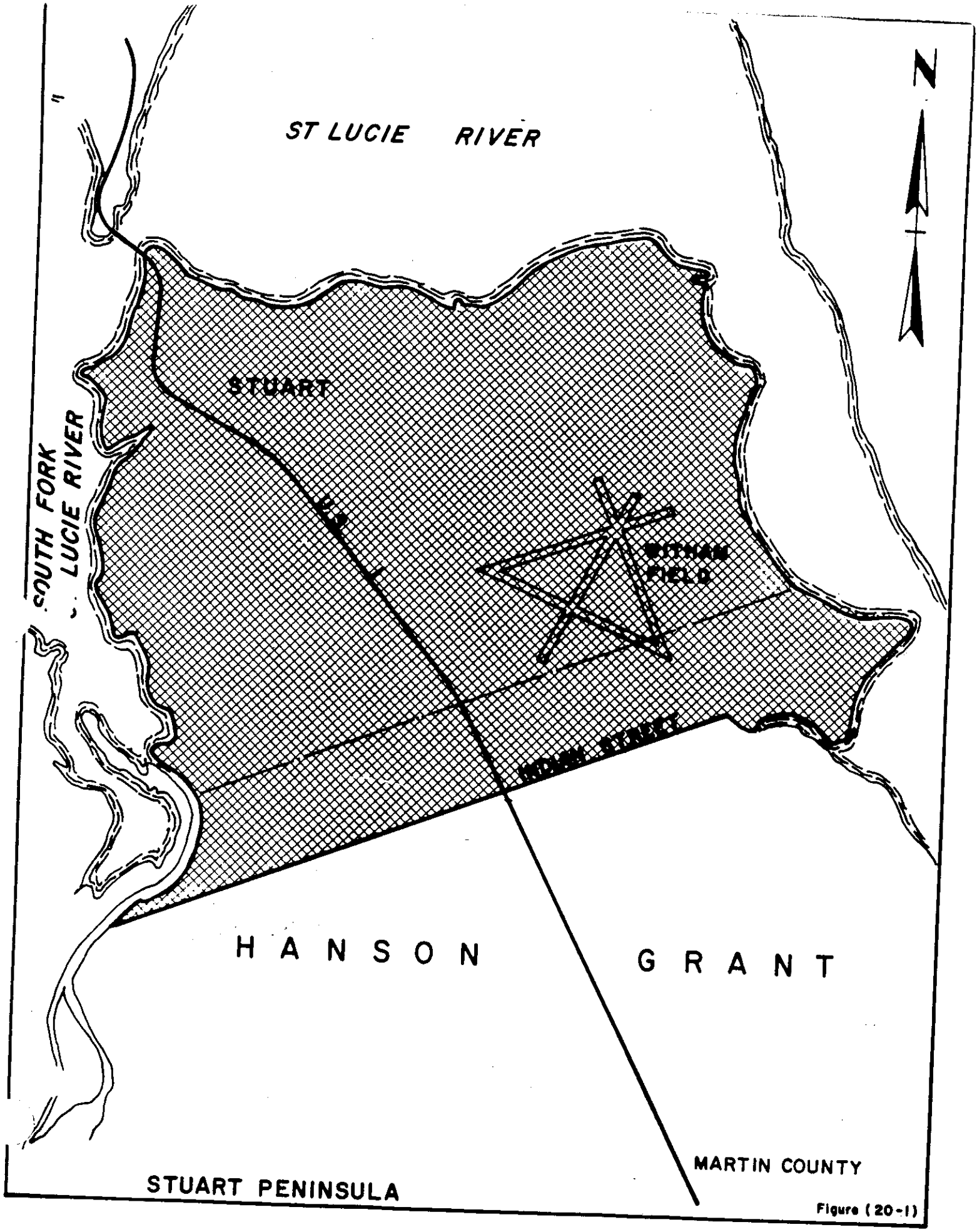

ST LUCIE RIVER
N
STUART
SOUTH FORK
LUCIE RIVER
WITHAM
FIELD
INDIAN STREET
HANSON
GRANT
MARTIN COUNTY
STUART PENINSULA

Figure (20-1)

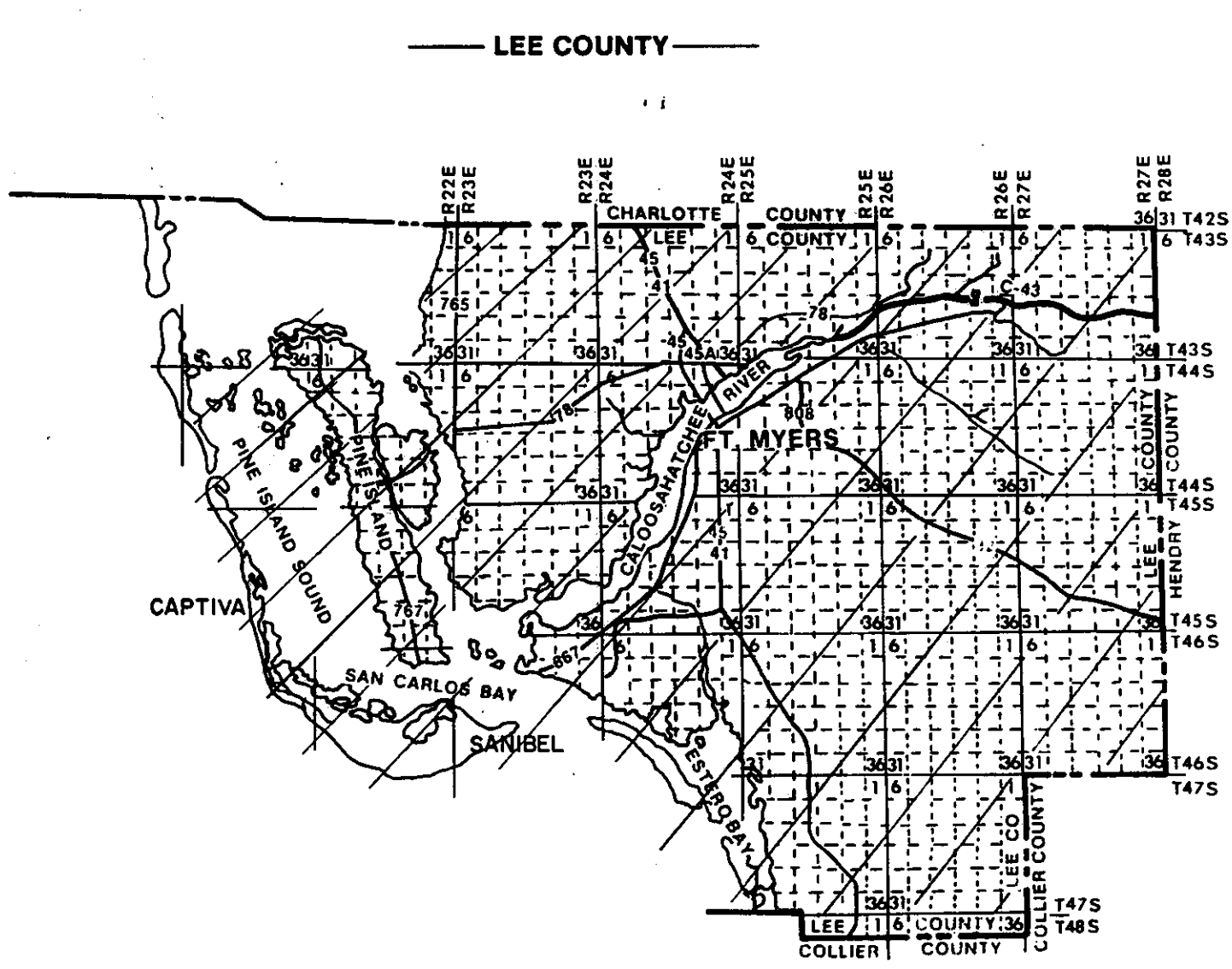
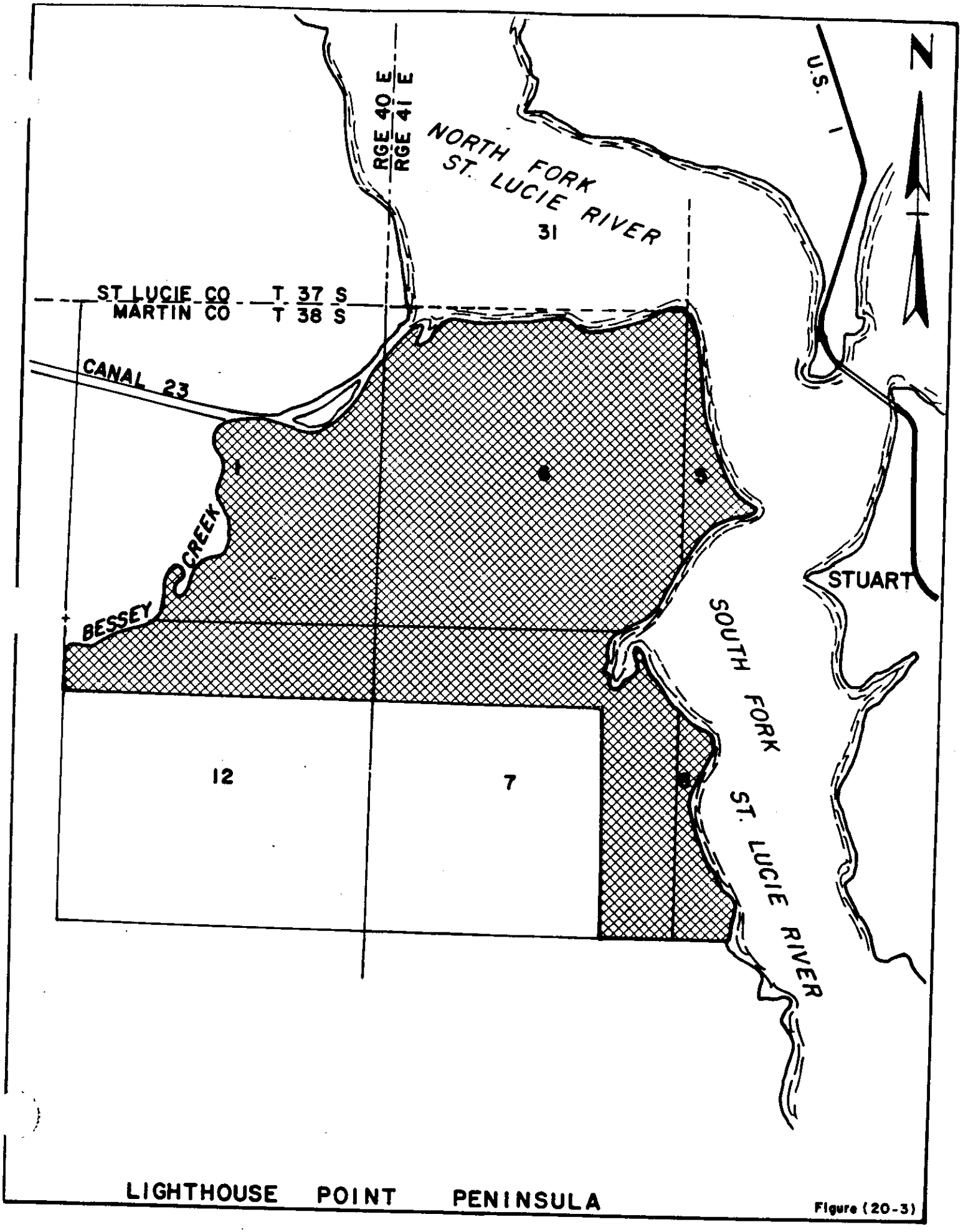
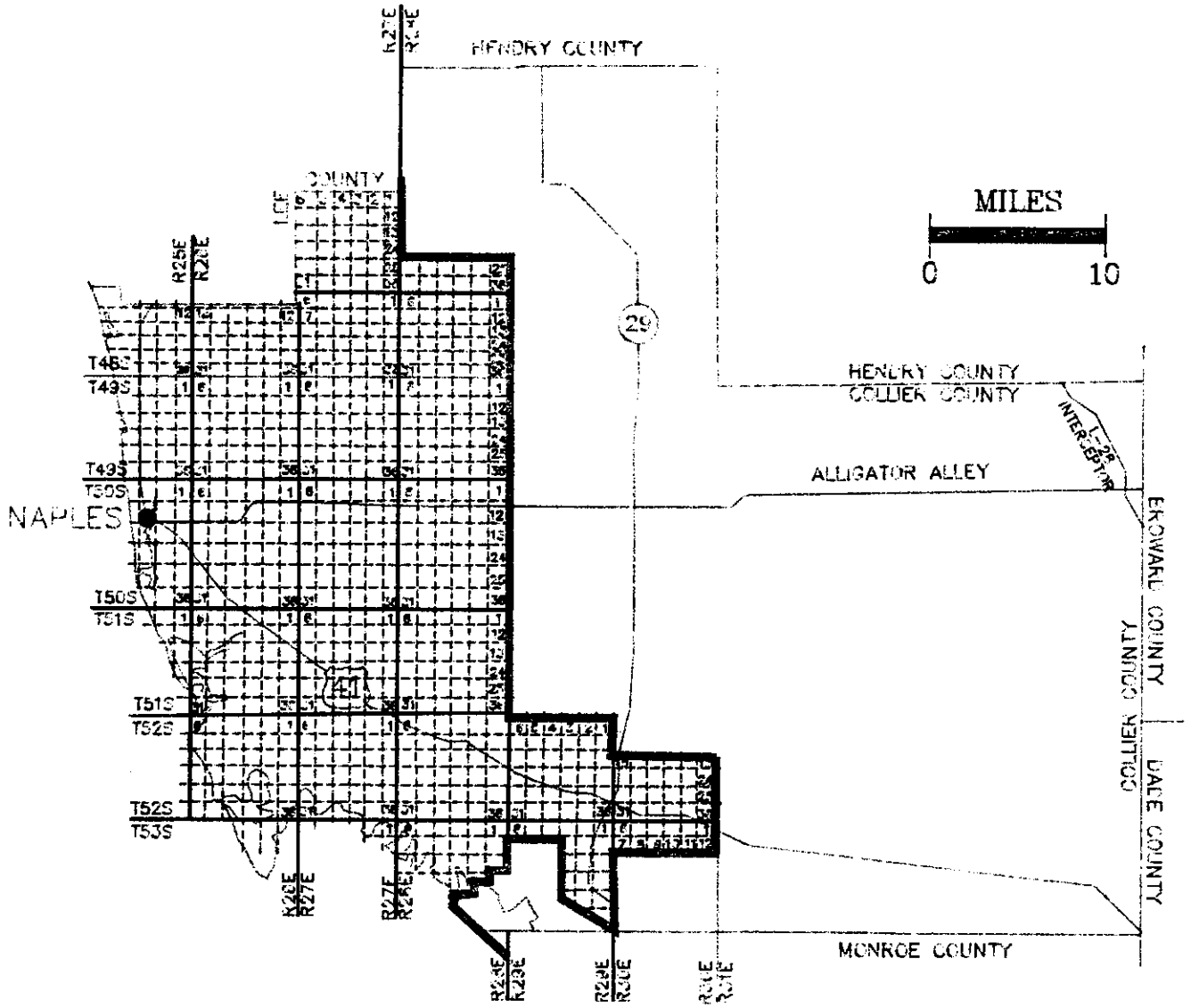

LEE COUNTY
N
R22E
R23E
R24E
R25E
R26E
R27E
R28E
CHARLOTTE COUNTY
LEE COUNTY
T42S
T43S
T44S
T45S
T46S
T47S
T48S
FT. MYERS
CALOOSAHATCHEE RIVER
PINE ISLAND SOUND
PINE ISLAND
CAPTIVA
SAN CARLOS BAY
SANIBEL
ESTERO BAY
LEE COUNTY
HENDRY COUNTY
LEE CO
COLLIER COUNTY
COLLIER COUNTY
765
767
867
808
C-43
45
41
78

FIGURE 20-2



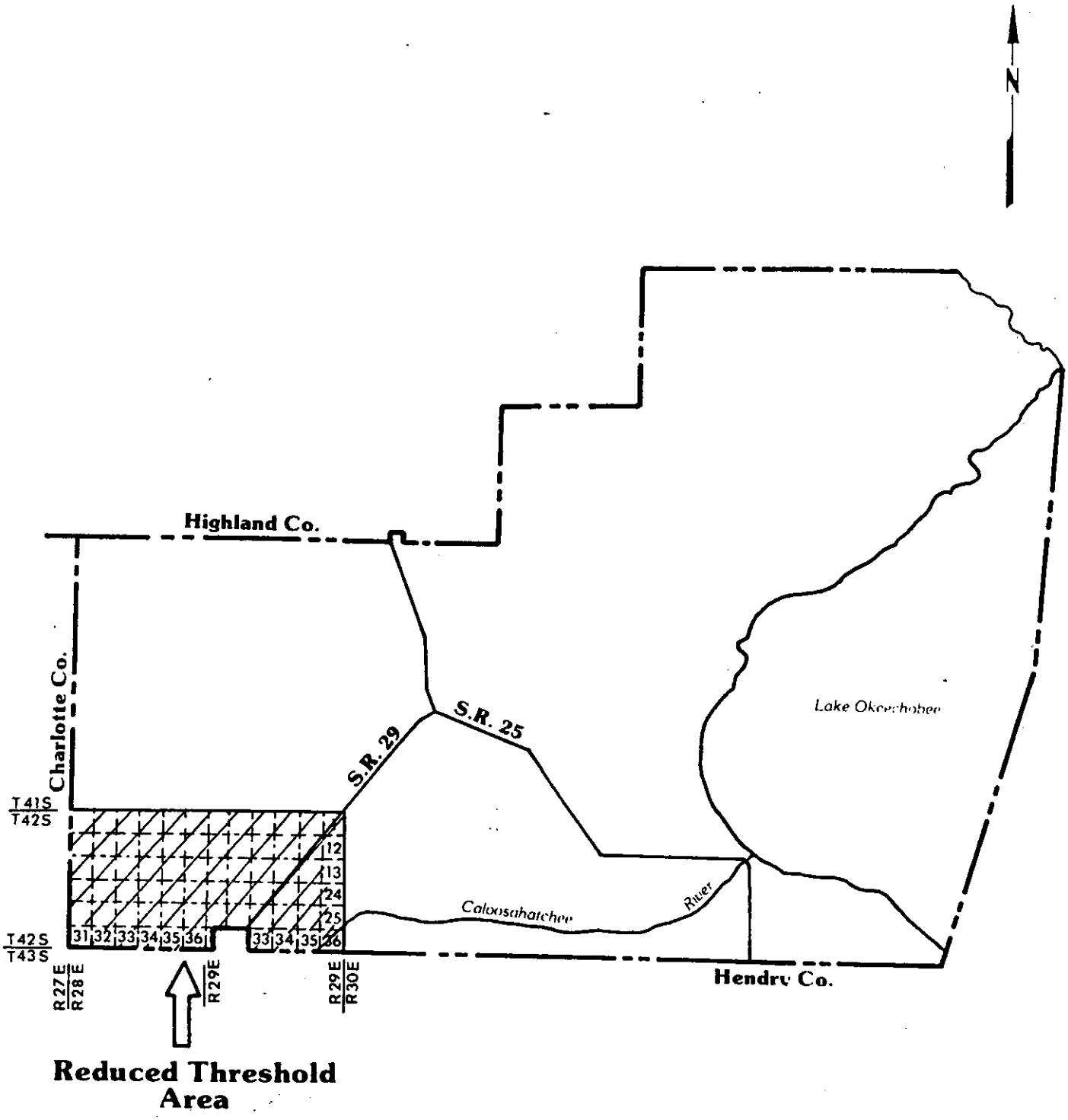
LIGHTHOUSE POINT PENINSULA

Figure (20-3)



REDUCED THRESHOLD AREA COLLIER COUNTY

Figure 2?-4



Glades County

Figure 20-5

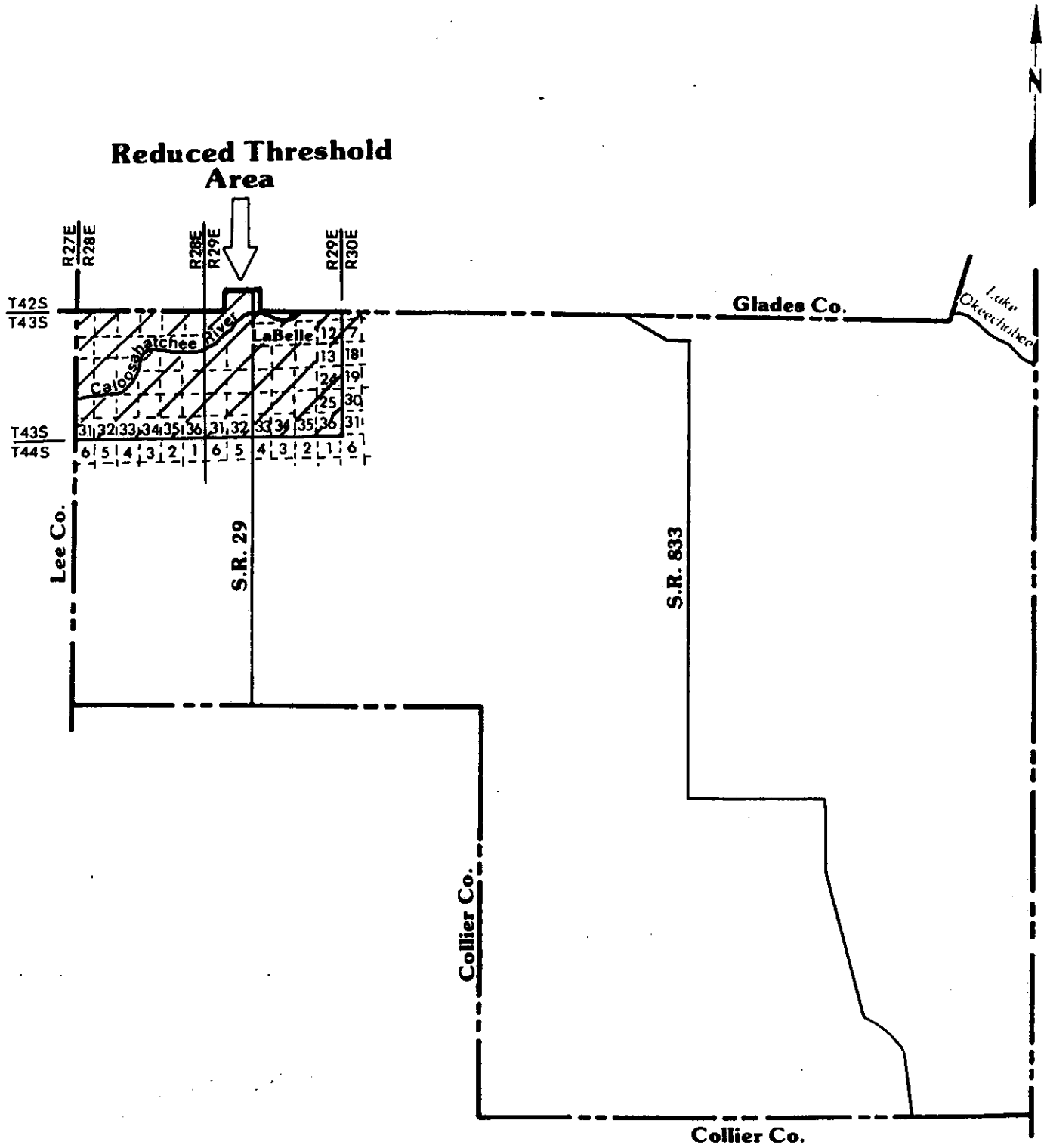
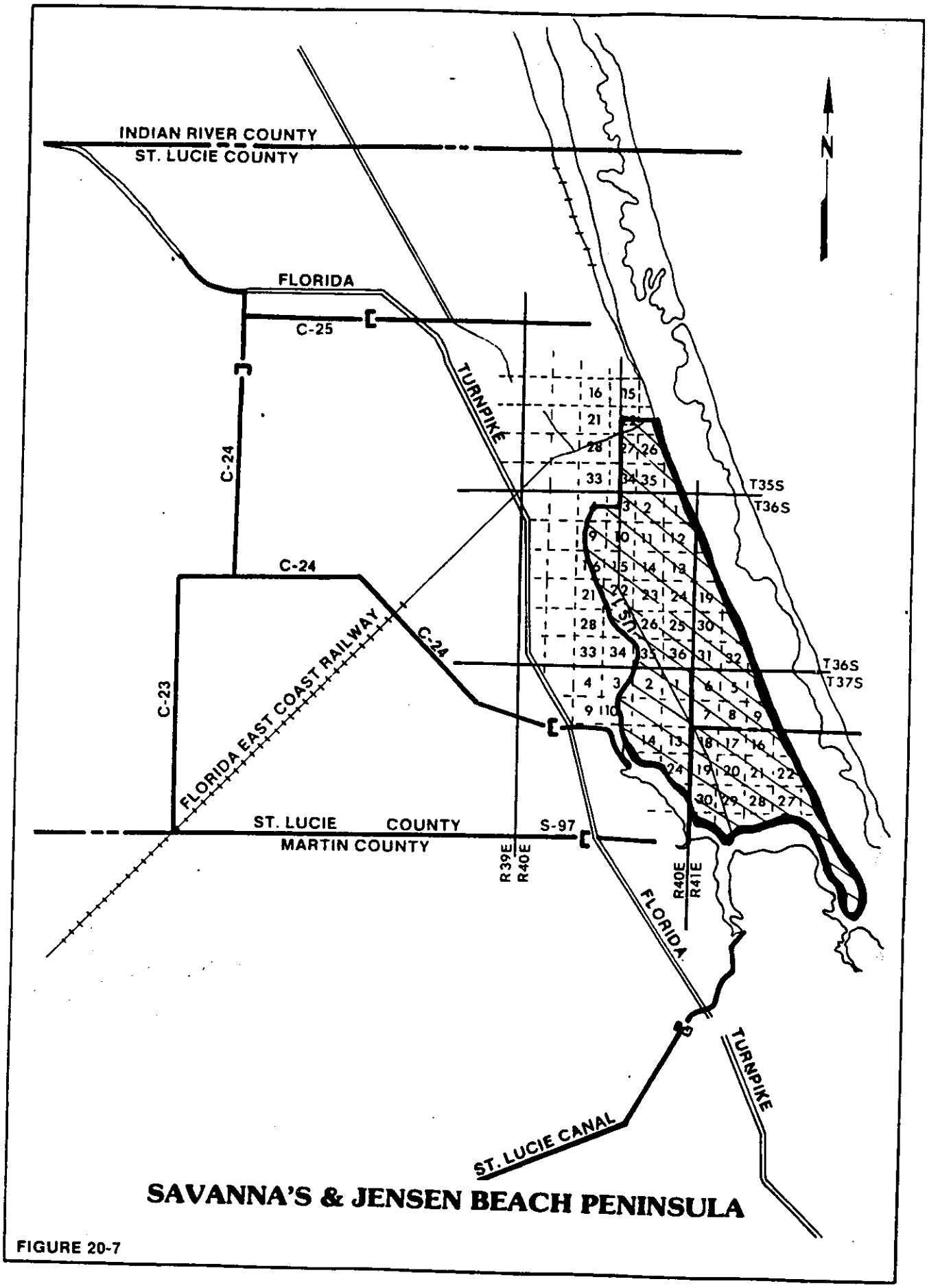

Reduced Threshold Area
N
R27E
R28E
R28E
R29E
R29E
R30E
T42S
T43S
T43S
T44S
Caloosahatchee River
LaBelle
Glades Co.
Lake Okeechobee
Lee Co.
S.R. 29
S.R. 833
Collier Co.
Collier Co.
HENDRY COUNTY

Figure 20-6



SAVANNA'S & JENSEN BEACH PENINSULA

FIGURE 20-7

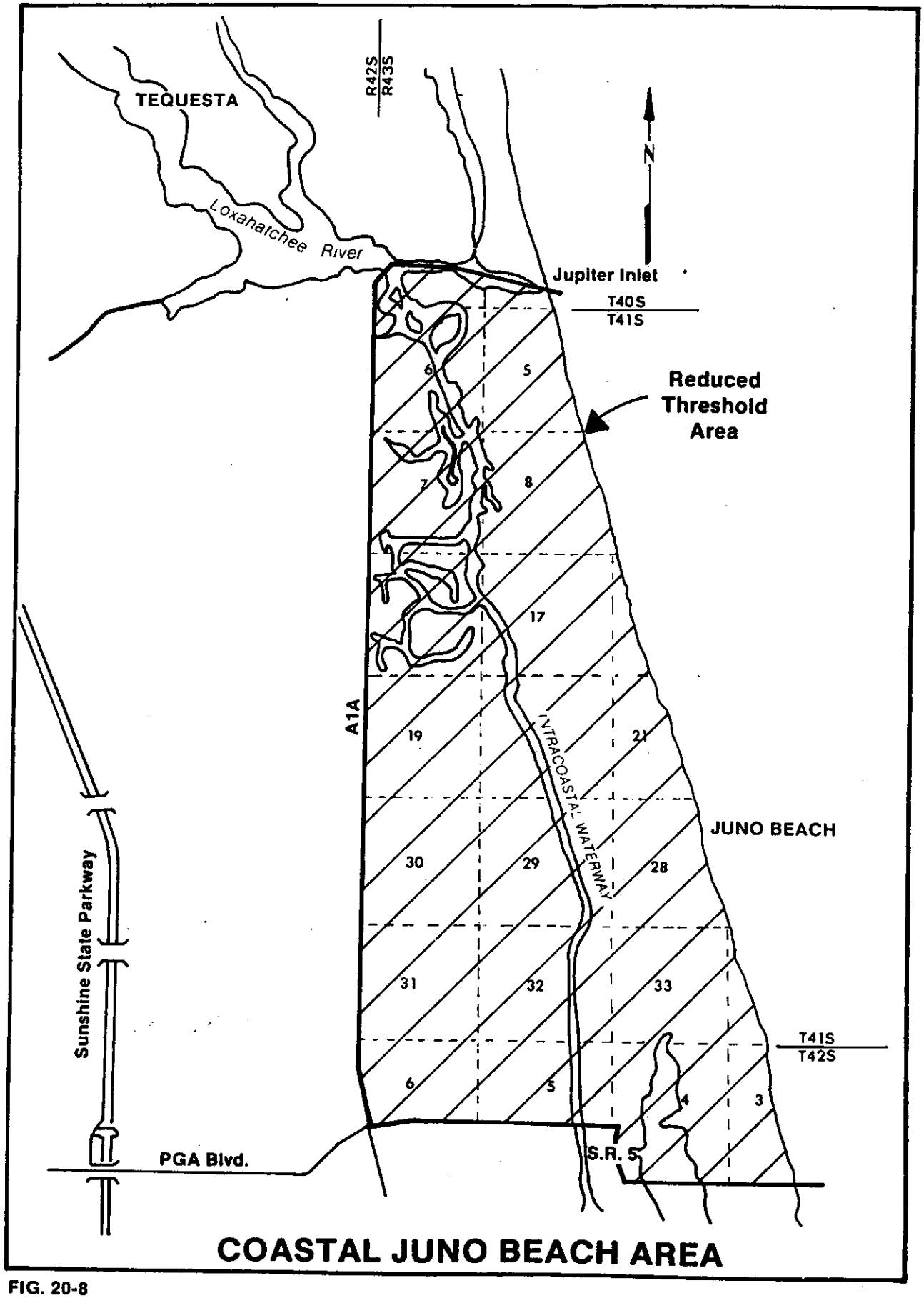

TEQUESTA
R42S
R43S
N
Loxahatchee River
Jupiter Inlet
T40S
T41S
Reduced
Threshold
Area
A1A
INTRACOASTAL WATERWAY
JUNO BEACH
Sunshine State Parkway
PGA Blvd.
S.R. 5
T41S
T42S
COASTAL JUNO BEACH AREA

FIG. 20-8

PART C

WATER MANAGEMENT RULES

CHAPTER 40E-21

WATER SHORTAGE PLAN

CHAPTER 40E-21
WATER SHORTAGE PLAN

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Rules of the South Florida Water Management District
WATER SHORTAGE PLAN
Chapter 40E-21

PART I GENERAL

40E-21.011 Policy and Purpose
40E-21.031 Elements of the Plan
40E-21.051 Definitions
40E-21.132 Water Use Restrictions

PART II DECLARING AND IMPLEMENTING A WATER SHORTAGE

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PART III EMERGENCY PROVISIONS

40E-21.331 Declaring a Water Shortage Emergency
40E-21.371 Water Use Restrictions in a Water Shortage Emergency
40E-21.391 Implementing a Water Shortage Emergency Declaration

PART IV MONITORING AND ENFORCEMENT

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PART VI THE CLASSIFICATION SYSTEM

40E-21.611 Classification System
40E-21.631 Source Classes
40E-21.651 Use Classes
40E-21.671 Method of Withdrawal Classes

PART I GENERAL

40E-21.011 Policy and Purpose.

(1) The rules in this chapter comprise the District's water shortage plan required under subsection 373.246(1), Florida Statutes. 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. 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, or from a private well for domestic or individual home use.

Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.175, 373.246 F.S.
History--New 5-31-82.

40E-21.031 Elements of the Plan.

The water shortage plan consists of the following elements:

(1) **Part I. General** - Part I provides the general goals and objectives of the District in developing and adopting the water shortage plan. The various elements of the plan are described, and definitions for key terms used in the plan are provided.

(2) **Part II. Declaring and Implementing a Water Shortage** - Part II describes the procedures the District will utilize in declaring a water shortage. Provisions are made for comparing estimated present and anticipated water supplies with estimated present and anticipated user needs. The impact on the water resource if demands are met from available supplies is also evaluated. In addition, a method for expressing the severity of a water shortage in terms of four water shortage phases is provided. General user restrictions are established. Finally, procedures for implementing the water shortage declaration are provided.

(3) **Part III. Emergency Provisions** - Normally, the provisions of Part II will be sufficient to protect users within use classes during times of water shortage. At times, however, due to the peculiar circumstances which apply to each individual user, the class restrictions imposed in Part II may be inadequate to sufficiently protect individual users.

In those situations, the Executive Director with the concurrence of the Board may declare a water shortage emergency and impose restrictions on individual users. Part III establishes the procedures for declaring and implementing a water shortage emergency. In addition, provisions are made for establishing water use restrictions, including implementation of the restrictions described in parts II and V.

(4) **Part IV. Monitoring and Enforcement** - This part describes how the District, in conjunction with local law enforcement officials, will enforce the provisions of a declared water shortage or water shortage emergency. The District's enforcement jurisdiction is described and enforcement procedures are generally outlined. Penalties for violations of the water shortage plan and any order issued pursuant to it are provided. In addition, the District's policy of seeking the cooperation and assistance of local government officials and of assisting such officials in the enforcement of the water shortage plan is generally described. The District's overall program of monitoring surface and ground waters, climatic conditions and water demand during a shortage is generally described. In addition a monitoring program is established to determine the impact of a water shortage on the water resources of the District and the effectiveness of a declaration of water shortage or water shortage emergency.

(5) **Part V. Specific Restrictions** - Part V establishes specific water use restrictions for each water shortage phase and water use class. These restrictions are in addition to the general restrictions authorized in parts II and III. Water users may refer to this part for specific information concerning the restrictions which apply to them during any phase of a water shortage.

(6) **Part VI. The Classification System** - Part VI classifies each user according to the source of water supply, method of withdrawal and type of water use. The classification system is utilized in conjunction with Parts II, III and V to determine the water use restrictions with which the users of a particular source must comply. This part is published separately as an appendix.

Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.175, 373.246 F.S.
History--New 5-31-82.

40E-21.051 Definitions.

When used in this chapter:

(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 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, 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.

(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.

(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.

(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).

(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).

(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, Florida Statutes, 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.

Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.175, 373.246 F.S.
History--New 5-31-82, Amended 1-26-86, 2-14-91.

40E-21.132 Water Use Restrictions.

(1) The Water Shortage Plan in this section establishes the water use restrictions to be followed when the Board declares a water shortage within the Lake Istokpoga-Indian Prairie area. The restrictions are intended to insure that established minimum flows and levels within the area maintained and that the water resources within the area do not suffer serious harm.

(2) If the Board declares a water shortage pursuant to rule 40E-21.231 or the Executive Director with the advice and concurrence of the Board declares a water shortage emergency pursuant to rule 40E-21.331 within the Lake Istokpoga-Indian Prairie Area, then uses from the affected sourced classes, shall be restricted pursuant to rule 40E-21.271 or rule 40E-21.371 respectively.

Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.119, 373.175, 373.246 F.S.
History–New 9-3-81, Amended 7-4-82.
Formerly 16K-30.09.

PART II DECLARING AND IMPLEMENTING A WATER SHORTAGE

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.

(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 resource 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.

Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.175, 373.246 F.S.
History–New 5-31-82, Amended 1-26-86.

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, 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.

Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.175, 373.246 F.S.
History--New 5-31-82, Amended 1-26-86.

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		Code	% Reduction in Overall Demand
I.	Moderate W/S	Yellow	less than 15%
II.	Severe W/S	Orange	less than 30%
III.	Extreme W/S	Red	less than 45%
IV.	Critical W/S	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), 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.

Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.175, 373.246 F.S.
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 maintain minimum flows and minimum levels,

(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.

Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.175, 373.246 F.S.

History–New 5-31-82, Amended 1-26-86

40E-21.275 Variances.

(1) All users requesting relief from the provisions of this 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, unless waived or modified by the Board:

(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 restricitons 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 40E-21, Part V, 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), 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 section 40E-1.571(2).

(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.

Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.175, 373.246 F.S.
History--New 5-31-82, Amended 1-26-86, 2-14-91.

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 recision 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.

Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.119, 373.175, 373.246 F.S.
History--New 5-31-82, Amended 1-26-86.

PART III EMERGENCY PROVISIONS

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.

(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),
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),
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 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.

(7) Water shortage emergencies declared under this section 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.

Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.119, 373.175, 373.246 F.S.
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).

Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.119, 373.175, 373.246 F.S.
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).

(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 addition 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).

Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.119, 373.175, 373.246 F.S.
History--New 5-31-82.

PART IV MONITORING AND ENFORCEMENT

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.

Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.026, 373.103, 373.175, 373.246 F.S.
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, Florida Statutes, or chapter 40E.

(3) Enforcement action may be initiated by the Executive Director or his designee pursuant to section 373.603, Florida Statutes, 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, Florida Statutes, 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, Florida Statutes, and rule 40E-1.611, 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 facia 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.

Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.119, 373.175, 373.246, 373.603, 373.609 F.S.
History–New 5-31-82.

PART V SPECIFIC RESTRICTIONS

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.

(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.

Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.175, 373.246 F.S.

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.

(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.

(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 paragraph (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 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.

Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.175, 373.246 F.S.
History–New 5-31-82, Amended 1-26-86, 2-14-91.

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

1. Water used for diversion and impoundment into non-District facilities shall be voluntarily reduced.

(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.

(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 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 paragraph (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 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.

Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.175, 373.246 F.S.
History--New 5-31-82, Amended 1-26-86, 2-14-91.

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

1. 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

1. Water used for diversion and impoundment into non-District facilities shall be voluntarily reduced.

(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. Withdrawals by each user from each source class in each month shall be limited to an amount that represents each user's share of the total allocation for agricultural irrigation made by the District from that source for that month and in that basin. The District's allocation for agricultural irrigation will be determined based on its evaluation of the supply capabilities of the source class, the supply capabilities of other source classes available in the area, the needs of agriculture and all other users in the area and the District's overall management strategy for handling the uncertainties of future climatological events. The share of the total agricultural irrigation allocation available to each user will be based on any prioritization among crops the District establishes based on economic loss and equity considerations and the acreage and quantity of withdrawals for which the user has been permitted.

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 paragraph (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.

Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.175, 373.246 F.S.
History–New 5-31-82, Amended 1-26-86, 2-14-91.

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

1. Water used for diversion and impoundment into non-District facilities shall be voluntarily reduced.

(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. Withdrawals by each user from each source class in each month shall be limited to an amount that represents each user's share of the total allocation for agricultural irrigation made by the District from that source for that month and in that basin. The District's allocation for agricultural irrigation will be determined based on its evaluation of the supply capabilities of the source class, the supply capabilities of other source classes available in the area, the needs of agriculture and all other users in the area and the District's overall management strategy for handling the uncertainties of future climatological events. The share of the total agricultural irrigation allocation available to each user will be based on any prioritization among crops the District establishes based on economic loss and equity considerations and the acreage and quantity of withdrawals for which the user has been permitted.

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 paragraph (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.

Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.175, 373.246 F.S.
History–New 5-31-82, Amended 1-26-86, 2-14-91.

PART VI THE CLASSIFICATION SYSTEM

40E-21.611 Classification System.

Unless the emergency provisions of part III of this chapter are invoked, water users are regulated by class under the provisions of this water shortage plan. The rules in this part establish the classification system which provides the basis for distinguishing among different user classes. Under the system, each water user is classified according to source, use and method of withdrawal.

Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.175, 373.246 F.S.
History–New 5-31-82.

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. 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)

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:

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 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 on 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.

Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.175, 373.246 F.S.
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/UrbanIrrigation/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 including, but not limited to, maintaining structural integrity, providing agricultural water and other non-recreational, non-aesthetic 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.

Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.175, 373.246 F.S.
History–New 5-31-82, Amended 2-14-91.

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

Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.175, 373.246 F.S.
History–New 5-31-82.

WATER SHORTAGE RESTRICTIONS
ESSENTIAL/DOMESTIC/UTILITY/COMMERCIAL

	ESSENTIAL USE	DOMESTIC TYPE USE	WATER UTILITY USE	POWER PRODUCTION USE COMMERCIAL & INDUSTRIAL PROCESS USE	DIVERSION & IMPOUNDMENT INTO NON-DISTRICT FAC.
PHASE I Moderate Shortage (Yellow)	Fire fighting or medical uses-No restrictions. Hydrant flushing-only on emergency basis. Sewer line flushing-voluntary reductions.	Residential domestic use-voluntarily reduced to 60 gallons per person per day. Commercial & industrial domestic type use-voluntarily reduced.	Pressure-Voluntary reduction to 45 psi initial pressure at point of service (meter). Notify appropriate fire-fighting agencies. New waterline cleaning & disinfection-restricted to 7 p.m.-7 a.m. Voluntary system conservation	Commercial car washes - For vehicles under 10,000 lb. gross veh. wt.--use restricted to 75 gal. or less per wash; vehicles greater than 10,000 lb. gross veh. wt. restricted to 150 gal. or less per wash. Other power production, commercial & industrial processes-voluntary.	Voluntary reduction in diversions
PHASE II Severe Shortage (Orange)	Same as Phase I	Residential domestic use-voluntarily reduced to 50 gallons per person per day. Commercial & industrial domestic type use-voluntarily reduced.	Pressure-Same as Phase I, except pressure reduction is mandatory.	Same as Phase I	Same as Phase I
PHASE III Extreme Shortage (Red)	Same as Phase I	Residential domestic use - voluntarily reduced to 40 gallons per person per day. Commercial & industrial domestic type use - voluntarily reduced.	Pressure-Voluntary reduction below 45 psi initial pressure at point of service (meter). Maintain adequate line and fire flow pressures.	Commercial car washes - for vehicles under 10,000 lbs. gross veh. wt. Use above 75 gal. per wash prohibited; Use between 75 gal. & 50 gal. restricted to 8 a.m. - 3 p.m. Use 50 gal. or less-voluntary. Vehicles over 10,000 lbs. gross veh. wt.--Use above 150gal. per wash prohibited; Use between 150 & 100 gal. restricted to 8 a.m. - 3 p.m. Use 100 gal. or less-voluntary. Other commercial, industrial & power production processes--voluntary	Same as Phase I
PHASE IV Critical Shortage (Purple)	Fire fighting or medical uses-No restrictions. Hydrant flushing-only on emergency basis. Sewer line flushing-only on an emergency basis.	Residential domestic use-voluntarily reduced to 30 gallons per person per day. Commercial & industrial domestic type use - voluntarily reduced to minimum levels required for health & safety.	Pressure-Same as Phase III	Same as Phase III	Same as Phase I

MORE THAN 60% REDUCTION - NO OUTSIDE WATER USE

OTHER RESTRICTIONS AS DIRECTED BY GOVERNING BOARD

WATER SHORTAGE RESTRICTIONS
AGRICULTURE

	AGRICULTURAL USE	AQUACULTURAL USE LIVESTOCK USE	SOIL FLOODING	FREEZE PROTECTION
PHASE I Moderate Shortage (Yellow)	Overhead, except portable volume guns-restricted to 2 p.m. to 10 a.m. Low volume - no restrictions Voluntary use of water conservation techniques. Maximize use from sources not experiencing shortage.	Voluntary reduction in use.	Pest Control, soil preservation - flooding prohibited. Sugarcane - flooding for burning prior to harvesting - voluntary reduction. Sod-flooding to permit harvesting - voluntary reduction.	Limited to situations in which official weather forecast services predict freezing temperatures likely to cause permanent damage to crops.
PHASE II Severe Shortage (Orange)	Same as Phase I	Same as Phase I	Same as Phase I	Same as Phase I
PHASE III Extreme Shortage (Red)	Overhead - restricted to 7 p.m. to 7 a.m. Low volume - no restriction. Voluntary use of water conservation techniques. Maximize use from sources not experiencing shortage. Withdrawals limited based upon availability of water, permitted acreage and allocation and relative value of agricultural products.	Same as Phase I	Pest Control, Soil Preservation - Flooding prohibited. Sugarcane - Same as Phase I. Sod-Flooding to permit harvesting - prohibited.	Same as Phase I
PHASE IV Critical Shortage (Purple)	Same as Phase III	Same as Phase I	Same as Phase III	Same as Phase I

MORE THAN 60% REDUCTION - NO OUTSIDE WATER USE

OTHER RESTRICTIONS AS DIRECTED BY GOVERNING BOARD

WATER SHORTAGE RESTRICTIONS
NURSERY/URBAN IRRIGATION/RECREATION

	NURSERY USE	LANDSCAPE IRRIGATION NEW INSTALLATION RECREATION AREA USE	LANDSCAPE IRRIGATION EXISTING INSTALLATION RECREATION AREA USE	GOLF COURSE USE	WATER BASED RECREATION USE (INCLUDES POOLS, WATER SLIDES, SWIM AREAS)
PHASE I Moderate Shortage (Yellow)	Low volume-voluntary Low volume hand watering-voluntary Overhead-inside-8 a.m.-8p.m.,7 days per week Overhead outside-7p.m.-7a.m., 7 days per week Flood - 8 days per month	Under 5 acres-2 a.m.-8 a.m., Mon.-Fri. 5 acres or over-12:01 a.m.-8 a.m., Mon.-Fri. Low volume hand watering - voluntary. New irrigation system cleaning & adjusting - 10 min. per zone, one time only.	Under 5 acres-4 a.m.-8 a.m.,Mon,Wed, & Sat. for odd house addresses & Tues, Thurs, Sun for even house addresses or locations with no address 5 acres or over-Same as under 5 acres except hrs. limited to 12:01 a.m.-8 a.m.	Greens & tees-night only, other reductions voluntary. Fairways & roughs-same as Phase I landscape irrigation, existing installations over 5 acres. (Front 9 Mon,Wed,Sat.; Back 9 Tues, Thurs, Sun.)	Filling - permitted for new and existing facilities. Draining - only permitted onto pervious surfaces. no draining into sewers. Makeup - permitted for new and existing facilities
PHASE II Severe Shortage (Orange)	Low volume-voluntary Low volume hand watering-voluntary Overhead-inside-8 a.m.-8p.m., 7 days per week. Overhead-outside-7 p.m.-7a.m., odd numbered days Flood - 6 days per month.	Under 5 acres-2 a.m.-8 a.m., Mon,Wed,Thurs, Fri.. 5 acres or over-12:01a.m.-8 a.m., Mon,Wed,Thurs, Fri. Low vol. hand watering - voluntary New irrig. system clean. & adjust. 10 min. per zone,one time only.	Under 5 acres-4 a.m.-8 a.m. on Wed & Sat for odd house addresses; Thurs & Sun for even house addresses & locations with no address. 5 acres or over- Same as under 5 acres, except hours limited to 12:01 a.m.- 8 a.m.	Greens & Tees - night only, other reductions voluntary. Fairways & Roughs-Same as Phase II landscape irrigation-existing installation, over 5 acres. (Front 9- Wed., Sat., Back 9- Thurs., Sun.)	Filling - permitted for new facilities, prohibited for existing facilities Draining - same as Phase I Makeup - Same as Phase I
PHASE III Extreme Shortage (Red)	Low volume-voluntary Low volume hand watering-voluntary Overhead-inside- 8 a.m. - 8 p.m., odd numbered days Overhead - outside-12:01 a.m.-7 a.m., odd numbered days. Flood - 4 days per month.	Under 5 acres-2 a.m.-7 a.m., Mon, Wed, Fri. 5 acres or over - 12:01a.m.-7 a.m., Mon, Wed, Fri. Low volume hand watering - voluntary New irrigation system cleaning & adjusting-10 min. per zone, one time only.	Under 5 acres - 4 a.m.-7 a.m. on Sat for odd house addresses; Sun for even addresses & locations with no address. 5 acres or over - Same as under 5 acres except hrs. limited to 12:01 a.m. to 7 a.m.	Greens - night only, other reductions voluntary. Tees- 3 days/week, Front 9 Mon., Wed., Sat. Back 9 Tues., Thur., Sun. Night only. Fairways & Roughs-Same as Phase III landscape irrigation-existing installation, over 5 acres. (Front 9-Sat; Back 9-Sun.)	Same as Phase II
PHASE IV Critical Shortage (Purple)	Low volume-voluntary Low volume hand watering-voluntary Overhead inside-8 a.m.-4 p.m., odd numbered days Overhead outside-2 a.m.-7 a.m., odd numbered days Flood- 2 days per month.	Under 5 acres- 6 a.m.-7 a.m., Sat. 5 acres or over- 4 a.m.-7 a.m., Sat. Low volume hand watering -Mon,Wed, Fri. New irrigation system cleaning & adjusting-prohibited.	Under 5 acres - 6 a.m.-7 a.m. on Sat. for odd house addresses & Sun for even house addresses and locations with no addresses. 5 acres or over- Same as under 5 acres except hrs. limited to 4 a.m - 7 a.m.	Greens-night only, other reductions voluntary. Tees-1 day/week, Front 9 Sat. Back 9 Sun. Night only. Fairways & Roughs-Same as Phase IV landscape Irrigation- existing installation, over 5 acres. (Front 9-Sat.; Back 9-Sun.)	Filling - prohibited for new and existing facilities Draining — same as Phase I Makeup — prohibited

MORE THAN 60% REDUCTION - NO OUTSIDE WATER USE

OTHER RESTRICTIONS AS DIRECTED BY GOVERNING BOARD

Figure 21-1
Sheet 3 of 4

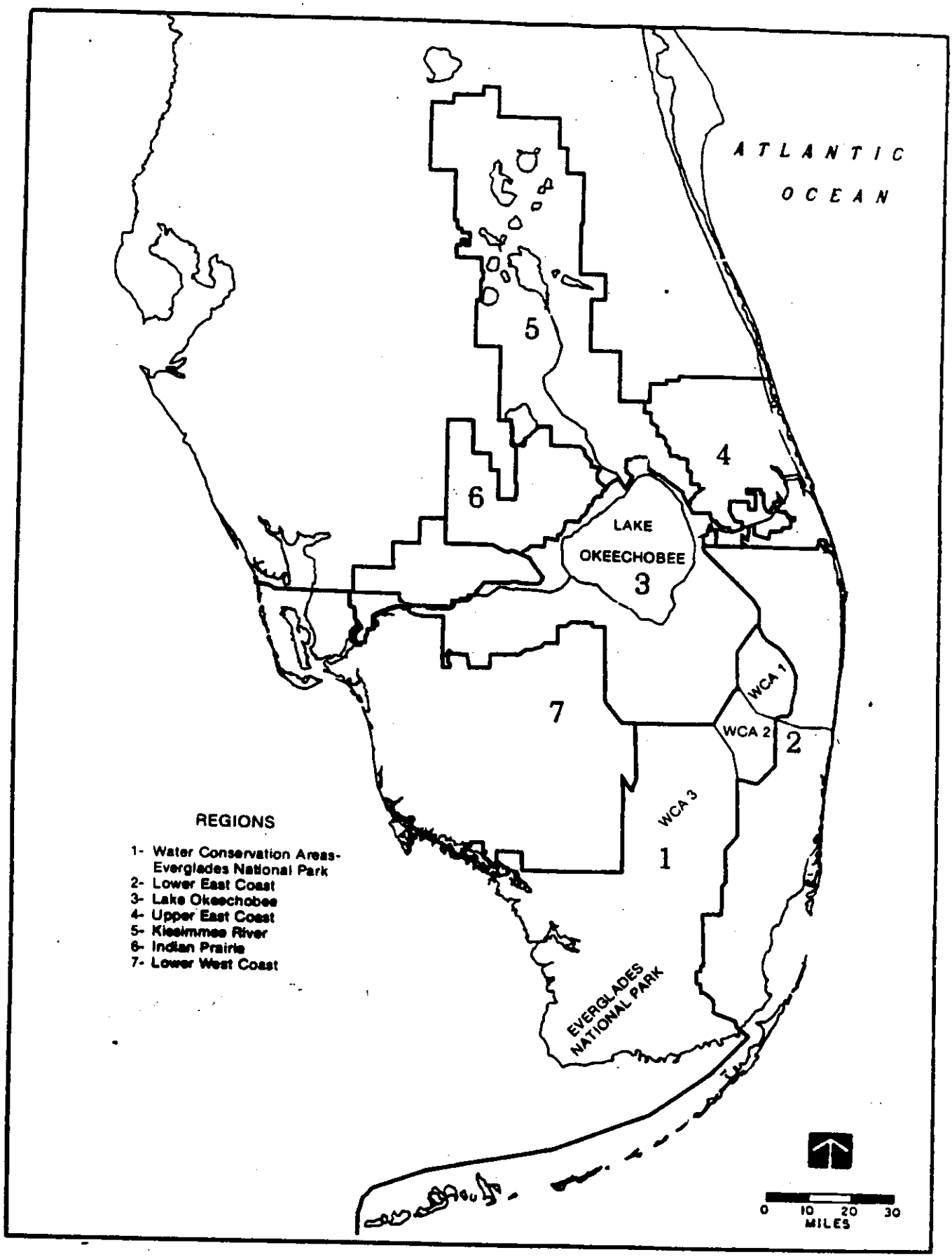
WATER SHORTAGE RESTRICTIONS
MISCELLANEOUS

	COOLING & AIR CONDITIONING USE	DEWATERING USE	NAVIGATION USE	OTHER OUTSIDE USES	AESTHETIC USE (Includes fountains, waterfalls, etc.)
PHASE I Moderate Shortage (Yellow)	Restricted to water necessary to maintain temperatures no colder than 78°F.	Discharge of fresh-water to tide prohibited.	Franklin Lock & Dam - coordinate with COE to restrict lockages when chloride levels reach 180 ppm up-stream of the struc-ture. Other locks-request COE to restrict lockages to conserve water & maintain acceptable chloride levels upstream of the structures.	Street, driveway, sidewalk washing or cleaning prohibited. Vehicle washing(Non-commercial): pervious surfaces only, during existing landscape irrigation hrs. & days, low volume only. Outside pressure cleaning-low volume processes only, 7 days/week.	Outside-Prohibited Inside - Voluntary reductions.
PHASE II Severe Shortage (Orange)	Same as Phase I	Same as Phase I	Same as Phase I	Same as Phase I Street, driveway, sidewalk-Same as Phase I Vehicle washing (non-commercial): Same as Phase I Outside pressure cleaning-low volume processes only, Mon. through Fri.	Same as Phase I
PHASE III Extreme Shortage (Red)	Same as Phase I	Same as Phase I	Same as Phase I	Street, driveway, sidewalk-Same as Phase I Vehicle washing (non-commercial): Same as Phase I Outside pressure cleaning-low volume processes only Mon & Wed.	Outside - Prohibited Inside - Prohibited
PHASE IV Critical Shortage (Purple)	No immediate discharge to tidewater; water reuse required.	Same as Phase I	Same as Phase I		Same as Phase III

MORE THAN 60% REDUCTION - NO OUTSIDE WATER USE

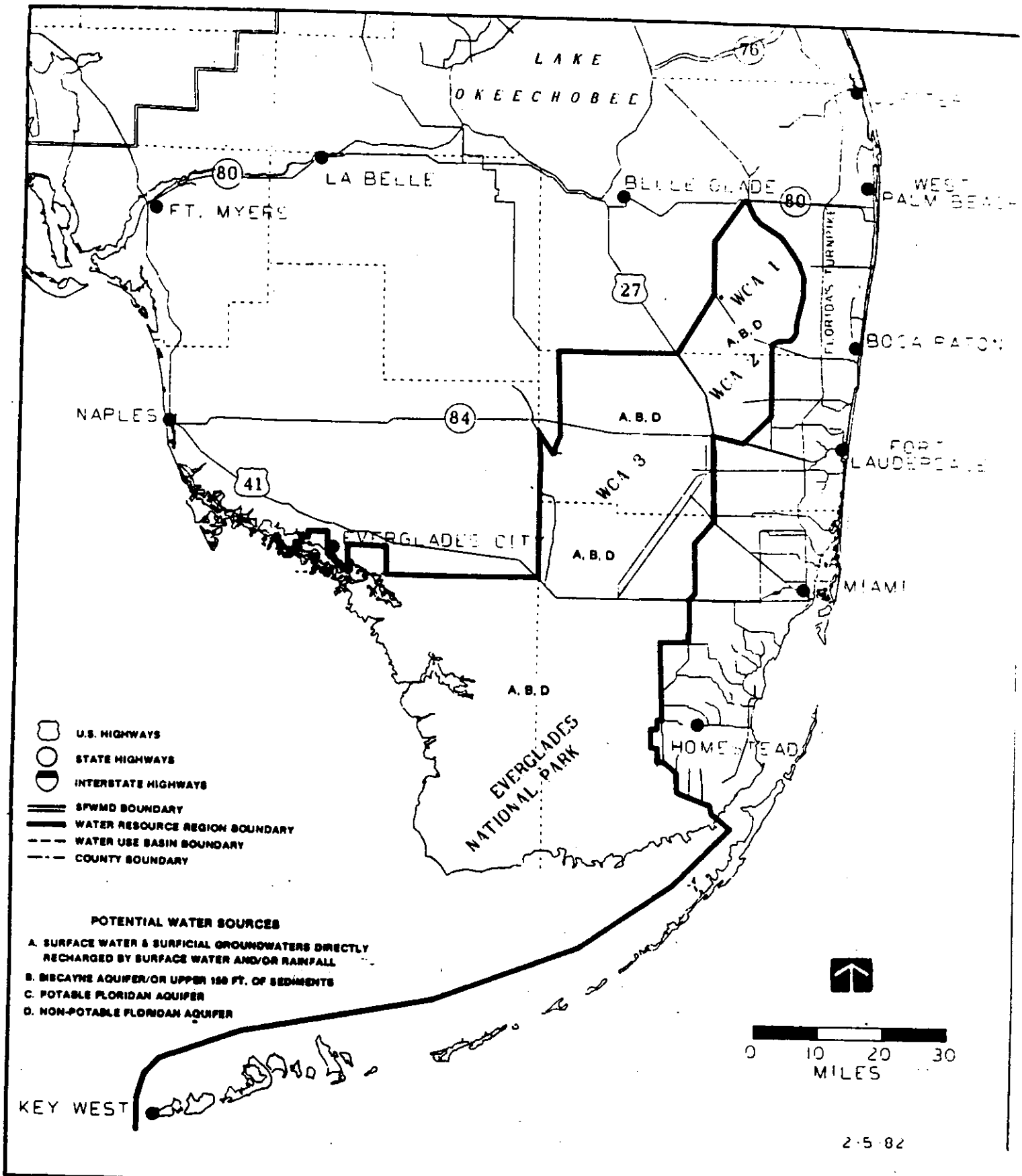
OTHER RESTRICTIONS AS DIRECTED BY GOVERNING BOARD

Figure 21-1
Sheet 1 of 1



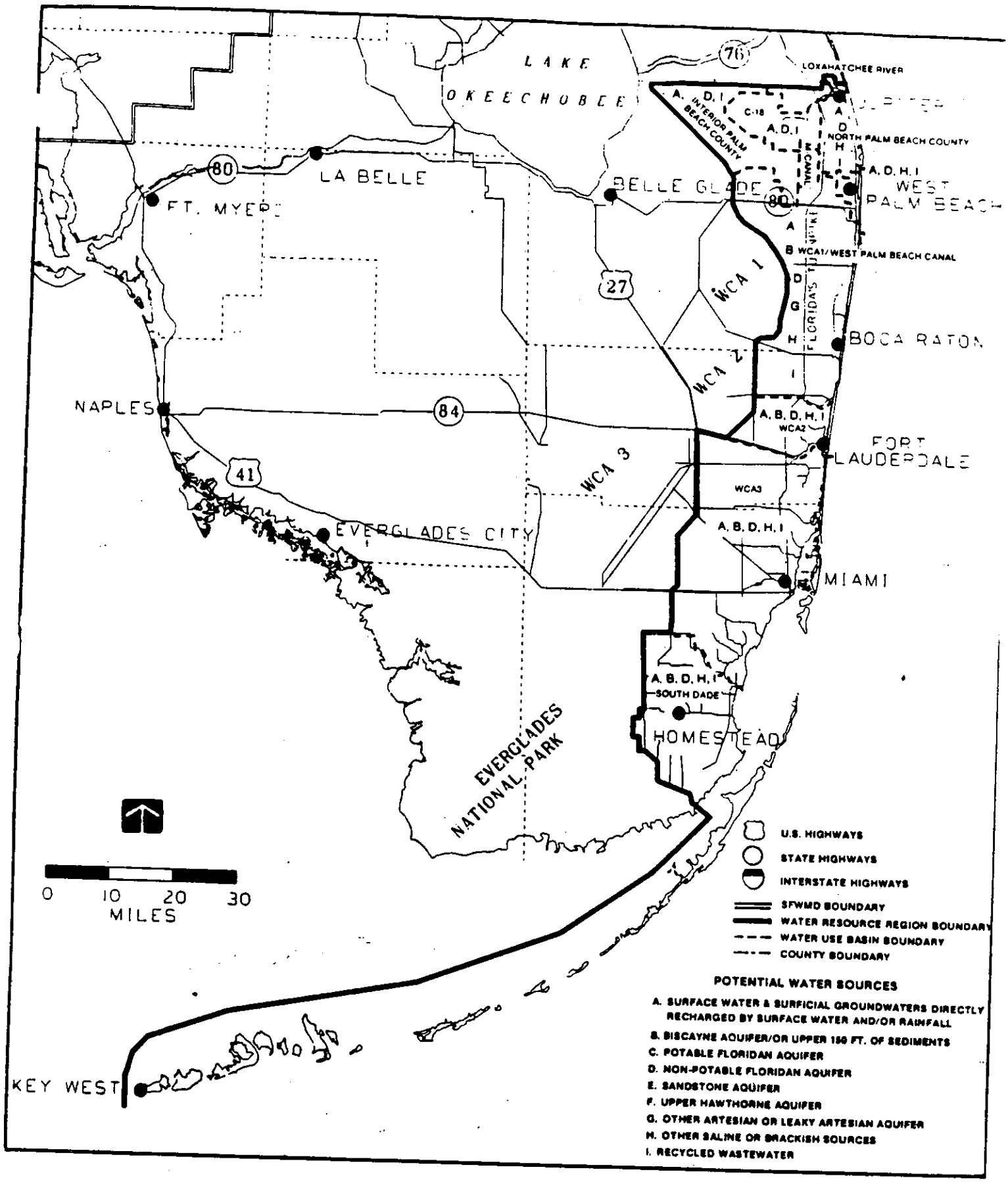
WATER SHORTAGE PLAN REGIONS

FIGURE 21-2



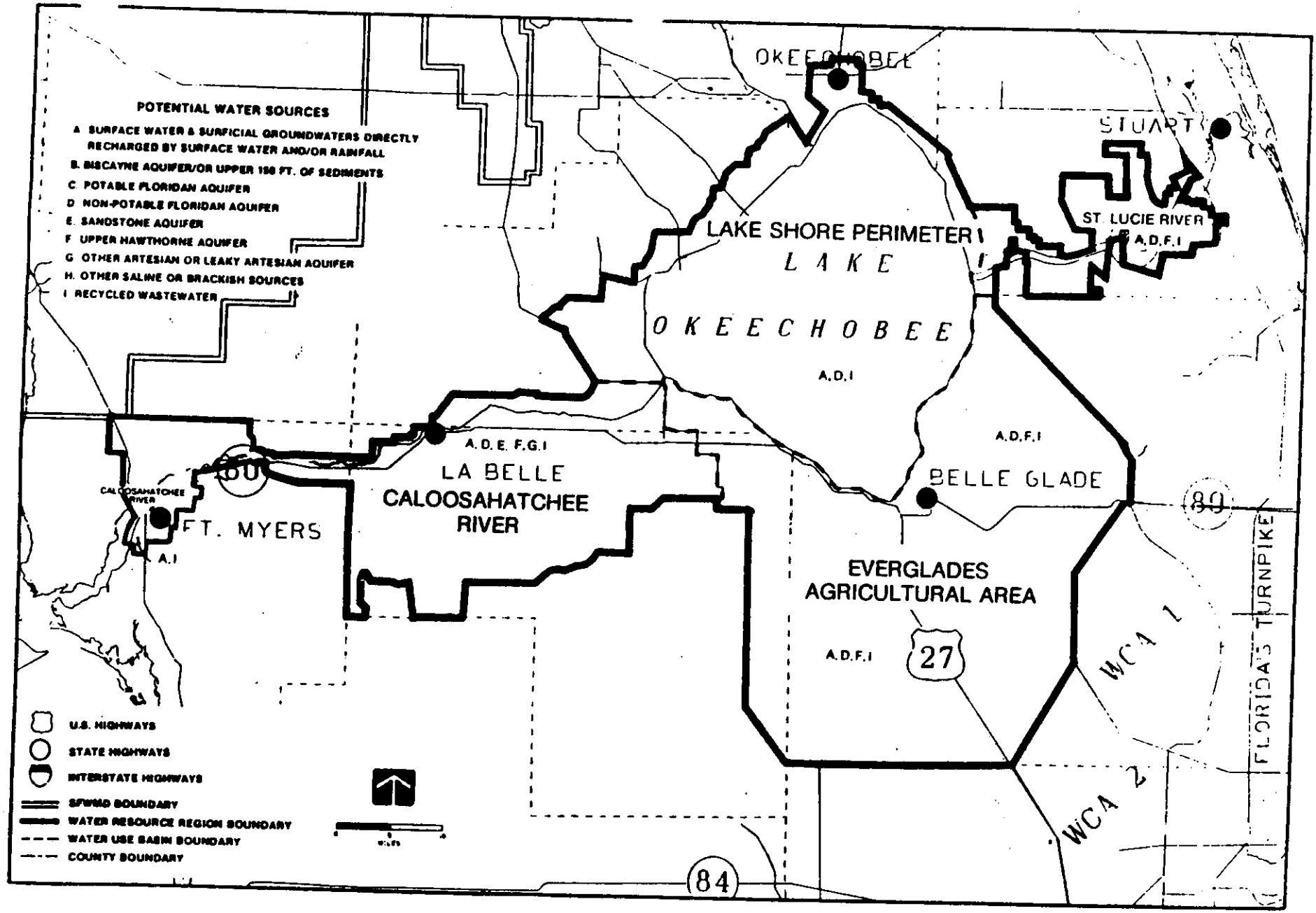
WATER CONSERVATION AREAS - EVERGLADES NATIONAL PARK REGION

FIGURE 21-3



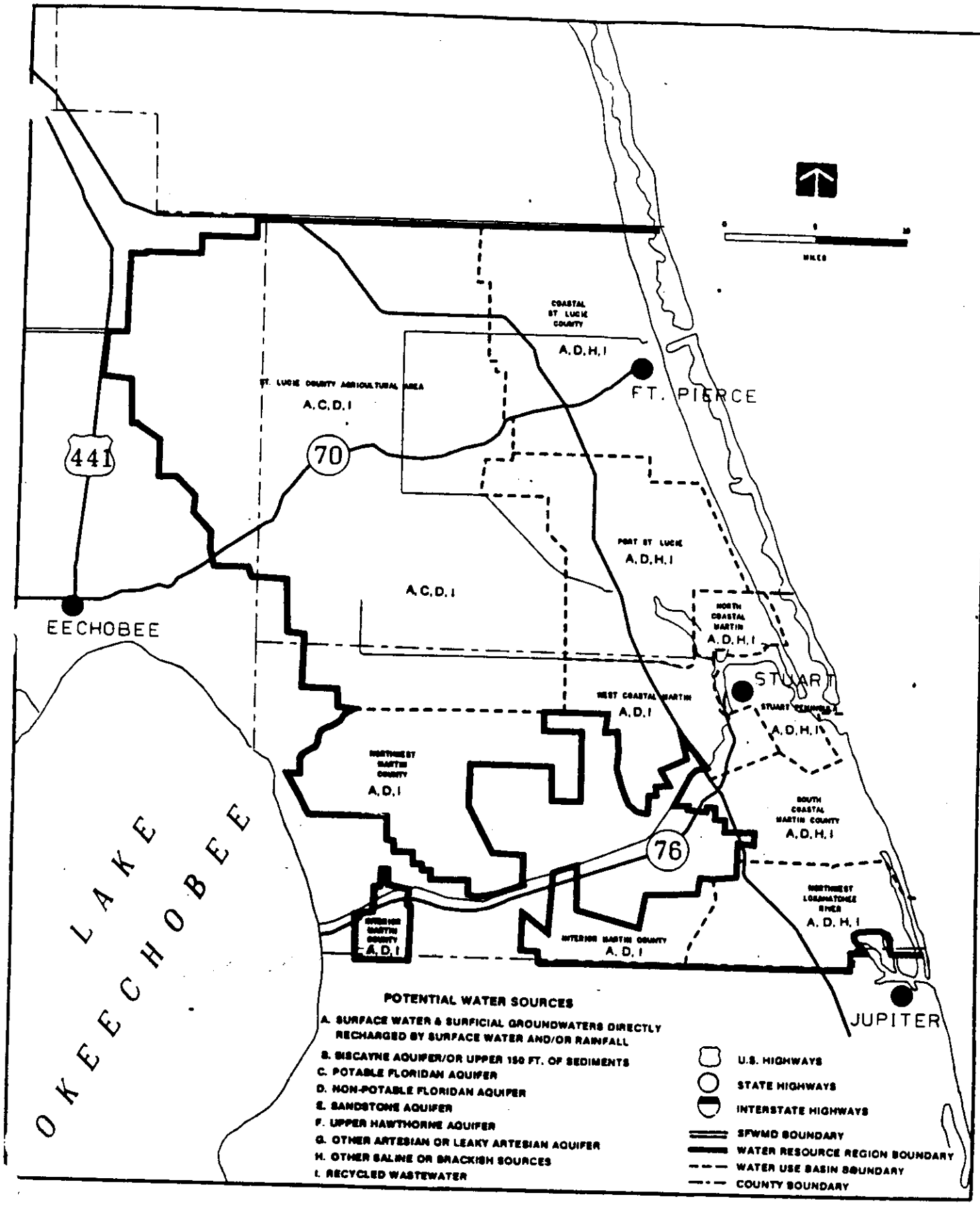
LOWER EAST COAST REGION

FIGURE 21-4



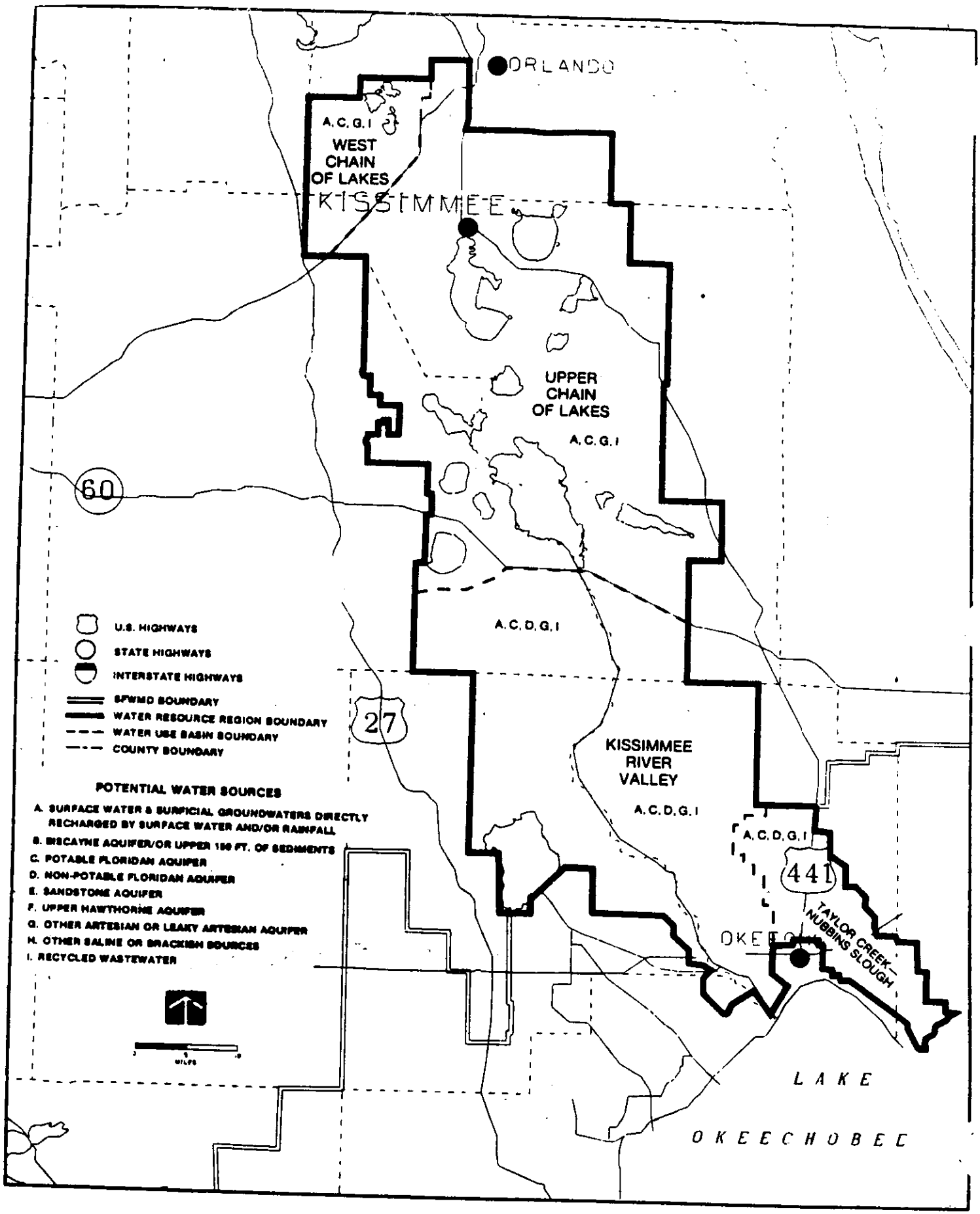
LAKE OKEECHOBEE REGION

FIGURE 21-5



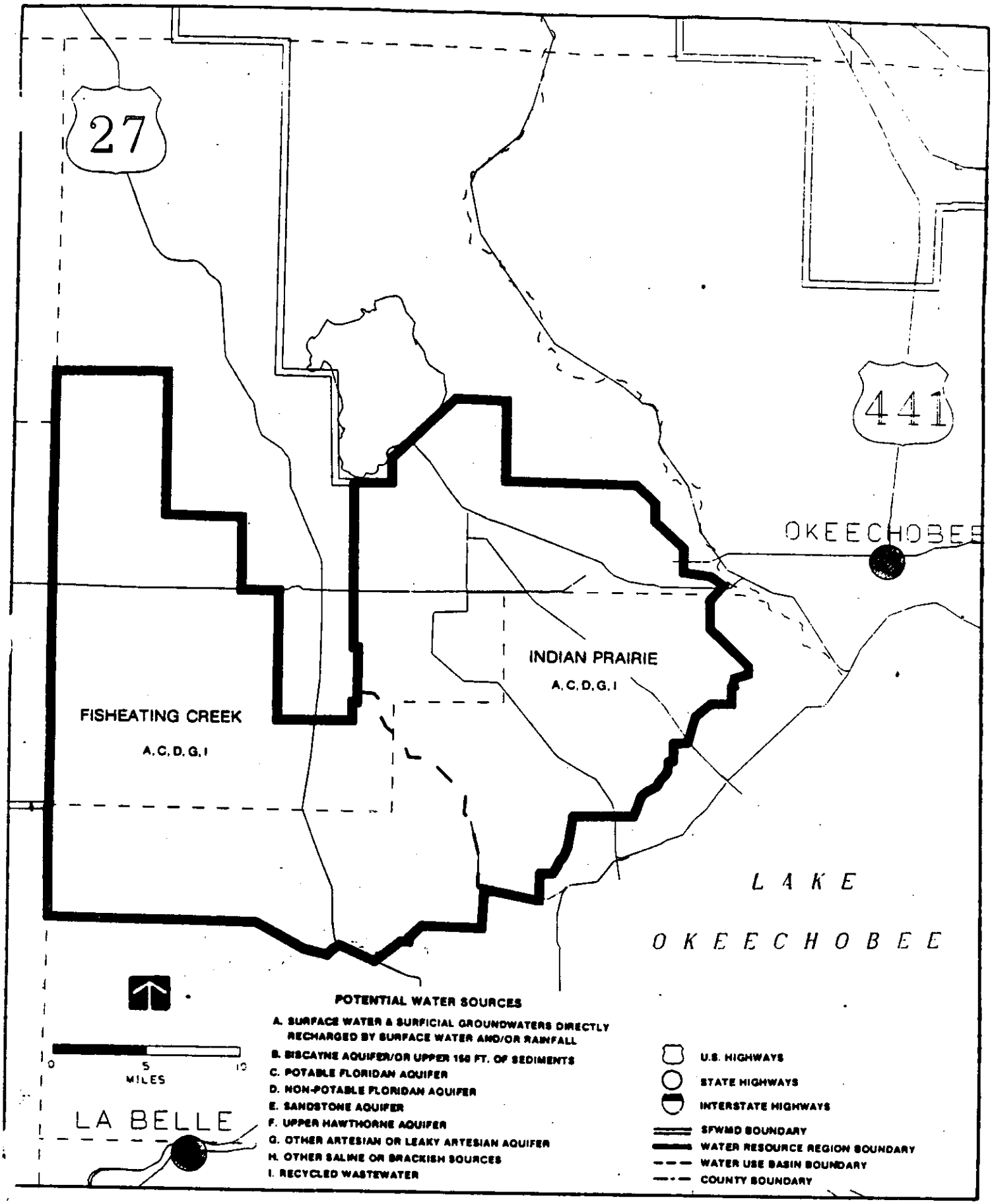
UPPER EAST COAST REGION

FIGURE 21-6

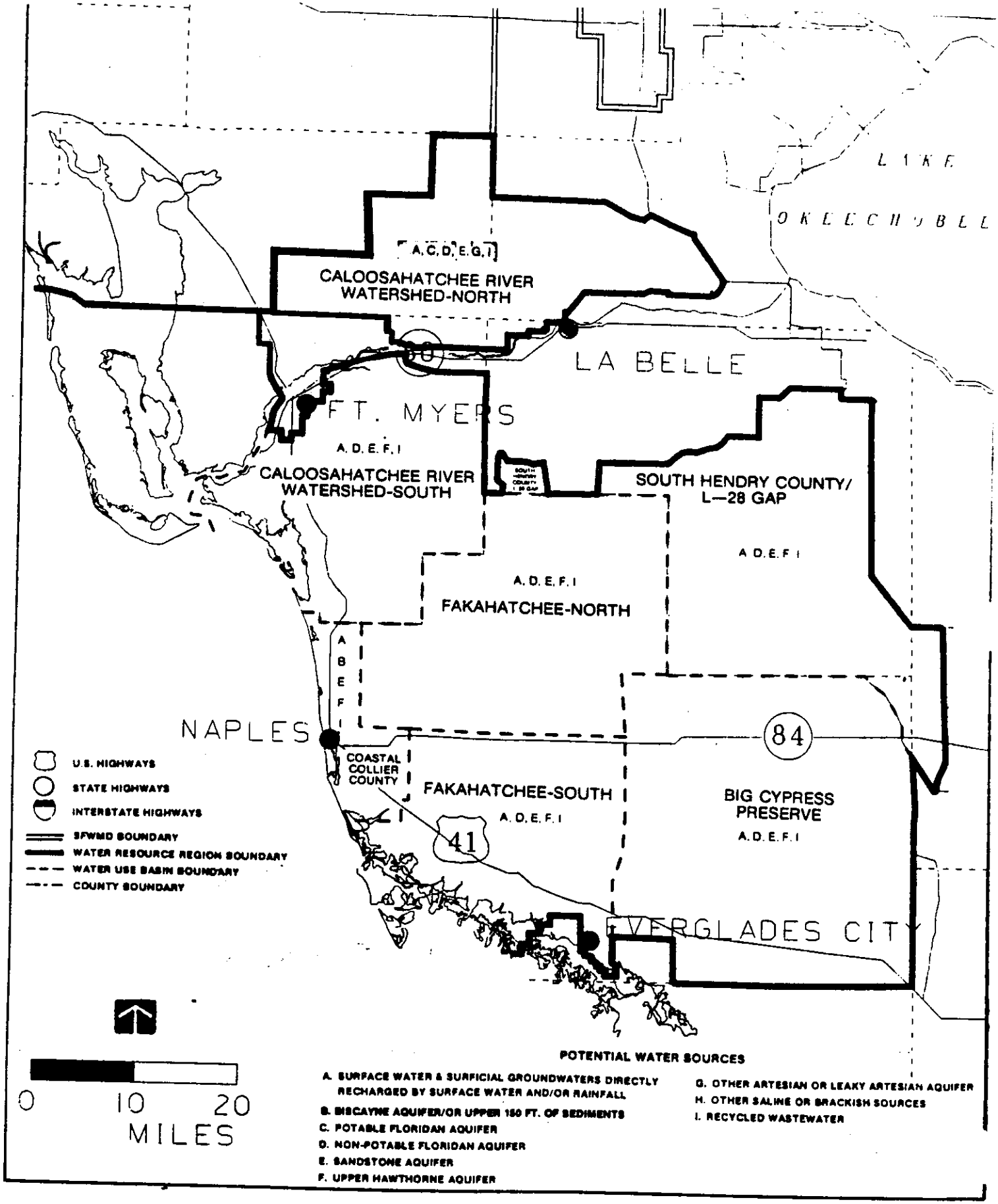


KISSIMMEE RIVER REGION

FIGURE 21-7



INDIAN PRAIRIE REGION
FIGURE 21-8



LOWER WEST COAST REGION

FIGURE 21-9

SOUTH FLORIDA WATER

MANAGEMENT DISTRICT

WATER SHORTAGE PLAN RULES

APPENDIX I

Chapter 40-E-21, Appendix I
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APPENDIX I
of the
South Florida Water Management District's
WATER SHORTAGE PLAN RULES
CHAPTER 40E-21, FLORIDA ADMINISTRATIVE CODE

APPENDIX I COMPREHENSIVE PLANNING

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.

(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 County line 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 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 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 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 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 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 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 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, 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, 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 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 the 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 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.

(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 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 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 centerline 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 on 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.

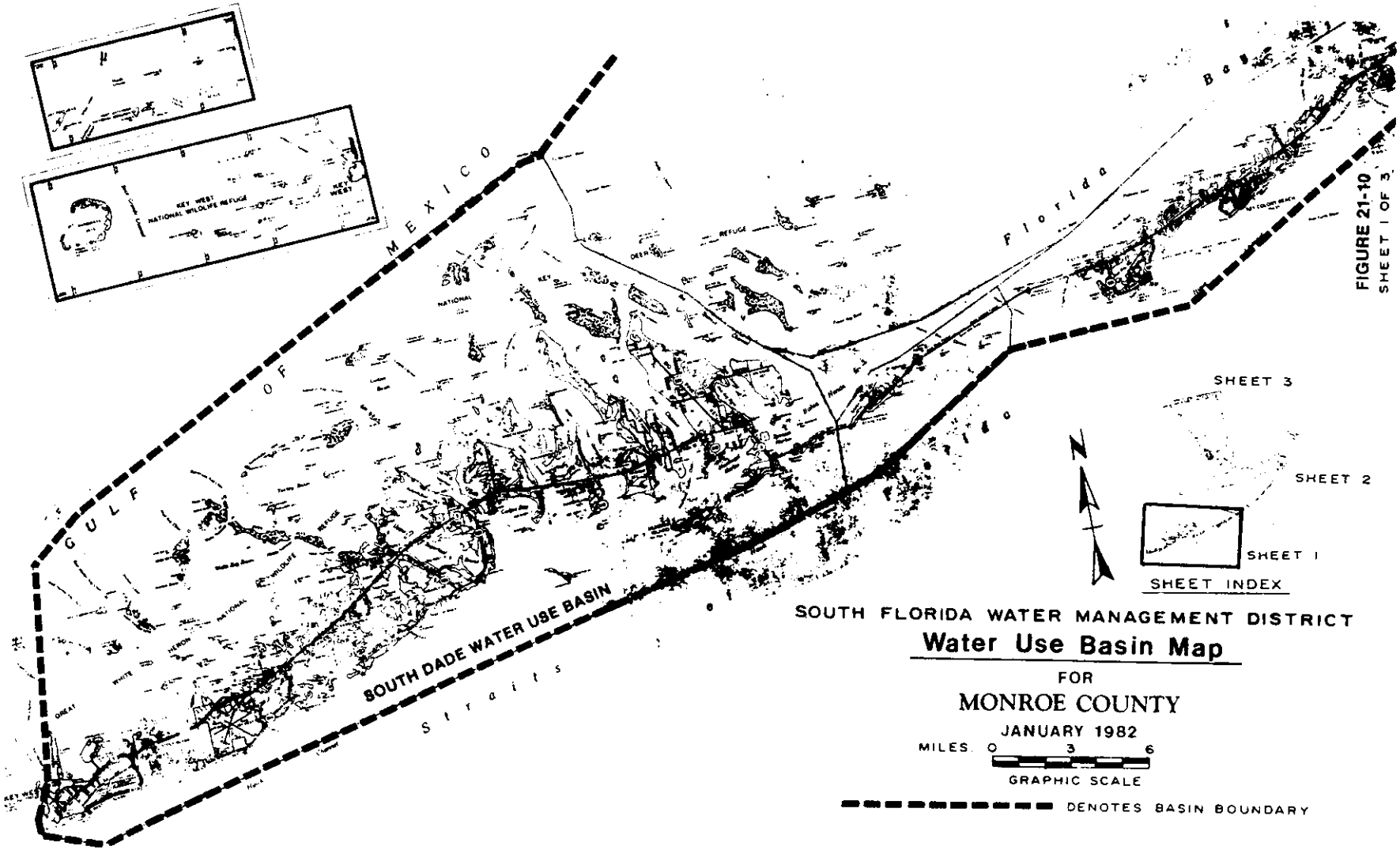


FIGURE 21-10
SHEET 1 OF 3

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

Water Use Basin Map

FOR

MONROE COUNTY

JANUARY 1982

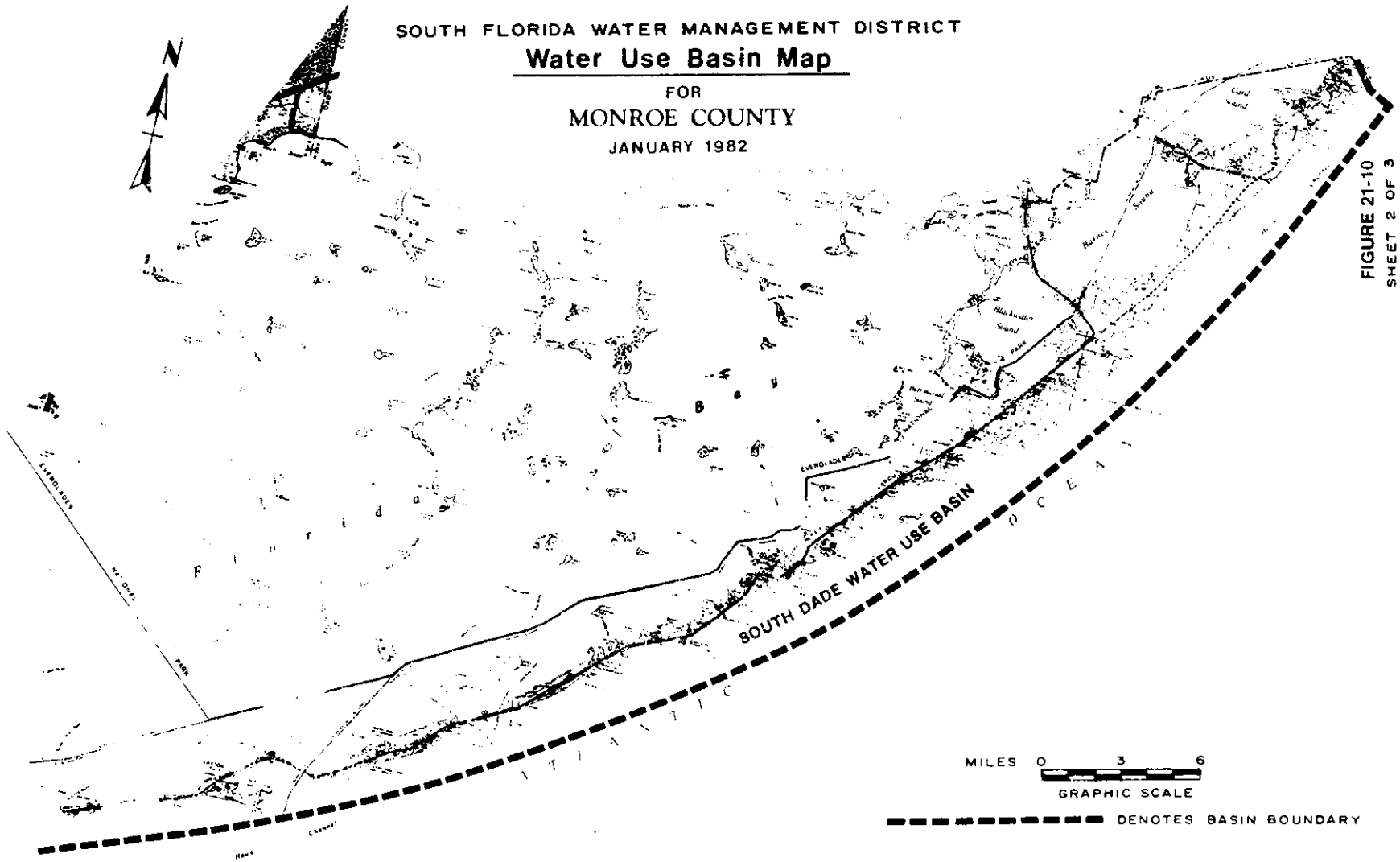


FIGURE 21-10
SHEET 2 OF 3

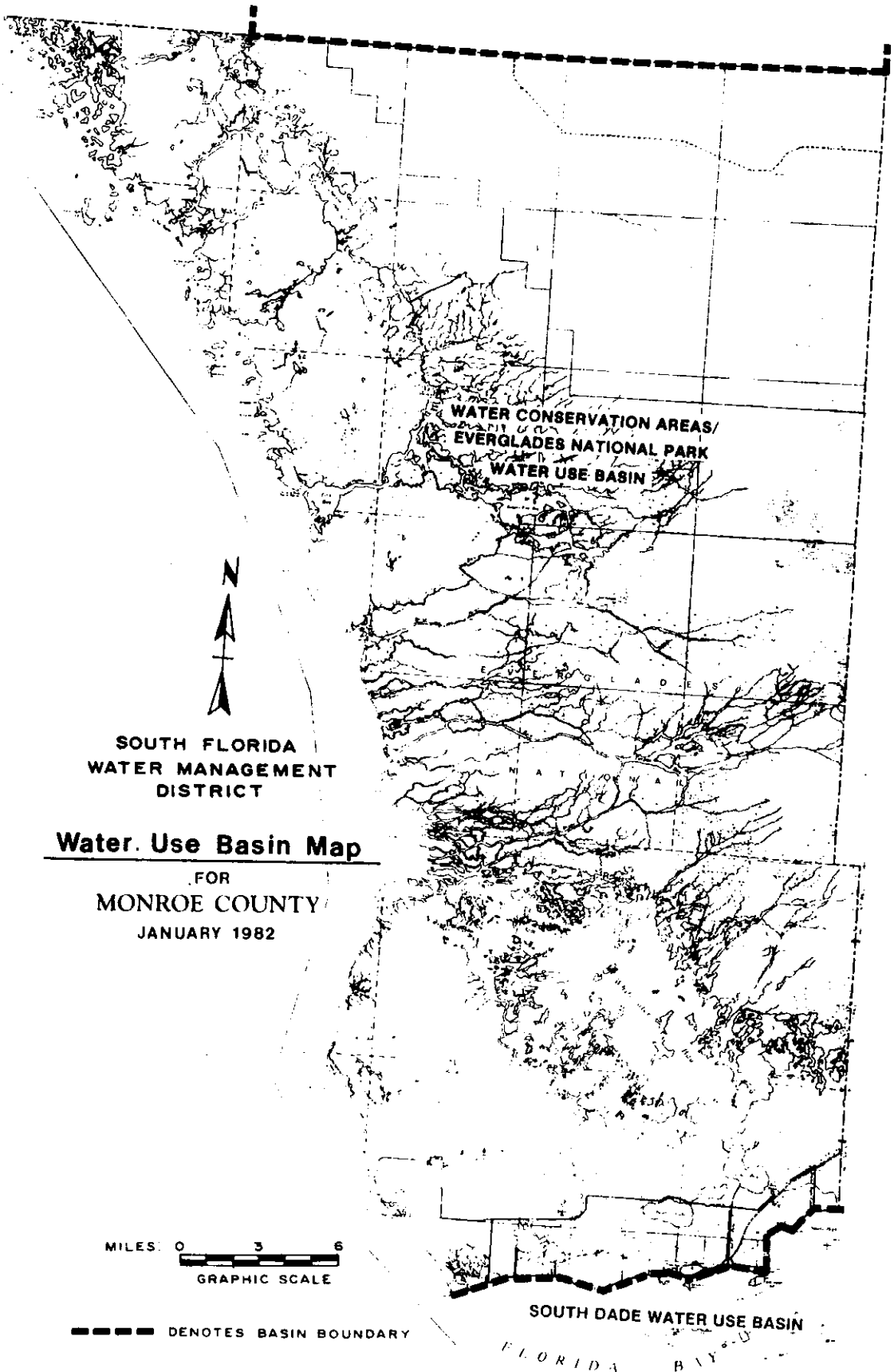


FIGURE 21-10
SHEET 3 OF 3

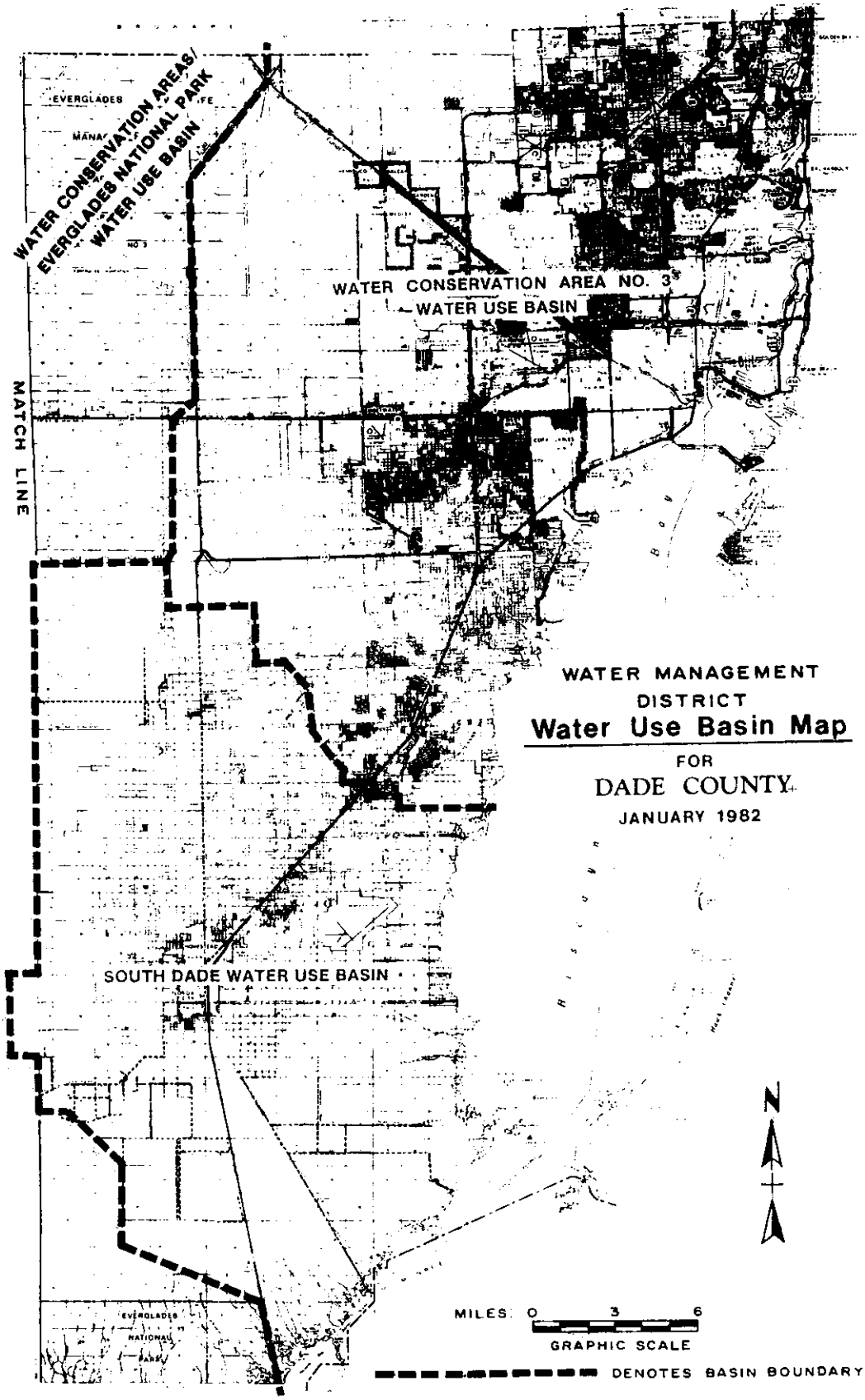


FIGURE 21-11

SHEET 1 OF 2

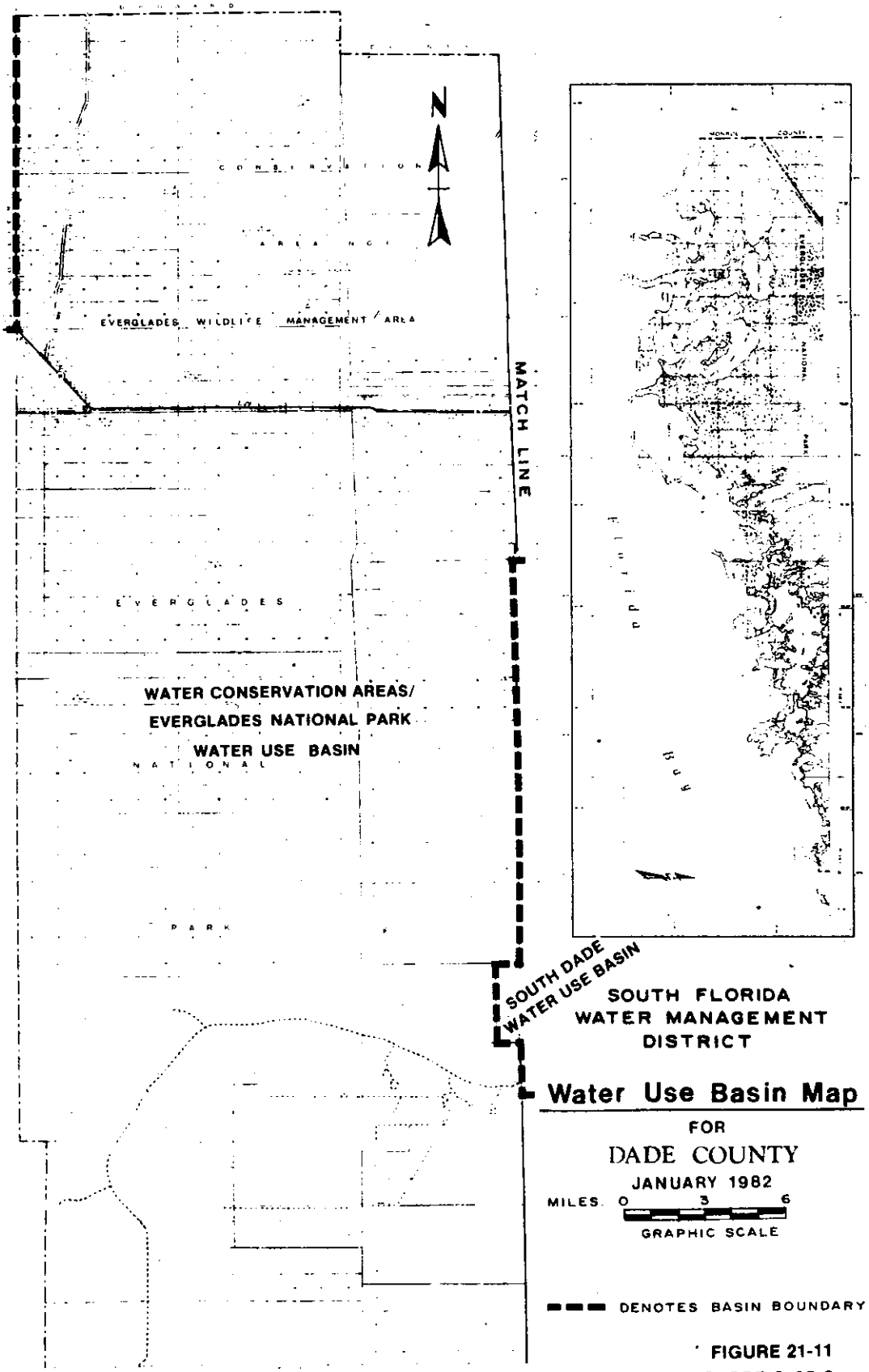


FIGURE 21-11
SHEET 2 OF 2

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

Water Use Basin Map

FOR

BROWARD COUNTY

JANUARY 1982

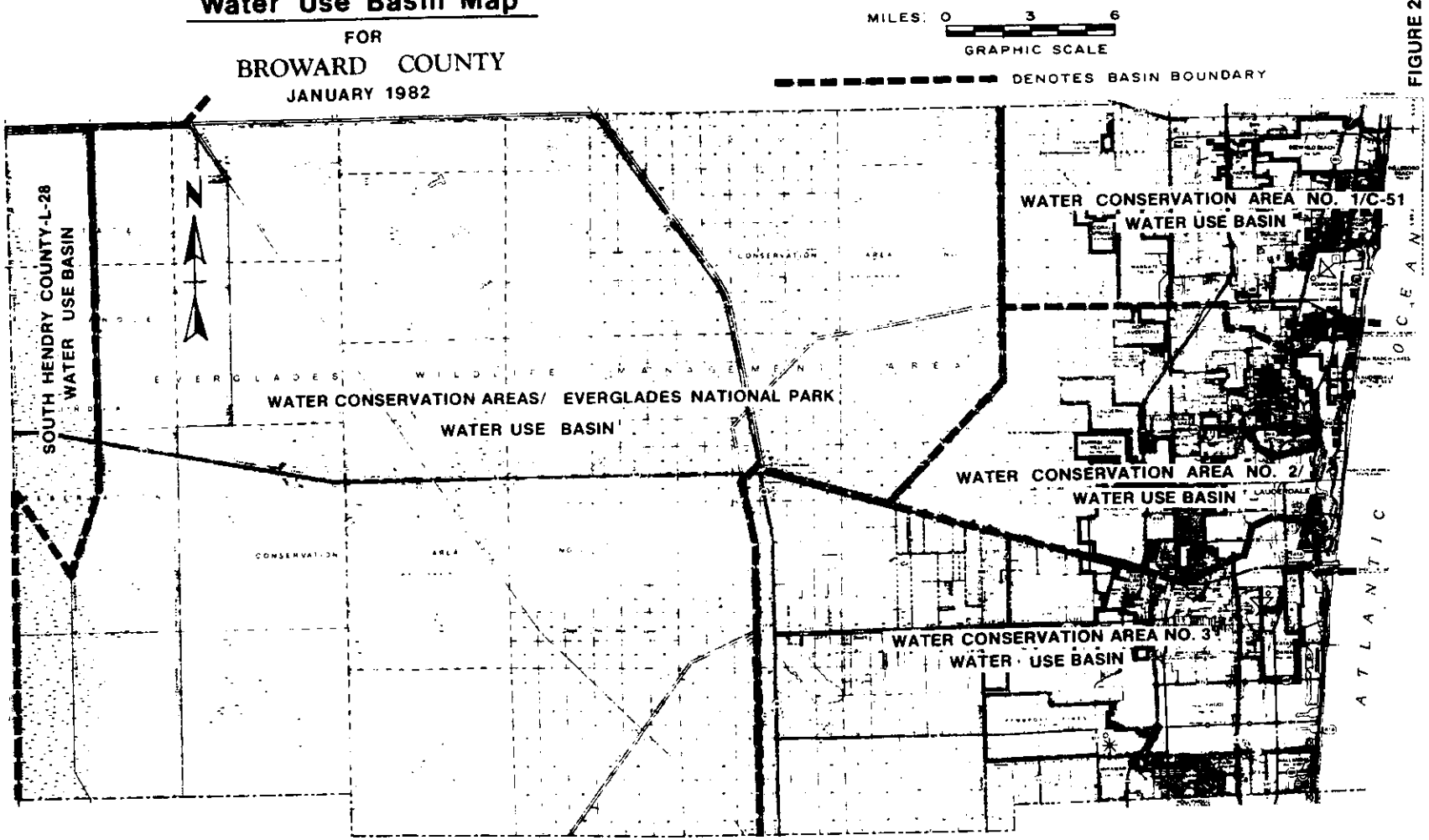


FIGURE 21-12

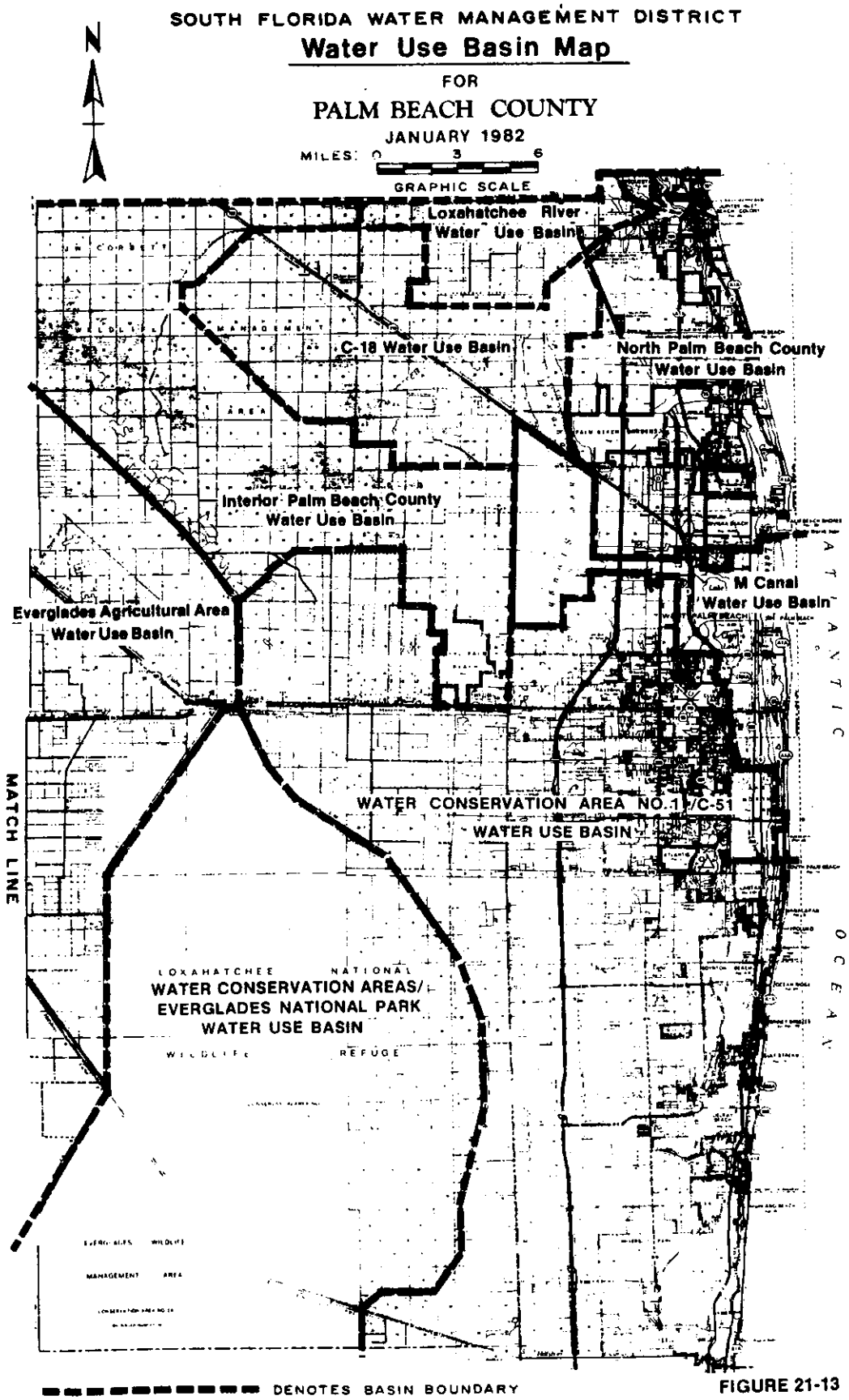
SOUTH FLORIDA WATER MANAGEMENT DISTRICT

Water Use Basin Map

FOR

PALM BEACH COUNTY

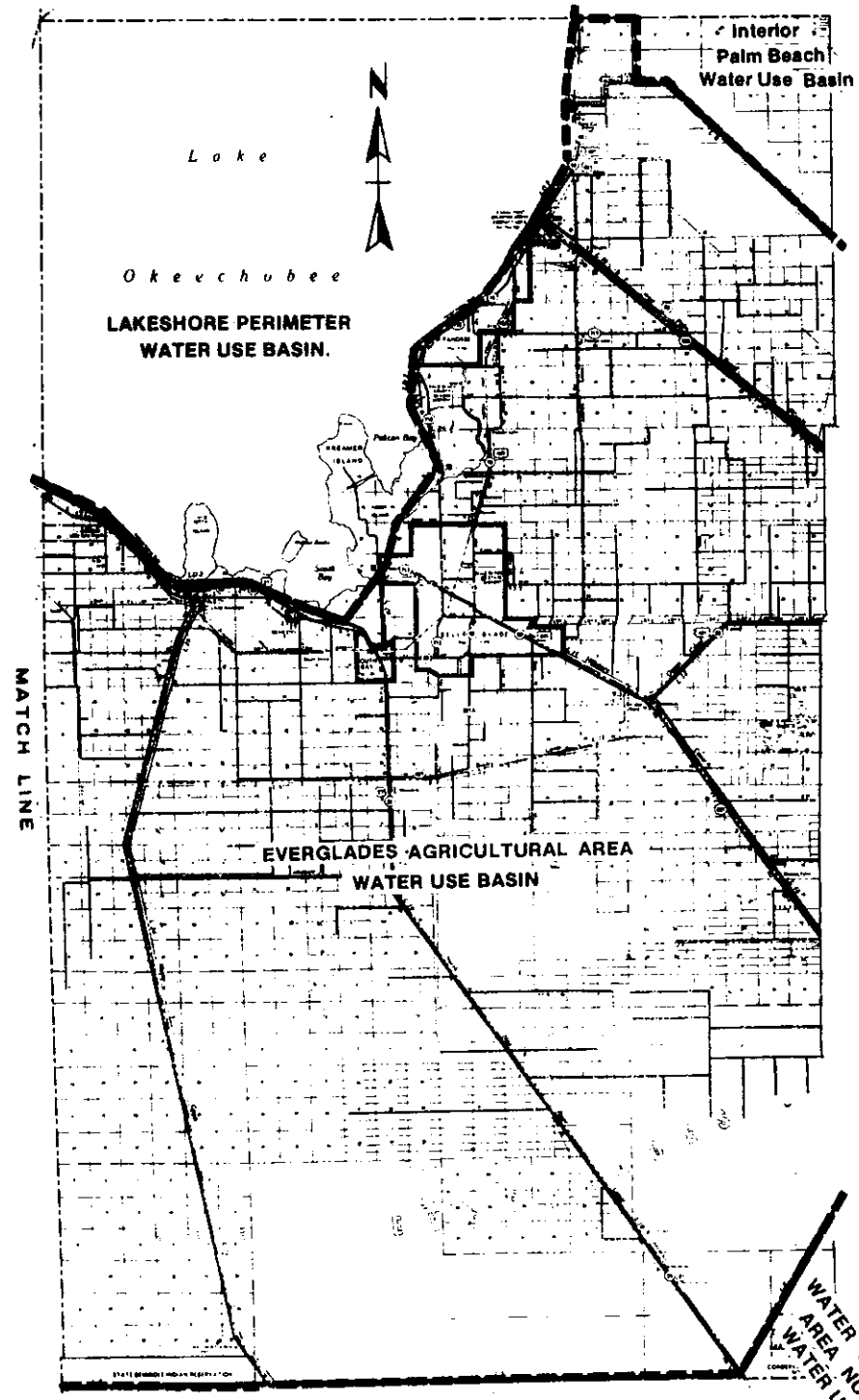
JANUARY 1982



DENOTES BASIN BOUNDARY

FIGURE 21-13

SHEET 1 OF 2



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

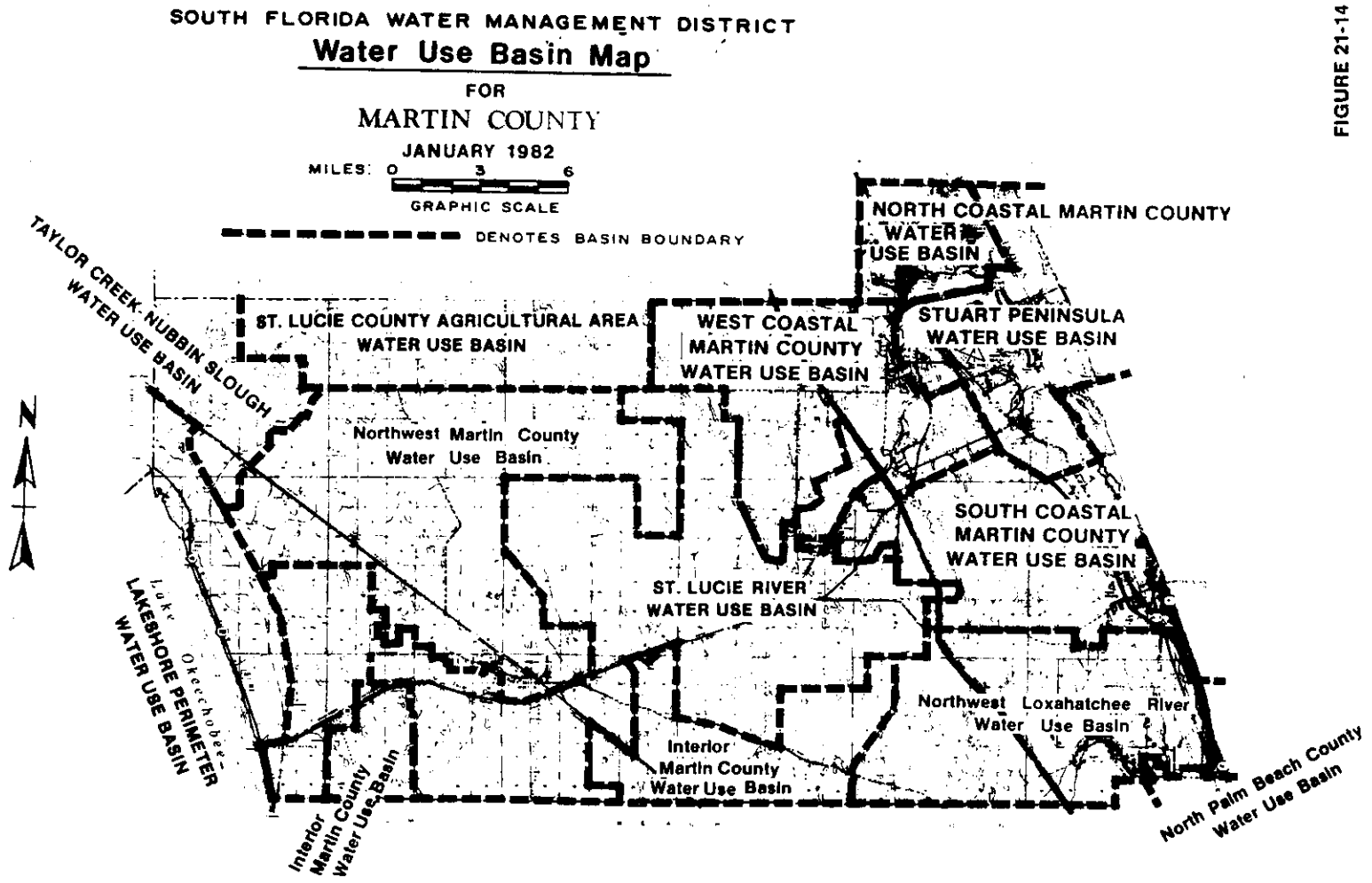
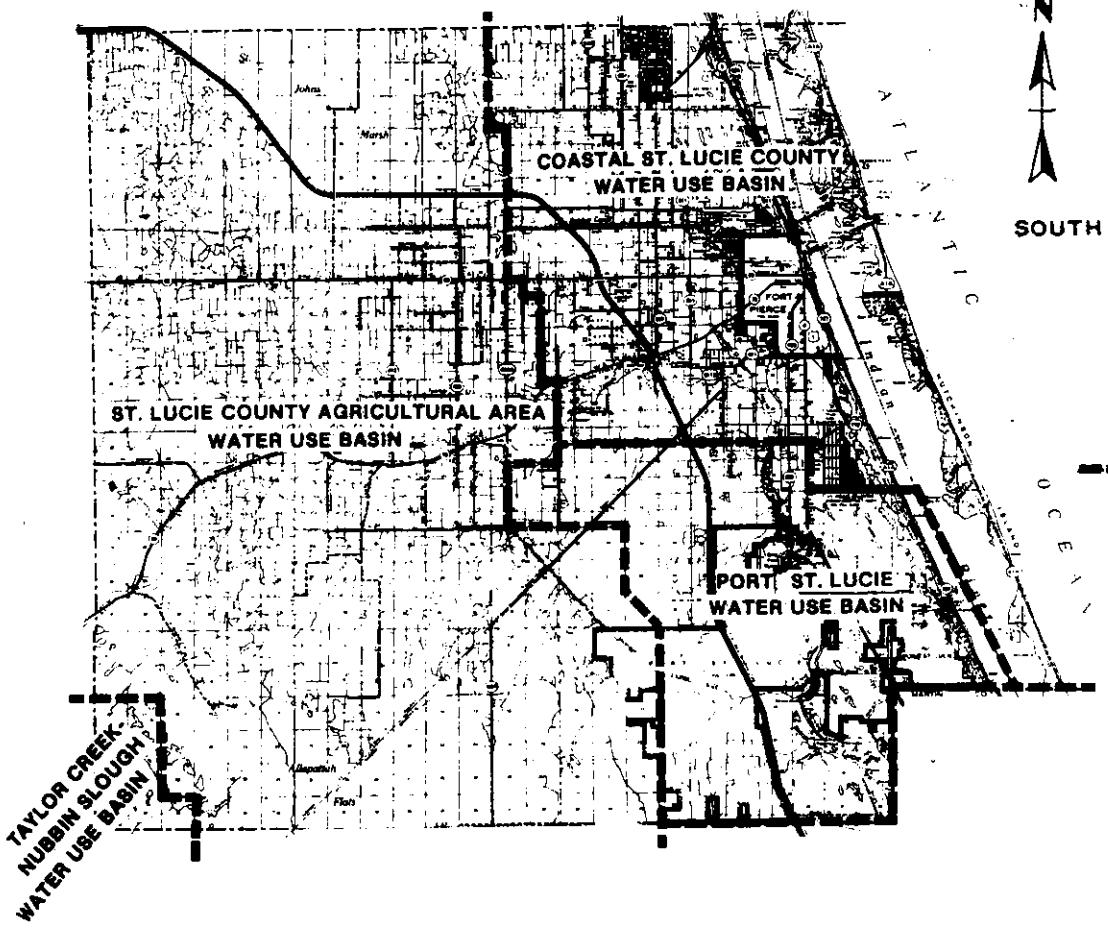

SOUTH FLORIDA WATER MANAGEMENT DISTRICT
Water Use Basin Map
FOR
MARTIN COUNTY
JANUARY 1982
MILES: 0 3 6
GRAPHIC SCALE
DENOTES BASIN BOUNDARY
N
NORTH COASTAL MARTIN COUNTY WATER USE BASIN
TAYLOR CREEK-NUBBIN SLOUGH WATER USE BASIN
ST. LUCIE COUNTY AGRICULTURAL AREA WATER USE BASIN
WEST COASTAL MARTIN COUNTY WATER USE BASIN
STUART PENINSULA WATER USE BASIN
Northwest Martin County Water Use Basin
SOUTH COASTAL MARTIN COUNTY WATER USE BASIN
ST. LUCIE RIVER WATER USE BASIN
LAKESHORE PERIMETER WATER USE BASIN
Lake Okeechobee
Northwest Loxahatchee River Water Use Basin
Interior Martin County Water Use Basin
Interior Martin County Water Use Basin
North Palm Beach County Water Use Basin

FIGURE 21-14



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

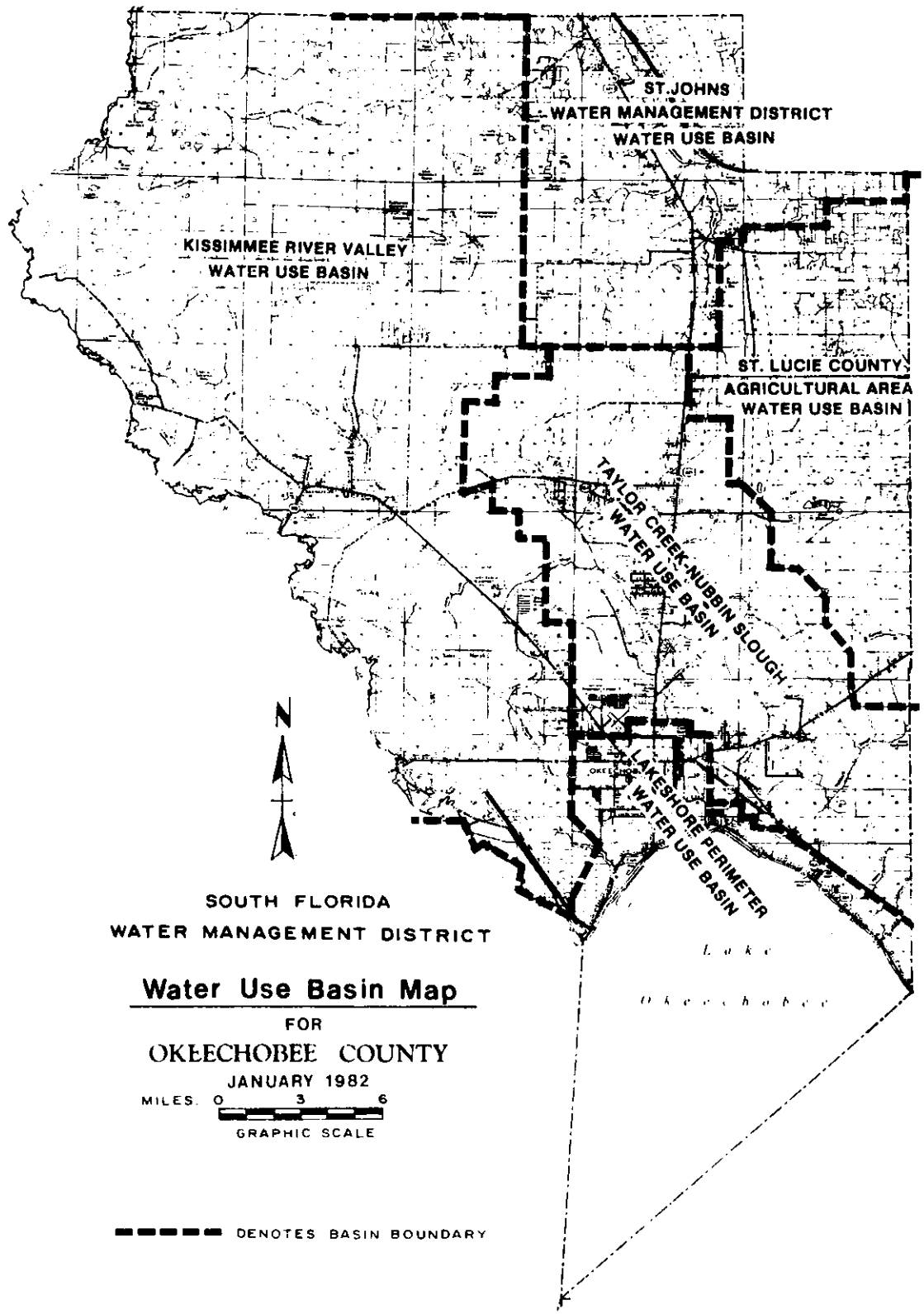

ST. JOHNS
WATER MANAGEMENT DISTRICT
WATER USE BASIN
KISSIMMEE RIVER VALLEY
WATER USE BASIN
ST. LUCIE COUNTY
AGRICULTURAL AREA
WATER USE BASIN
TAYLOR CREEK-NUBBIN SLOUGH
WATER USE BASIN
LAKESHORE PERIMETER
WATER USE BASIN
Lake
Okeechobee
N
SOUTH FLORIDA
WATER MANAGEMENT DISTRICT
Water Use Basin Map
FOR
OKEECHOBEE COUNTY
JANUARY 1982
MILES 0 3 6
GRAPHIC SCALE
DENOTES BASIN BOUNDARY

FIGURE 21-16

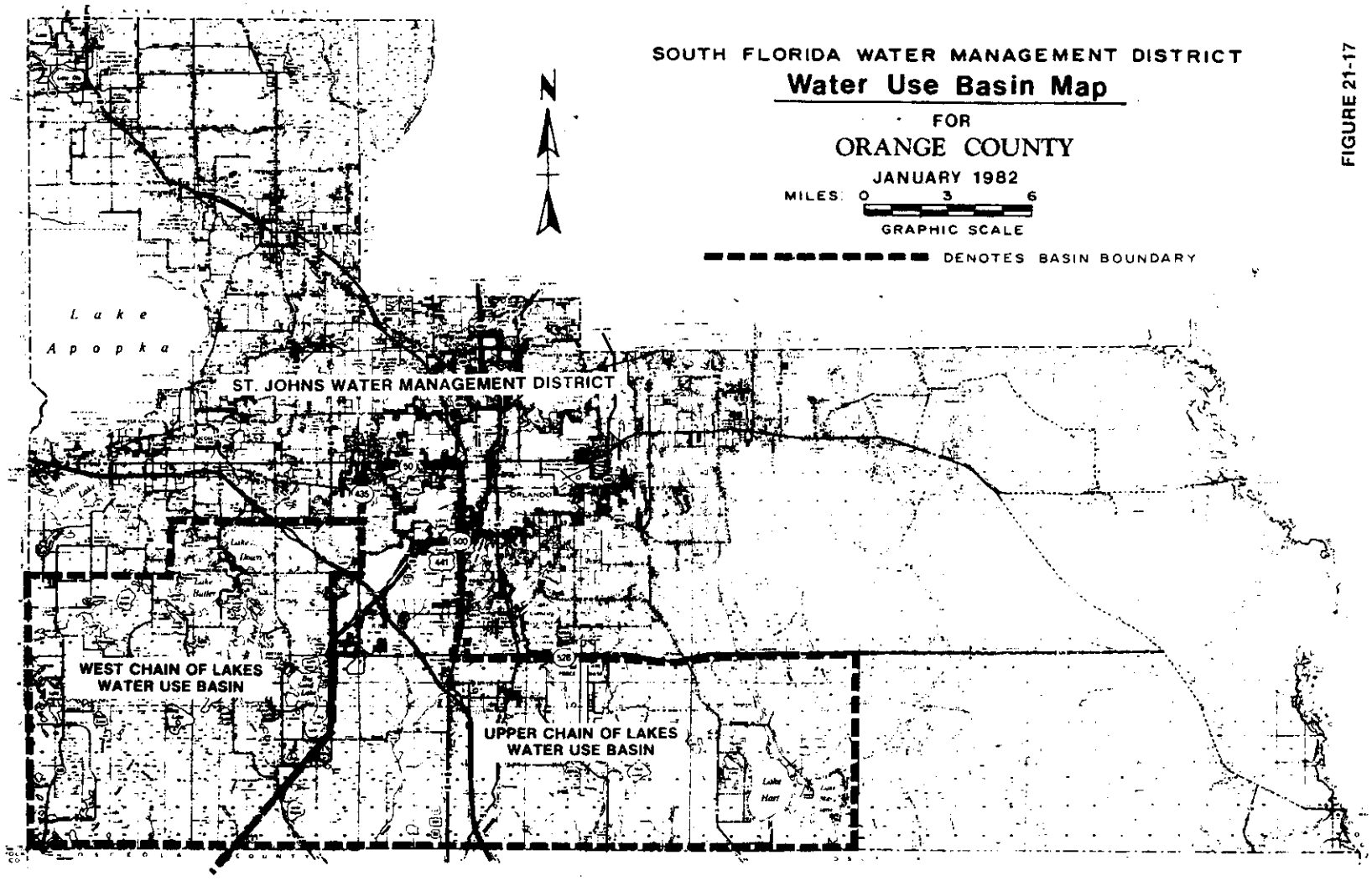
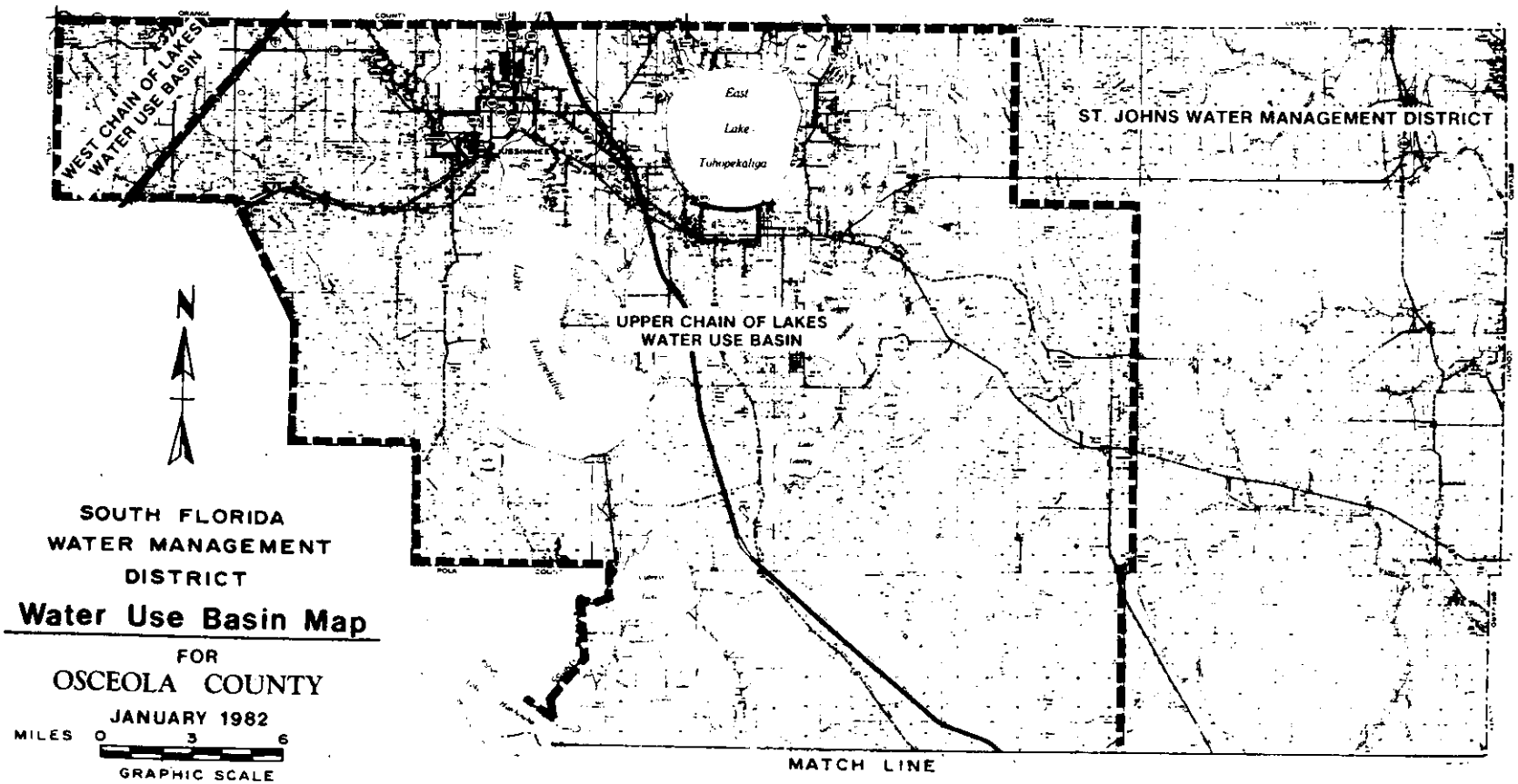

SOUTH FLORIDA WATER MANAGEMENT DISTRICT
Water Use Basin Map
FOR
ORANGE COUNTY
JANUARY 1982
MILES: 0 3 6
GRAPHIC SCALE
DENOTES BASIN BOUNDARY
N
Lake Apopka
ST. JOHNS WATER MANAGEMENT DISTRICT
WEST CHAIN OF LAKES WATER USE BASIN
UPPER CHAIN OF LAKES WATER USE BASIN

FIGURE 21-17



SOUTH FLORIDA WATER MANAGEMENT DISTRICT

Water Use Basin Map

FOR

OSCEOLA COUNTY

JANUARY 1982

MILES 0 3 6

GRAPHIC SCALE

DENOTES BASIN BOUNDARY

FIGURE 21-18

SHEET 1 OF 2

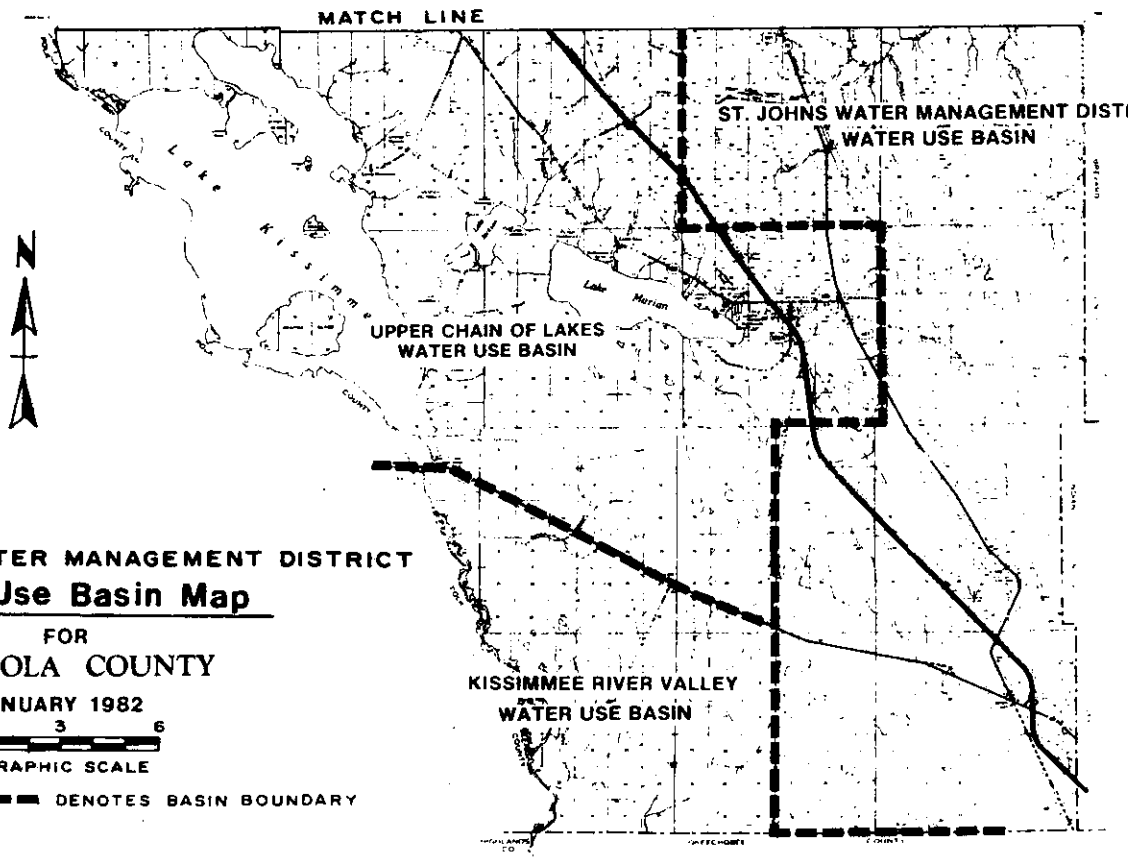


FIGURE 21-18
SHEET 2 OF 2

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

Water Use Basin Map

FOR

POLK COUNTY

JANUARY 1982

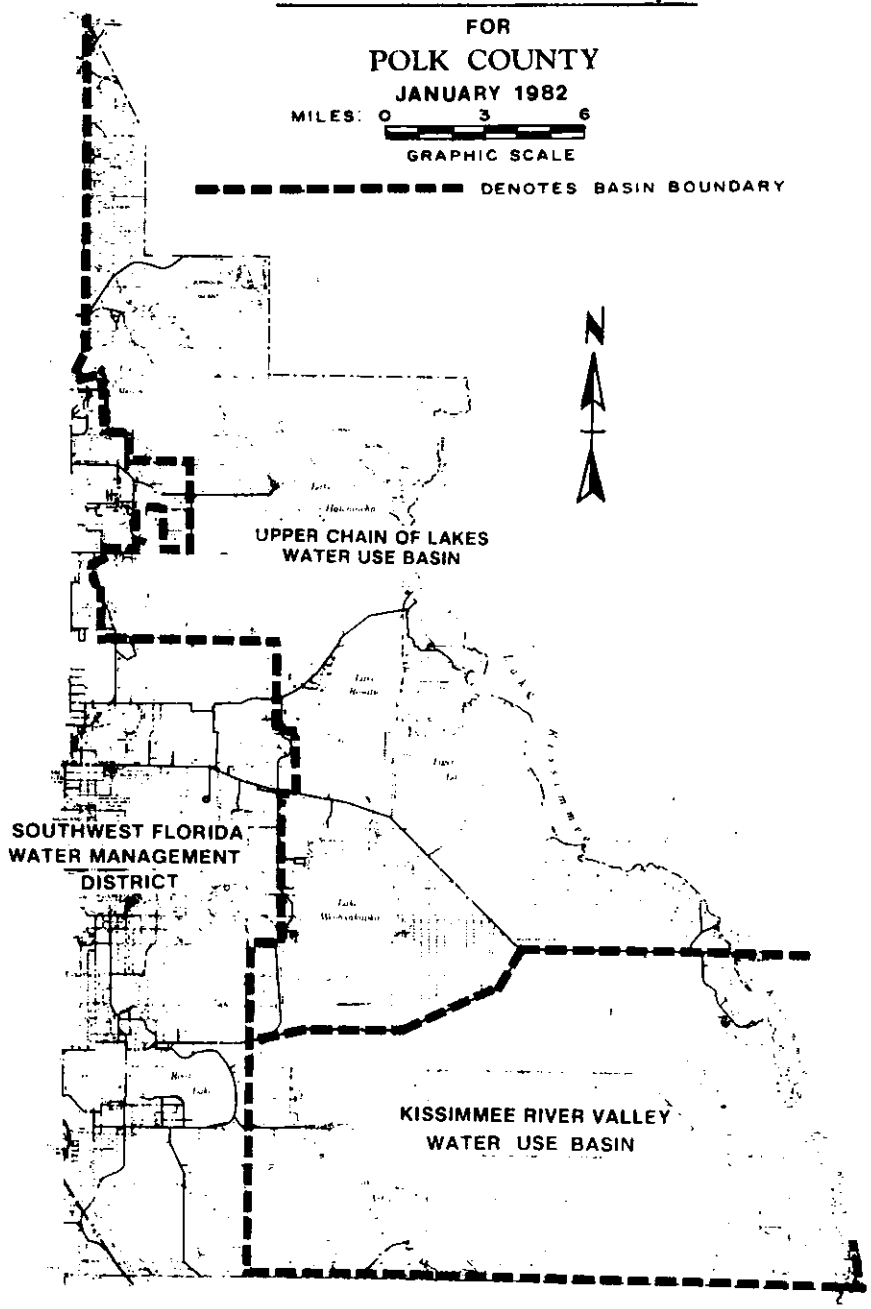
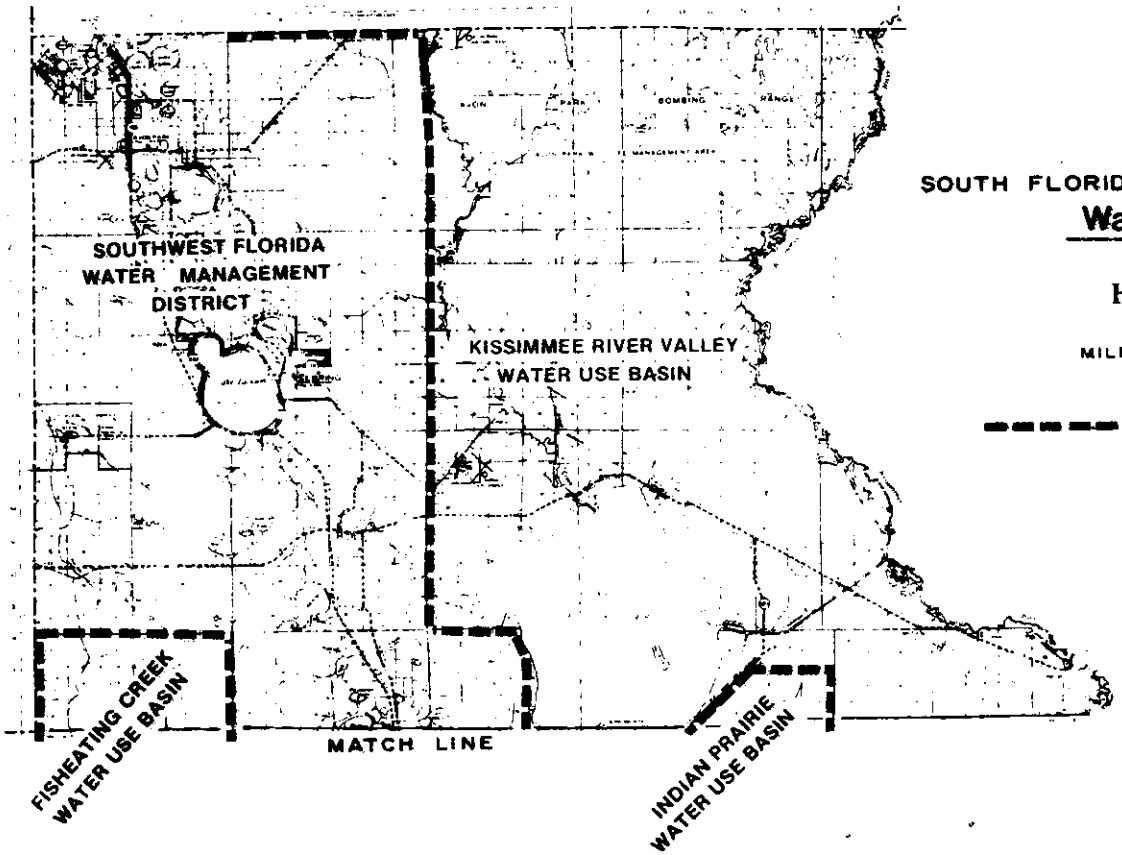


FIGURE 21-19

FIGURE 21-20
SHEET 1 OF 2



SOUTH FLORIDA WATER MANAGEMENT DISTRICT

Water Use Basin Map

FOR

HIGHLANDS COUNTY

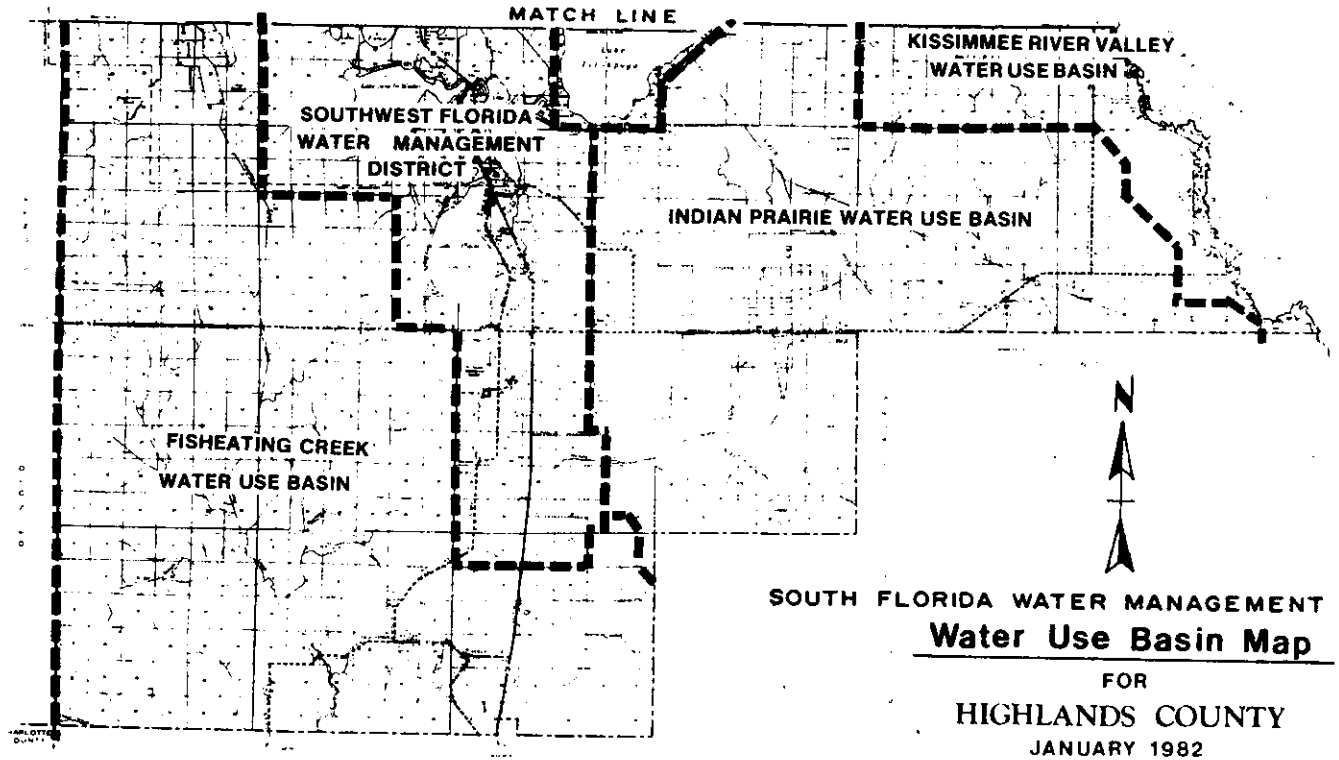
JANUARY 1982

MILES: 0 3 6

GRAPHIC SCALE

DENOTES BASIN BOUNDARY

N



SOUTH FLORIDA WATER MANAGEMENT DISTRICT

Water Use Basin Map

FOR

HIGHLANDS COUNTY

JANUARY 1982

MILES: 0 3 6

GRAPHIC SCALE

DENOTES BASIN BOUNDARY

FIGURE 21-20
SHEET 2 OF 2

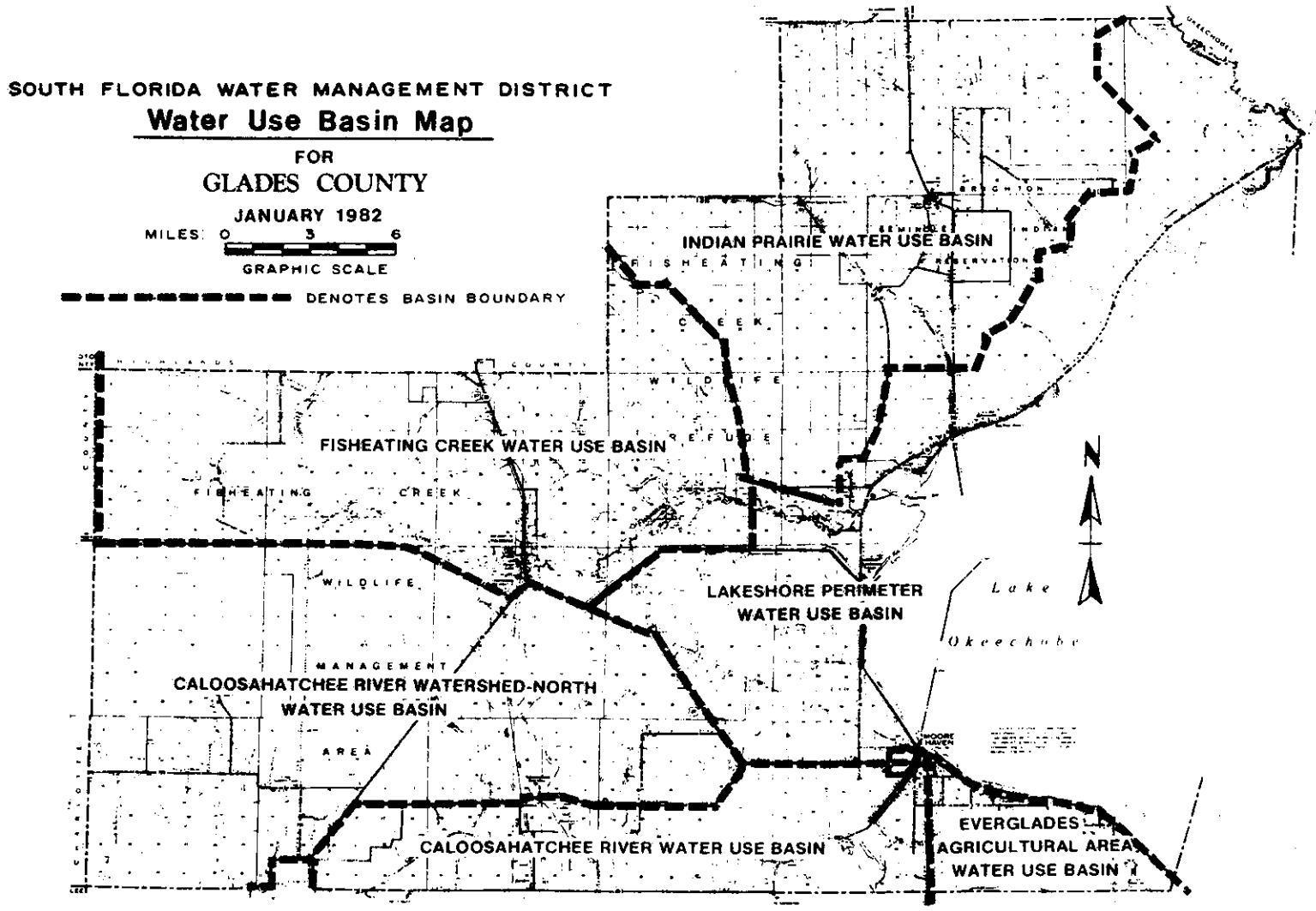

SOUTH FLORIDA WATER MANAGEMENT DISTRICT
Water Use Basin Map
FOR
GLADES COUNTY
JANUARY 1982
MILES 0 3 6
GRAPHIC SCALE
DENOTES BASIN BOUNDARY
INDIAN PRAIRIE WATER USE BASIN
FISHEATING CREEK WATER USE BASIN
LAKESHORE PERIMETER WATER USE BASIN
CALOOSAHATCHEE RIVER WATERSHED-NORTH WATER USE BASIN
CALOOSAHATCHEE 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

N

DENOTES BASIN BOUNDARY

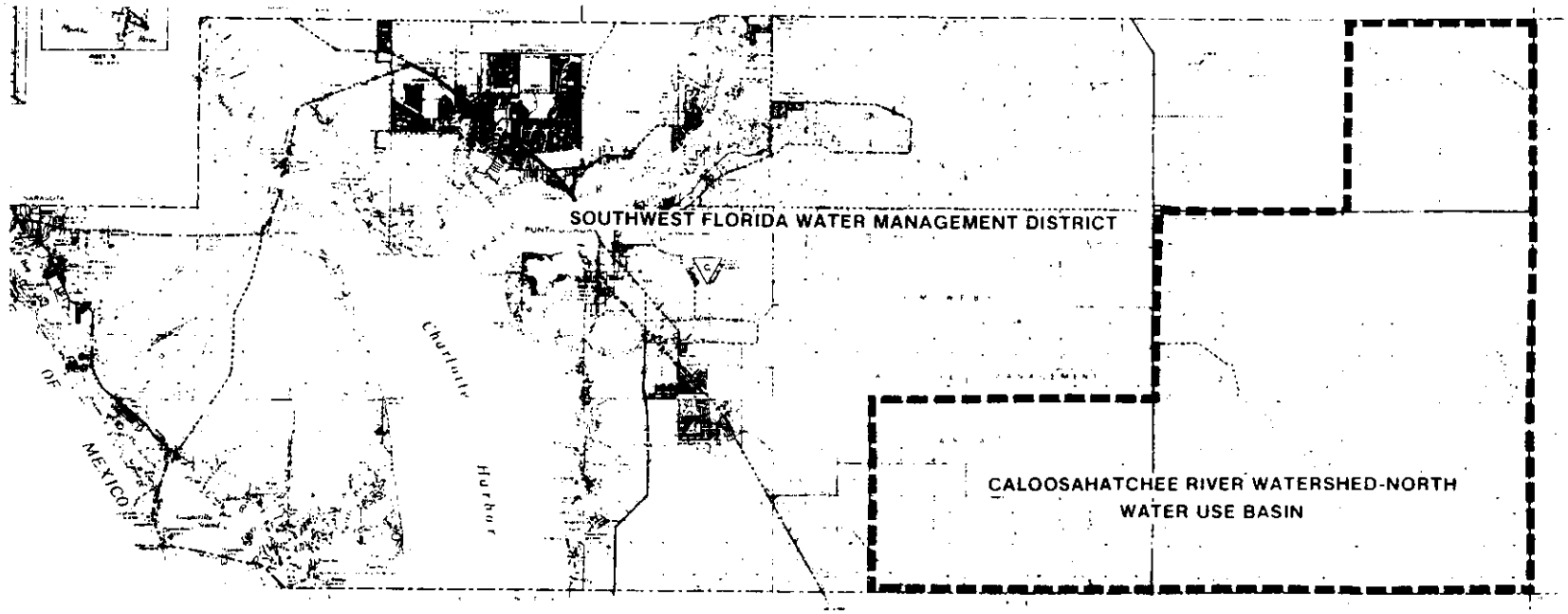


FIGURE 21-22

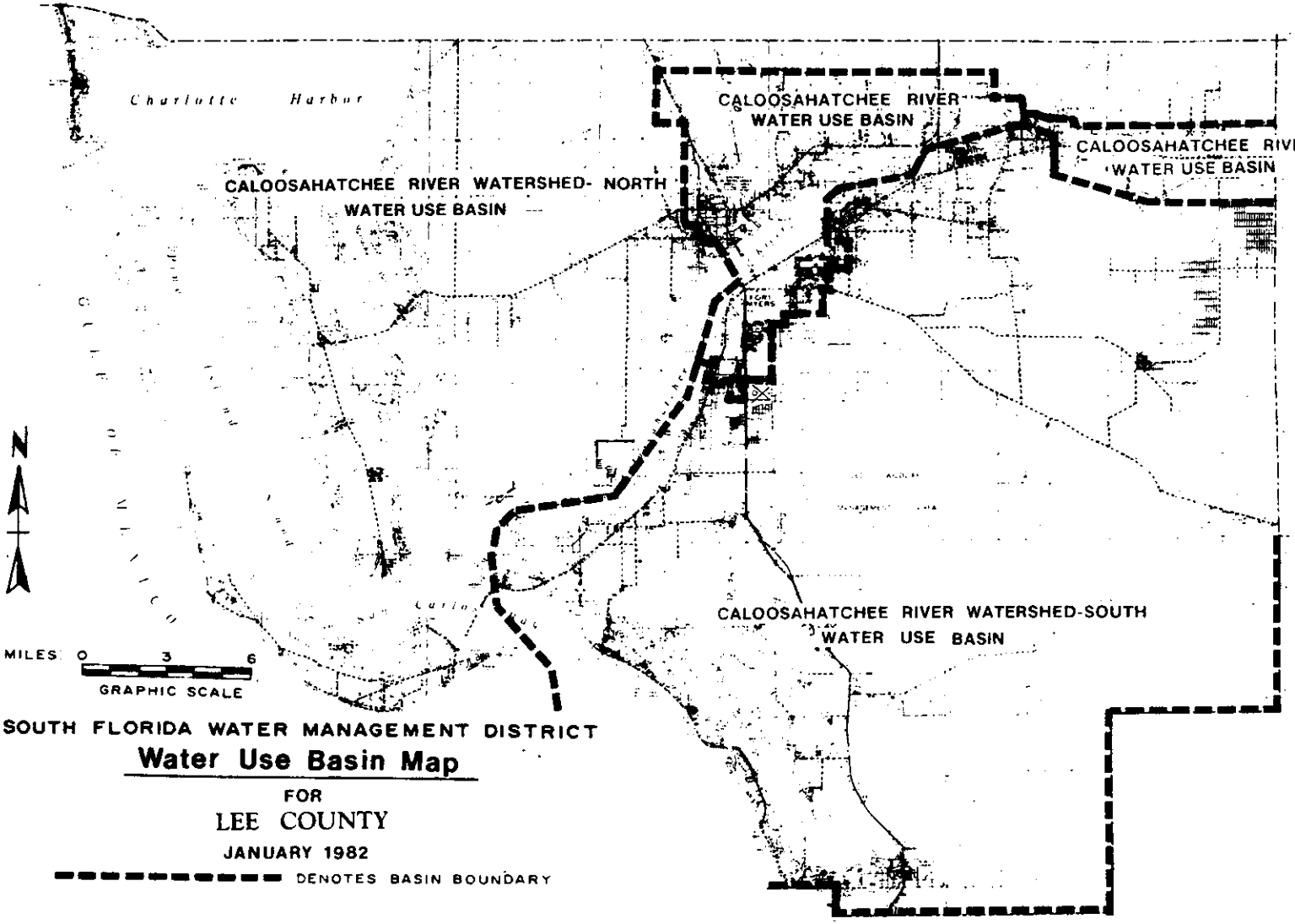

Charlotte Harbor
CALOOSAHATCHEE RIVER WATER USE BASIN
CALOOSAHATCHEE RIVER WATER USE BASIN
CALOOSAHATCHEE RIVER WATERSHED- NORTH WATER USE BASIN
CALOOSAHATCHEE RIVER WATERSHED-SOUTH WATER USE BASIN
N
MILES 0 3 6
GRAPHIC SCALE
SOUTH FLORIDA WATER MANAGEMENT DISTRICT
Water Use Basin Map
FOR
LEE COUNTY
JANUARY 1982
DENOTES BASIN BOUNDARY

FIGURE 21-23

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

Water Use Basin Map

FOR

HENDRY COUNTY

JANUARY 1982

MILES: 0 3 6

GRAPHIC SCALE

DENOTES BASIN BOUNDARY

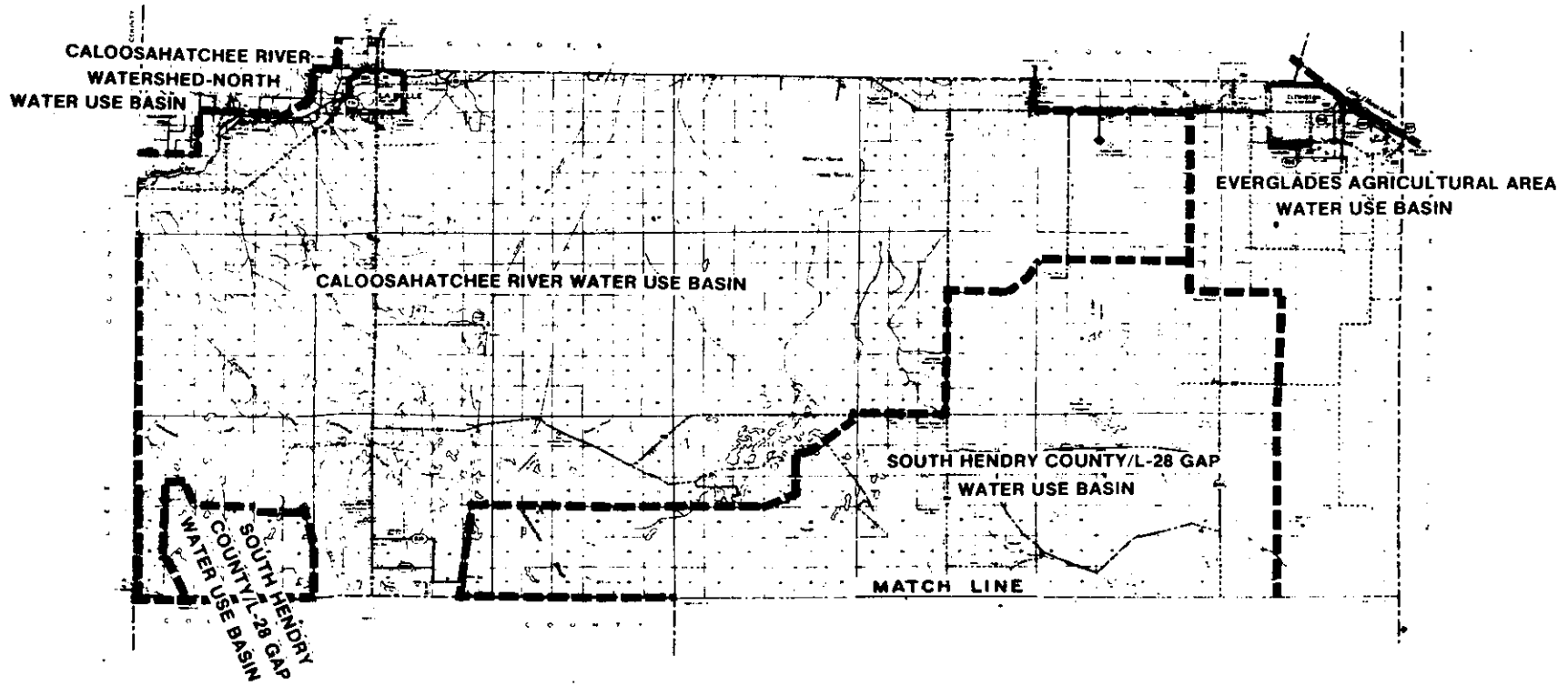


FIGURE 21-24
SHEET 1 OF 2

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

Water Use Basin Map

FOR

HENDRY COUNTY

JANUARY 1982

MILES: 0 3 6

GRAPHIC SCALE

DENOTES BASIN BOUNDARY

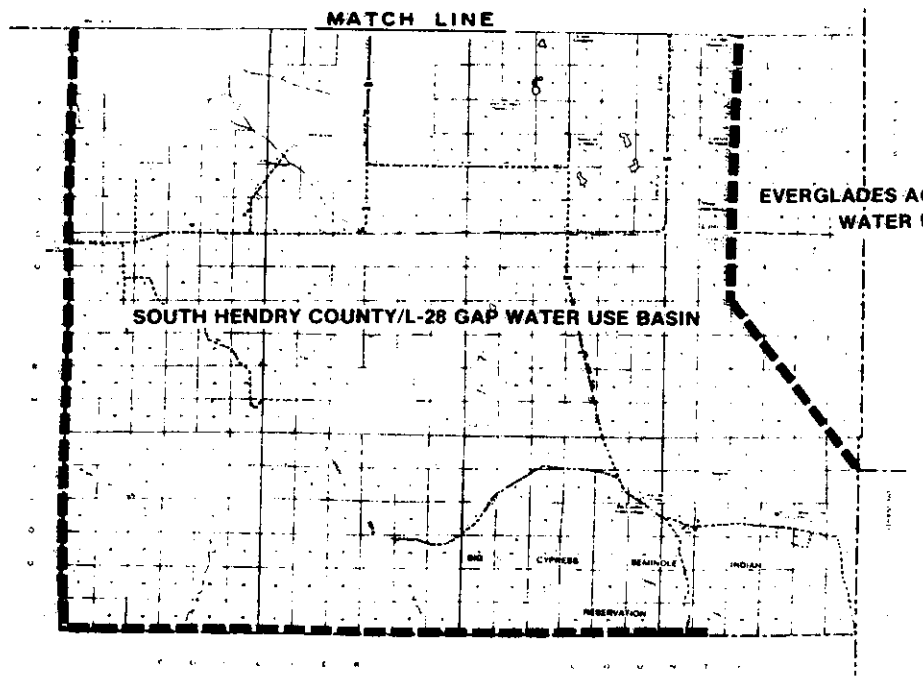


FIGURE 21-24
SHEET 2 OF 2

SOUTH FLORIDA
WATER MANAGEMENT DISTRICT

Water Use Basin Map

FOR

COLLIER COUNTY

JANUARY 1982

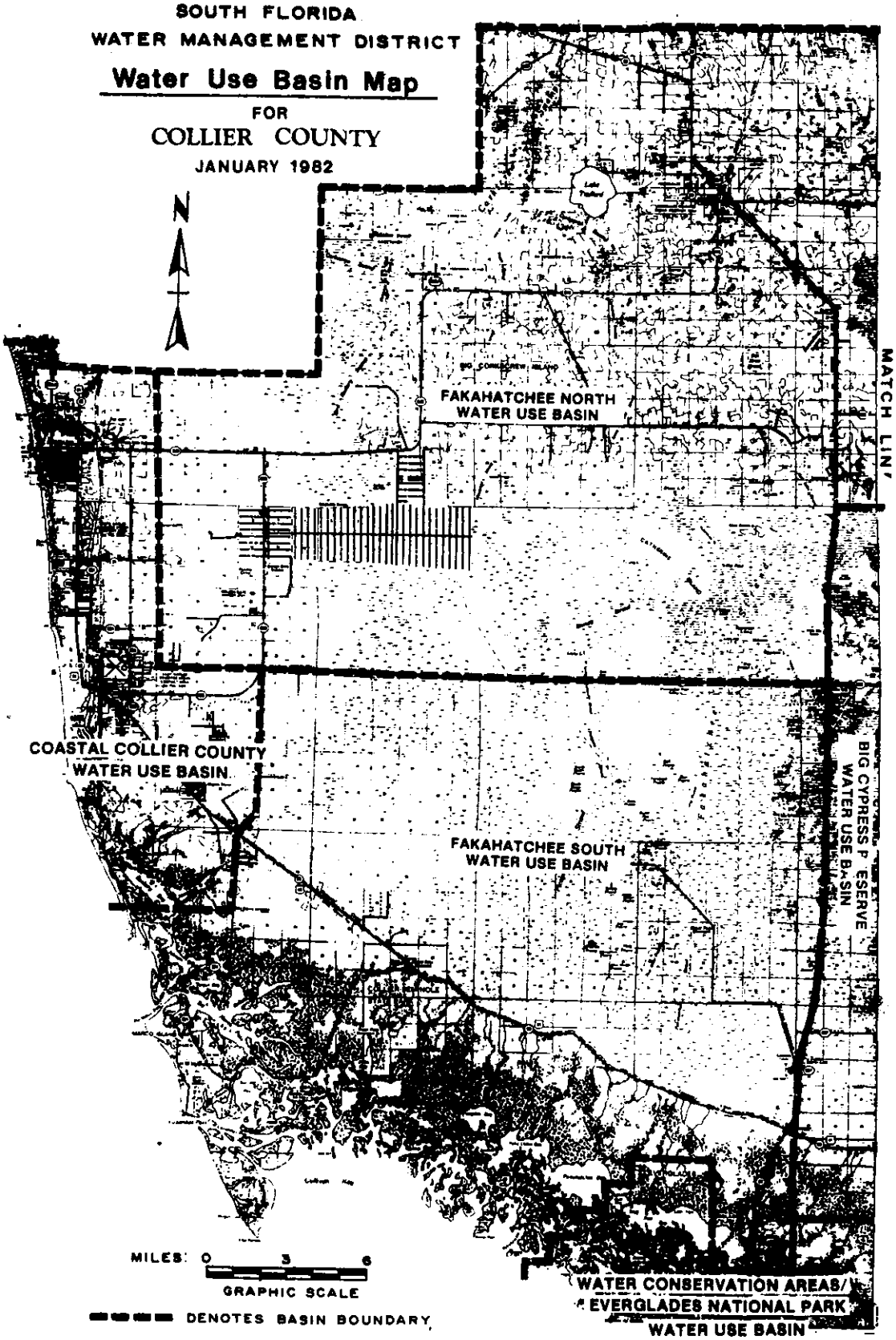


FIGURE 21-25

SHEET 1 OF 2

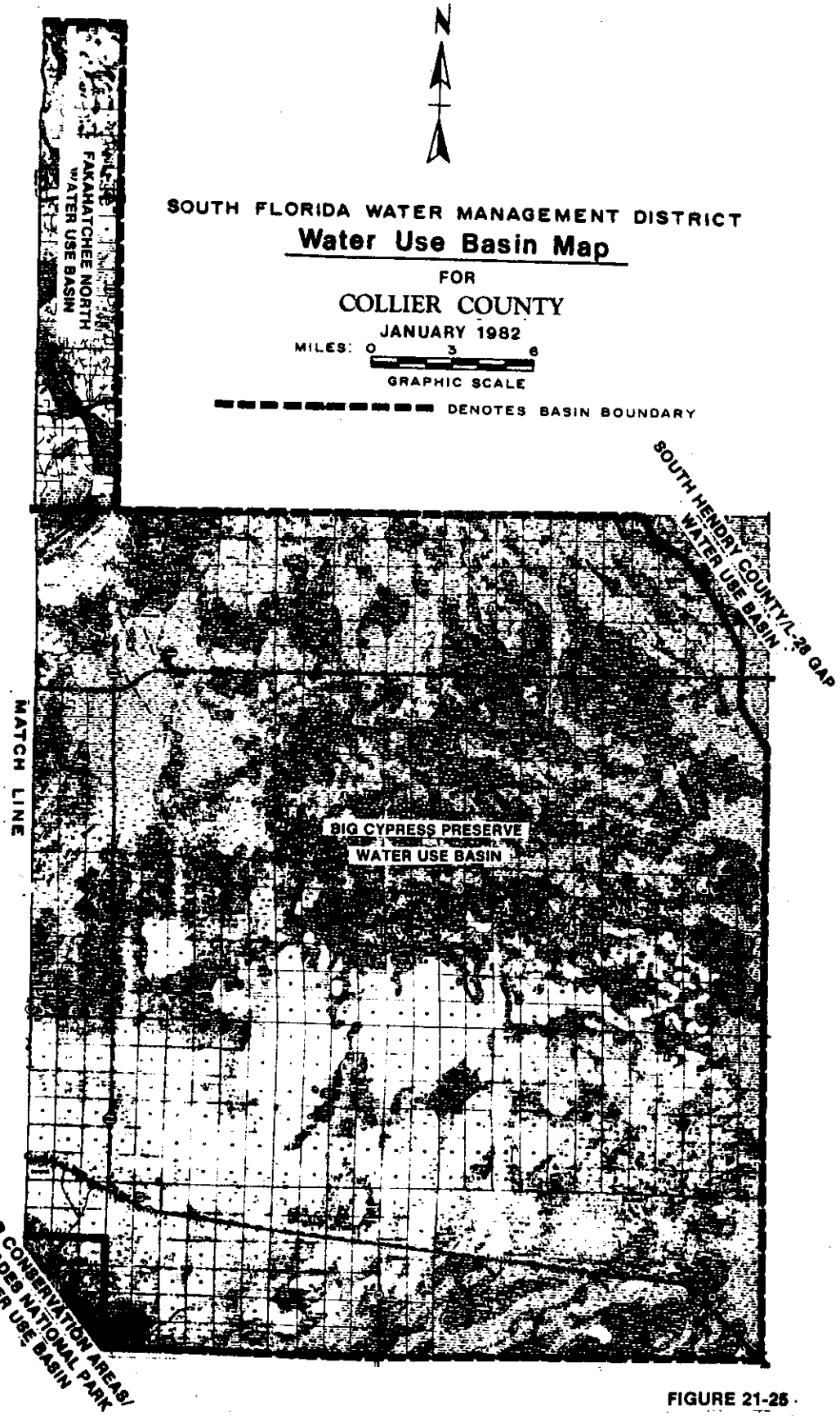


FIGURE 21-25
SHEET 2 OF 2

PART C

WATER MANAGEMENT RULES

CHAPTER 40E-22

REGIONAL WATER SHORTAGE PLANS

CHAPTER 40E-22
REGIONAL WATER SHORTAGE PLANS

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Rules of the South Florida Water Management District
REGIONAL WATER SHORTAGE PLANS
Chapter 40E-22

PART I LAKE ISTOKPOGA - INDIAN PRAIRIE AREA

40E-22.011 Policy and Purpose
40E-22.061 Indian Prairie Basin Boundary
40E-22.072 Minimum Levels
40E-22.082 Minimum Flows
40E-22.112 Permit Classification
40E-22.122 Termination of Withdrawals
40E-22.132 Water Use Restrictions

PART II ST. LUCIE COUNTY AGRICULTURAL AREA

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
40E-22.252 Permit Classification
40E-22.262 Termination of Withdrawals
40E-22.272 Water Use Restrictions

PART I LAKE ISTOKPOGA - INDIAN PRAIRIE AREA

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.

Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.041, 373.086, 373.103(4), 373.175, 373.246 F.S.
History–New 9-3-81.
Formerly 16K-30.01.

40E-22.061 Indian Prairie Basin Boundary.

(See Figure 22-1)

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 then 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 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 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.

Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.103, 373.175, 373.246 F.S.
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.

(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

	CANAL	(feet above mean sea level) 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

Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.042, 373.086, 373.103(4) F.S.
History--New 9-3-81.
Formerly 16K-30.03, 16K-30.05, 40E-21.072.

40E-22.082 Minimum Flows.

The following minimum monthly flows shall be maintained:

(1) Canals 39-A, 40, 41 and 41-A

(a) The monthly sum of the discharges at Structures 71, 72, 84, 127, 129, and 131 shall not be less than:

MONTH	MINIMUM FLOW (in acre-feet)
January	220
February	650
March	800
April	540
May	440
June	6500
July	5800
August	5500
September	6100

October	9200
November	1600
December	360

(b) If Lake Istokpoga is at or below its minimum level, no releases will be made for the sole purpose of maintaining the minimum flows established in this subsection.

(2) Arbuckle Creek

(a) The monthly discharge measured at U. S. Highway Number 98 shall not be less than:

MONTH	MINIMUM FLOW (in acre-feet)
January	9,025
February	9,025
March	2,025
April	7,790
May	5,510
June	8,550
July	19,000
August	26,600
September	27,550
October	28,500
November	11,400
December	7,790

(3) Josephine Creek

(a) The monthly discharge measured at State Road Number 17 shall not be less than:

MONTH	MINIMUM FLOW (in acre feet)
January	1,995
February	1,995
March	1,995
April	1,615
May	1,045
June	2,090
July	4,275
August	5,795
September	8,075
October	6,365
November	2,945
December	2,280

Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.042, 373.086, 373.103(4) F.S.
History--New 9-3-81.
Formerly 16K-30.04, 16K-30.06, 40E-21.082.

40E-22.112 Permit Classification.

(1) Water use permits will be classified by source and use within the following areas:

(a) all lands receiving water from Lake Istokpoga including the Lake Istokpoga Canal between Lake Istokpoga and the Lake Istokpoga canal structure;

(b) all lands within the Indian Prairie basin as defined in Rule 40E-22.062;

(c) all lands receiving water from the borrow canals of Interceptor Levees 59, 60 and 61.

(2) Source Classification.

(a) The following waters shall be classified "S".

1. Lake Istokpoga including the Lake Istokpoga Canal between Lake Istokpoga and the Lake Istokpoga canal structure;

2. Canals 39-A, 40, 41 and 41-A;

3. The borrow canals of Interceptor Levees 59, 60 and 61;

4. Any ditches and canals connecting with the facilities listed in subparagraphs 1., 2., or 3.

(b) The portion of the water table aquifer lying within 2,000 feet of the following waters shall be classified "G-1".

1. The shore line of Lake Istokpoga, including the Lake Istokpoga Canal between Lake Istokpoga and the Lake Istokpoga canal structure;

2. Canals 39-A, 40, 41 and 41-A;

3. The borrow canals of Interceptor Levees 59, 60 and 61;

4. Any ditch or canal connecting with Canals 39-A, 40, 41 and 41-A or the borrow canals of Interceptor Levees 59, 60 and 61 and with a depth below ground level in excess of 15 feet.

(c) The water table aquifer within areas specified in subsection (1), other than that portion of the aquifer described in paragraph (2)(b), shall be classified "G-2".

(d) The water body that has the generic name "Floridan Aquifer" (Artesian) shall be classified "G-3".

(3) Use Classification All uses shall be classified as provided in rule 40E-2.501.

Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.246 F.S.
History–New 9-3-81.
Formerly 16K-30.07, 40E-21.112.

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 is reached.

Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.086, 373.103(4), 373.246 F.S.
History–New 9-3-81.
Formerly 16K-30.08, 40E-21.122.

40E-22.132 Water Use Restrictions.

(1) The Water Shortage Plan in this section establishes the water use restrictions to be followed when the Board declares a water shortage within the Lake Istokpoga-Indian Prairie area. The restrictions are intended to insure that established minimum flows and levels within the area are maintained and that the water resources within the area do not suffer serious harm.

(2) If the Board declares a water shortage pursuant to rule 40E-21.231 or the

Executive Director with the advice and concurrence of the Board declares a water shortage emergency pursuant to rule 40E- 21.331 within the Lake Istokpoga-Indian Prairie Area, then uses from the affected source classes, shall be restricted pursuant to rule 40E-21.271 or rule 40E-21.371 respectively.

Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.119, 373.175, 373.246 F.S.
History–New 9-3-81, Amended 7-4-82.
Formerly 16K-30.09.

PART II ST. LUCIE COUNTY AGRICULTURAL AREA

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.

Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.042, 373.086, 373.103(4), 373.175, 373.246 F.S.
History–New 9-3-81.
Formerly 16K-31.01, 40E-21.212.

40E-22.222 St. Lucie County Agricultural Area Boundary.

(See Figure 22-3)

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 the 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, Township 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.

Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.103, 373.175, 373.246 F.S.
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
(a)	Canal 23 above Structure 97	14.0
(b)	Canal 23 between Structure 48 and Structure 97	4.0
(c)	Canal 24 above Structure 49	14.0
(d)	Canal 25 above Structure 99	14.0
(e)	Canal 25 between Structure 50 and Structure 99	8.0

Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.042, 373.086, 373.103(4) F.S.
History–New 9-3-81.
Formerly 16K-31.04, 40E-21.232.

40E-22.242 Minimum Flows.

(1) The following minimum monthly flows shall be maintained:

(a) The monthly discharge at Structure 48 shall not be less than:

MONTH	MINIMUM FLOW (in acre-feet)
January	292
February	329
March	365
April	219
May	401
June	1,168
July	1,533
August	1,533
September	1,680

October	2,118
November	694
December	292

(b) The monthly discharge at Structure 49 shall not be less than:

MONTH	MINIMUM FLOW (in acre-feet)
January	439
February	319
March	319
April	280
May	439
June	1,636
July	998
August	1,636
September	1,277
October	1,636
November	430
December	240

(c) The monthly discharge at Structure 50 shall not be less than:

MONTH	MINIMUM FLOW (in acre-feet)
January	480
February	400
March	560
April	520
May	440
June	1,279
July	1,639
August	1,399
September	1,199
October	1,679
November	1,439
December	399

(2) If Canal 23, 24, or 25 is at or below the following levels the minimum flow requirement for that canal will be suspended until the canal exceeds these levels:

(a) Dry Season (October 15 through May 14)

CANAL	LEVEL (feet above mean sea level)
C-23 above Structure 97	23.2
C-24 above Structure 49	21.2
C-25 above Structure 99	21.2

(b) Wet Season (May 15 through October 14)

CANAL	LEVEL (feet above mean sea level)
C-23 above Structure 97	22.2
C-24 above Structure 49	20.2

C-25 above Structure 99	20.2

Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.042, 373.086, 373.103(4) F.S.
History–New 9-3-81.
Formerly 16K-31.03, 40E-21.242.

40E-22.252 Permit Classification.

(1) Water Use Permits will be classified by source and use.

(2) Source Classification:

(a) Canals 23, 24 or 25 and all ditches and canals connecting with Canals 23, 24 or 25 shall be given a source classification of "S".

(b) The portion of the water table aquifer lying within 2,000 feet of the following waters shall be classified "G-1":

1. The centerline of Canals 23, 24 or 25;

2. Any ditch or canal connecting with Canals 23, 24 or 25 and with a depth below ground level in excess of 15 feet.

(c) The portion of the water table aquifer other than that described in paragraph (b) shall be classified "G-2".

(d) The water body that has the generic name "Floridan Aquifer" (Artesian) shall be classified "G-3".

(3) Use Classification All uses, shall be classified as provided in Rule 40E- 2.501.

Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.246 F.S.
History–New 9-3-81.
Formerly 16K-31.05, 40E-21.252.

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.

(b) For water withdrawals made from canals or ditches connecting with either Canal 23, 24 or 25:

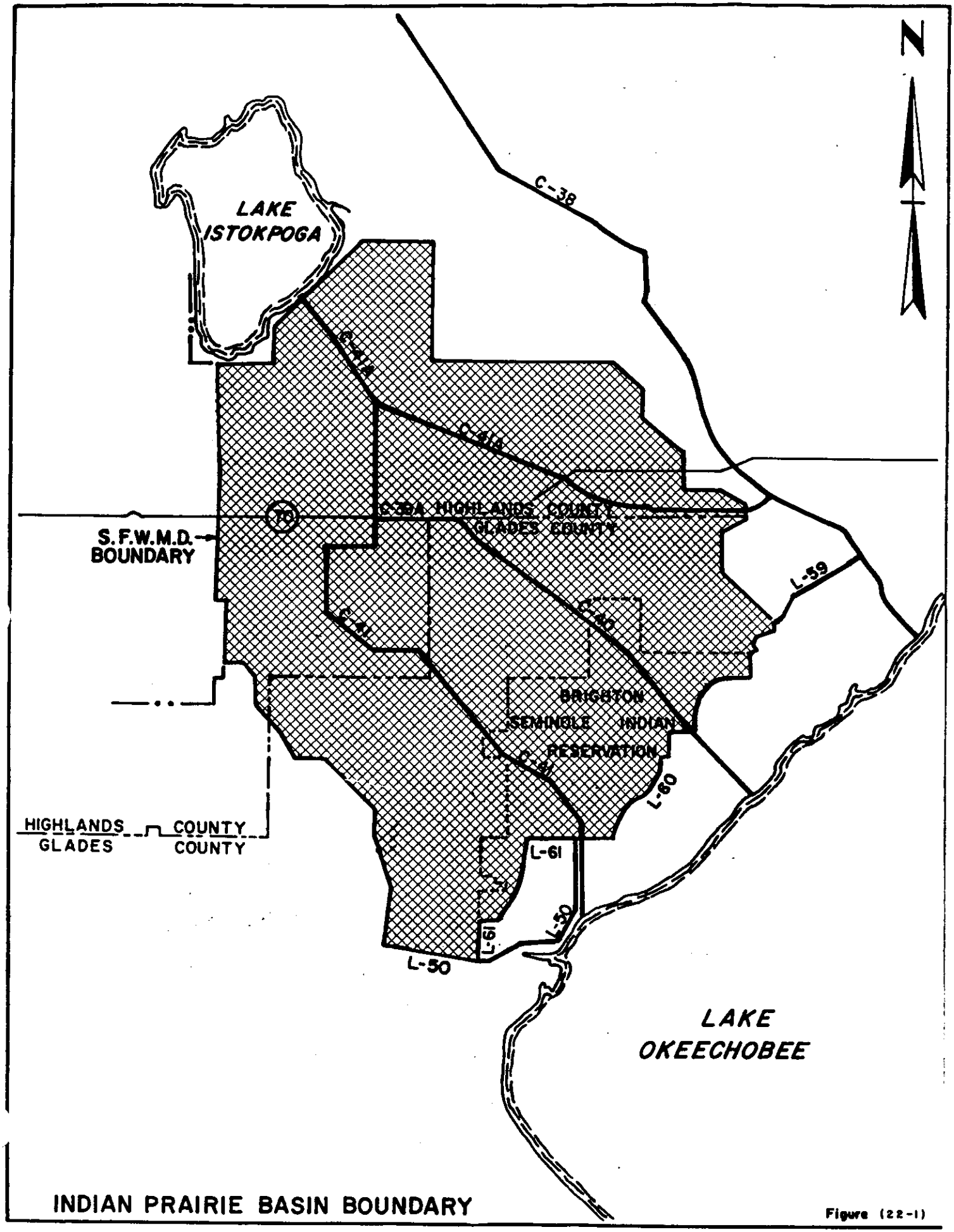
when the level in the connecting canal from which water is being withdrawn reaches an elevation of 14.0 feet mean sea level.

(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.

Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.086, 373.103(4), 373.246 F.S.
History–New 9-3-81.
Formerly 16K-31.06, 40E-21.262.

40E-22.272 Water Use Restrictions.

(1) When Canal 25 is less than 10.0 feet above mean sea level at Structure 50, the District may, upon notice, initiate restrictions upon agricultural, livestock, mining, industrial



INDIAN PRAIRIE BASIN BOUNDARY

Figure (22-1)

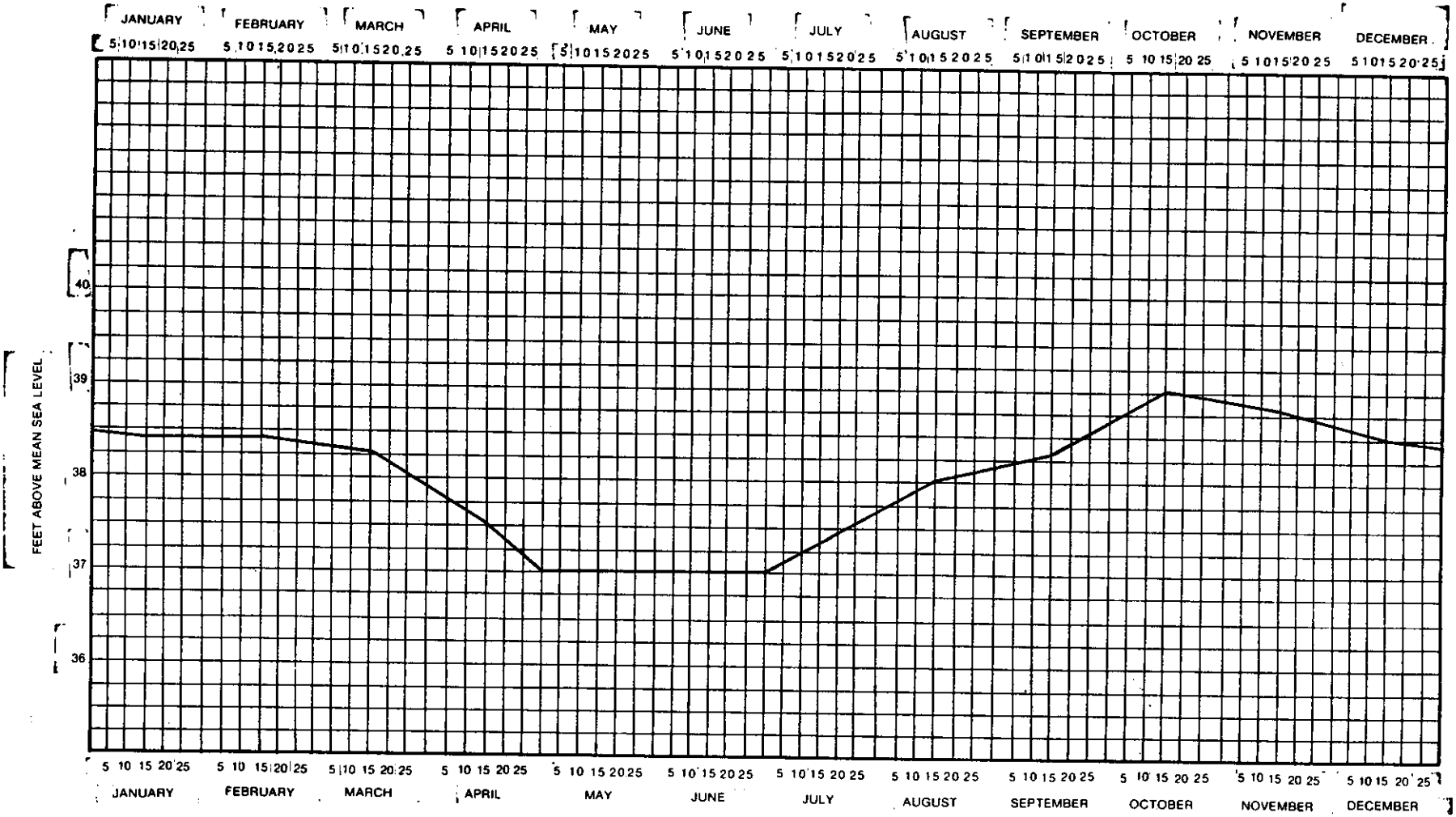
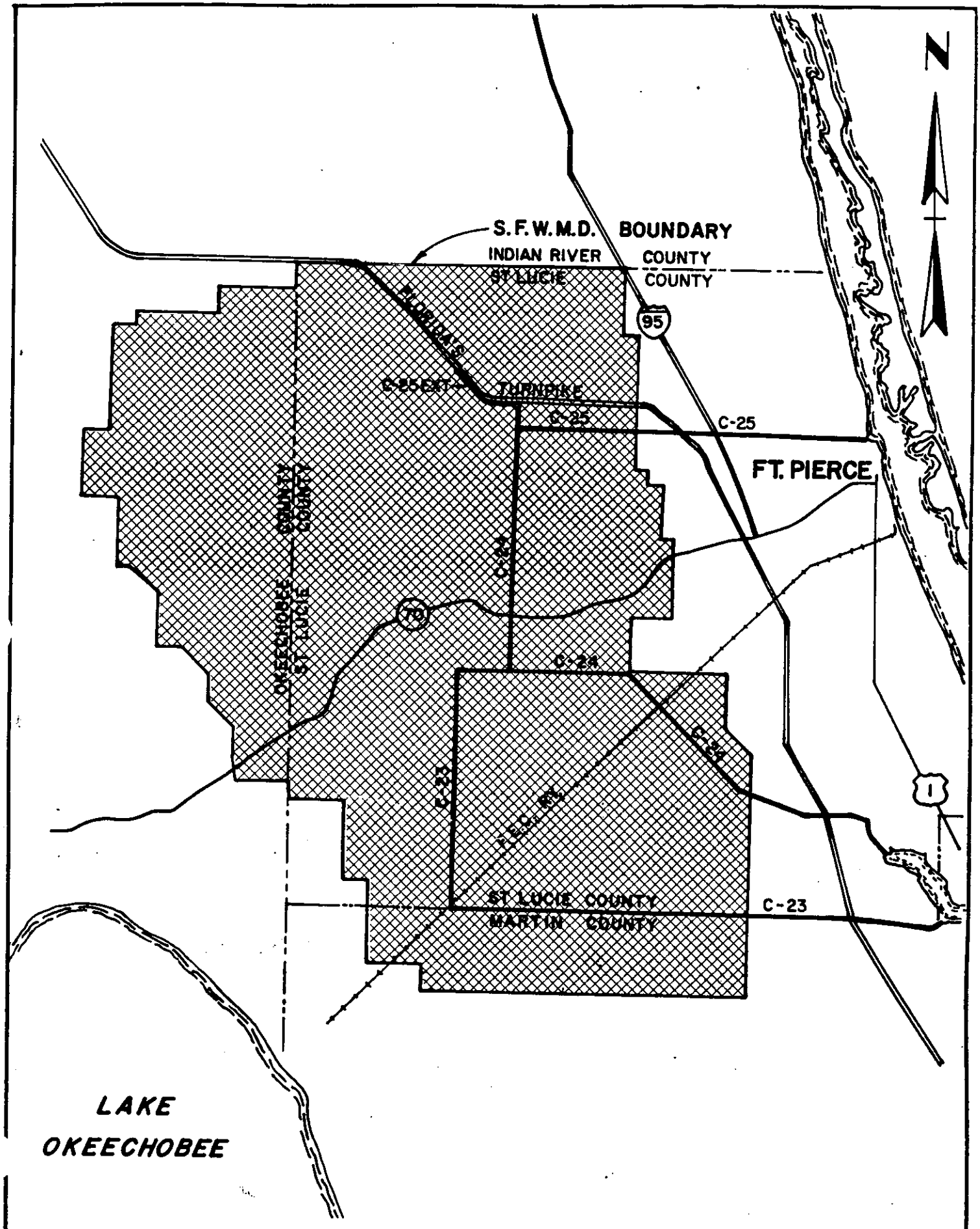


Figure 22-2 LAKE ISTOKPOGA MINIMUM LEVELS



ST LUCIE COUNTY AGRICULTURAL AREA

Figure (22-3)

PART C

WATER MANAGEMENT RULES

CHAPTER 40E-23

CRITICAL WATER SUPPLY PROBLEM AREAS

CHAPTER 40E-23
CRITICAL WATER SUPPLY PROBLEM AREAS

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Rules of the South Florida Water Management District
CRITICAL WATER SUPPLY PROBLEM AREAS
Chapter 40E-23

40E-23.011 Policy and Purpose
40E-23.021 Definitions
40E-23.023 Boundaries
40E-23.031 Implementation
40E-23.043 Application
40E-23.053 Criteria for Designation

40E-23.011 Policy and Purpose

The rules in this chapter designate areas that have water supply problems which have become critical or are anticipated to become critical within the next 20 years.

Specific Authority 373.044, 373.113, 373.171, F.S.
Law Implemented 373.016, 373.023, 373.103(1), 373.216-249, 403.064(1), F.S.
History–New 11-17-91.

40E-23.021 Definitions

(1) "Area of Special Concern" means an area that is of special water concern because of either limitations on water availability or other potentially adverse impacts associated with a proposed withdrawal.

(2) "Critical Water Supply Problem Areas" means those areas that have experienced or are anticipated to have water supply problems in the next 20 years as depicted on Figure 23-1.

(3) "Reduced Threshold Area (RTA)" means an area established by the District for which the threshold separating a General Permit from an individual permit has been lowered from the maximum limit of 3 MG per month (100,000 gpd) to 600,000 gallons per month (20,000 gpd). These areas are typically resource depleted areas where there has been an established history of sub-standard water quality, saline water movement into ground or surface water bodies or the lack of water availability to meet projected needs of a region.

(4) "Restricted Allocation Area" means 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 for which there is a lack of water availability to meet the needs of the region from that specific source of water.

(5) "Saline Water" means an aqueous solution with a chloride concentration greater than 250 mg/l and less than sea water.

(6) "Saline Water Interface" means a hypothetical surface of chloride concentration between fresh water and seawater where the chloride concentration is 250 mg/l at each point on the surface.

(7) "Saline Water Intrusion" means the phenomenon occurring when more dense saline water moves laterally inland from the seacoast or moves vertically upward to replace fresher water in an aquifer.

(8) "Seawater" means an aqueous solution with a chloride concentration equal to

or greater than 19,000 mg/l.

Specific Authority 373.044, 373.113, 373.171, F.S.
Law Implemented 373.016, 373.023, 373.216-249, 403.064(1), F.S.
History--New 11-17-91.

40E-23.023 Boundaries

The Critical Water Supply Problem Areas within the District are generally depicted in Figure 23-1, and specifically shall include the area within the following boundaries:

All those lands within the State of Florida lying southerly, easterly and westerly of the following specifically described line:

From the intersection of the easterly extension of the boundary line between St. Lucie and Indian River Counties and the Atlantic Ocean, including the waters of said Ocean and the islands therein within the jurisdiction of the State of Florida, thence, bear westerly along said easterly extension line and the said line between said St. Lucie and Indian River Counties to the intersection thereof with the east boundary line between Okeechobee and St. Lucie Counties, said point being also the Northeast (NE) corner of Section 1, Township 34 South, Range 36 East; Thence, southerly along the east line of said Section 1 and said boundary line between said Okeechobee and St. Lucie Counties, said line also being the boundary between Ranges 36 East and 37 East, to the Southeast (SE) corner of said Section 1; Thence, westerly along the south line of said Section 1 and the south lines of Sections 2 and 3, Township 34 South, Range 36 East to the Northwest (NW) corner of Section 10, Township 34 South, Range 36 East; Thence, southerly along the west line of said Section 10 to the Southeast (SE) corner of Section 9, Township 34 South, Range 36 East; Thence, westerly along the south line of Section 9 and the south lines of Sections 8 and 7, Township 34 South, Range 36 East to the intersection thereof with the boundary line between Ranges 35 East and 36 East; Thence, southerly along said boundary line between said Ranges 35 East and 36 East to the Northeast (NE) corner of Section 13, Township 34 South, Range 35 East; Thence, westerly along the north line of said Section 13 to the Northwest (NW) corner of said Section 13; Thence, southerly along the west line of said Section 13 and the west lines of Sections 24, 25 and 36, Township 34 South, Range 35 East to the intersection thereof with the boundary line between Townships 34 South and 35 South, said point being also the Southwest (SW) corner of said Section 36; Thence, westerly along the south line of Section 35, Township 34 South, Range 35 East and said boundary line between said Townships 34 South and 35 South to the intersection thereof with the easterly Right of Way line of U.S. Highway 441 (State Road 15); Thence, southerly along said easterly Right of Way line of said U.S. Highway 441 (State Road 15) to the intersection thereof with the south line of Section 27, Township 35 South, Range 35 East; Thence, easterly along said south line of said Section 27 and the south lines of Sections 26 and 25, Township 35 South, Range 35 East to the intersection thereof with the boundary line between Ranges 35 East and 36 East, said point being also the Southeast (SE) corner of said Section 25; Thence, southeasterly to the Northeast (NE) corner of Section 6, Township 36 South, Range 36 East; Thence, southerly along the east line of said Section 6 to the Southwest (SW) corner of

Section 8, Township 36 South, Range 36 East; Thence, easterly along the south line of said Section 8 to the Southeast (SE) corner of said Section 8; Thence, southeasterly to the Southeast (SE) corner of Section 16, Township 36 South, Range 36 East; Thence, southerly along the east line of Section 21, Township 36 South, Range 36 East to the Southeast (SE) corner of said Section 21; Thence, Southeasterly to the Northwest (NW) corner of Section 35, Township 36 South, Range 36 East; Thence, southerly along the west line of said Section 35 and the west line of Section 2, Township 37 South, Range 36 East to the Southwest (SW) corner of said Section 2; Thence, easterly along the south line of said Section 2 and the south line of Section 1, Township 37 South, Range 36 East to the intersection thereof with the boundary line between Okeechobee and St. Lucie Counties, said point being also the Southeast (SE) corner of said Section 1; Thence, southerly along said boundary line between said Okeechobee and St. Lucie Counties to the intersection thereof with the center line of South Florida Water Management District's Levee 64 Remainder; Thence, northwesterly along said center line of said Levee 64 Remainder and the center lines of South Florida Water Management District's Levees 63 North and 63 South to the west line of Section 32, Township 37 South, Range 36 East; Thence, southerly along said west line of said Section 32 to the Southeast (SE) corner of the Northeast one-quarter (NE1/4) of Section 31, Township 37 South, Range 36 East; Thence, westerly to the center of said Section 31; Thence, northerly to the northeast (NE) corner of the northwest one-quarter (NW1/4) of said Section 31; Thence, westerly along the north line of said Section 31 to the northwest (NW) corner of said Section 31; Thence, northerly to the Northeast (NE) corner of the Southeast one-quarter (SE1/4) of Section 25, Township 37 South, Range 35 East; Thence, westerly to the Northwest (NW) corner of the Southwest one-quarter (SW1/4) of said Section 25; Thence, northerly along the west line of said Section 25 and the west lines of Sections 24 and 13, Township 37 South, Range 35 East to the Northwest (NW) corner of said Section 13; Thence, westerly to the center line of Hamrick Road; Thence, northerly along said center line of said Hamrick Road to the intersection thereof with the north line of the South one-half (S1/2) of Section 11, Township 37 South, Range 35 East; Thence, westerly along the one-quarter (1/4) section line of said Section 11 and the one-quarter (1/4) section lines of Sections 10 and 9, Township 37 South, Range 35 East to the Southwest (SW) corner of the Northwest one-quarter (NW1/4) of said Section 9; Thence, southerly to the Southwest (SW) corner of said Section 9; Thence, westerly along the south lines of Sections 8 and 7, Township 37 South, Range 35 East to the intersection thereof with the boundary line between Ranges 34 East and 35 East, said point being also the Southwest (SW) corner of said Section 7; Thence, southerly along said boundary line between said Ranges 34 East and 35 East, said line being also the west lines of Sections 18, 19 and 30, Township 37 South, Range 35 East, to the Southwest (SW) corner of said Section 30; Thence, southeasterly to the intersection thereof with the boundary line between Townships 37 South and 38 South, said point being also the Southwest (SW) corner of Section 32, Township 37 South, Range 35 East; Thence, southwesterly to the Northwest (NW) corner of Section 18, Township 38 South, Range 35 East; Thence, southerly along

the west line of said Section 18 to the intersection thereof with the boundary line between Okeechobee and Glades Counties; Thence, northwesterly along said boundary line between said Okeechobee and Glades Counties, said line also being in part the boundary line between Highlands and Glades Counties, to the Southeast (SE) corner of Section 36, Township 37 South, Range 33 East; Thence, northerly along the east line of said Section 36 to the intersection thereof with the south Right of Way line of South Florida Water Management District's Canal 41A; Thence, northwesterly, leaving said Right of Way line of said Levee 41A, to the Northeast (NE) corner of Section 35, Township 37 South, Range 33 East; Thence westerly along the north line of said Section 35 and the north line of Section 34, Township 37 South, Range 33 East to the Northwest (NW) corner of the Northeast one-quarter (NE1/4) of said Section 34; Thence, northerly to the Northeast (NE) corner of the Southwest one-quarter (SW1/4) of Section 22, Township 37 South, Range 33 East; Thence, northwesterly to the Northwest (NW) corner of Section 16, Township 37 South, Range 33 East; Thence, northerly to the Southeast (SE) corner of Section 5, Township 37 South, Range 33 East; Thence, northwesterly to the intersection thereof with the boundary line between Townships 36 South and 37 South, said point being also the Northwest (NW) corner of said Section 5; Thence, westerly along said boundary line, said line being also the north line of Section 6, Township 37 South, Range 33 East and the north lines of Sections 1, 2, 3, 4, 5 and 6, Township 37 South, Range 32 East, to the intersection thereof with the boundary line between Ranges 31 East and 32 East, said point being also the Northwest (NW) corner of said Section 6; Thence, northerly along said boundary line, said line being also the west lines of Sections 31, 30, 19, 18 and 7, Township 36 South, Range 32 East, to the Northeast (NE) corner of the South one-half (S1/2) of Section 12, Township 36 South, Range 31 East; Thence, westerly along the one-quarter (1/4) line of said Section 12 and the one-quarter (1/4) lines of Sections 11 and 10, Township 36 South, Range 31 East to the intersection thereof with the center line of State Road 621; Thence, southwesterly, southerly and westerly along said center line of said State Road 621 to the intersection thereof with the boundary line between Townships 36 South and 37 South, said point being also the westerly boundary line of the South Florida Water Management District and the Northwest (NW) corner of Section 2, Township 37 South, Range 30 East; Thence, southerly along the west line of said Section 2 and said westerly boundary line of said South Florida Water Management District, being also the west lines of Sections 11, 14, 23, 26 and 35, Township 37 South, Range 30 East, and Sections 2, 11 and 14, Township 38 South, Range 30 East, to the Southwest (SW) corner of said Section 14; Thence, easterly along the south line of said Section 14 and said westerly boundary line of said South Florida Water Management District to the Northwest (NW) corner of the East one-half (E1/2) of the West one-half (W1/2) of Section 23, Township 38 South, Range 30 East; Thence, southerly along the west line of the East one-half (E1/2) of the West one-half (W1/2) of said Section 23 and the west lines of the East one-half (E1/2) of the West one-half (W1/2) of Sections 26 and 35, Township 38 South, Range 30 East, said line being also the westerly boundary line of said South Florida Water Management District, to the Southwest (SW) corner of the East

one-half (E1/2) of the Northwest one-quarter (NW1/4) of said Section 35; Thence, easterly, and leaving said westerly boundary line of said South Florida Water Management District, along the south line of the North one-half (N1/2) of said Section 35 to the intersection thereof with the east line of said Section 35, said point being also the Southeast (SE) corner of the North one-half (N1/2) of said Section 35; Thence, southeasterly to the intersection thereof with the north line of Section 1, Township 39 South, Range 30 East, said point being also the Northwest (NW) corner of the Northeast one-quarter (NE1/4) of said Section 1 and the boundary between Townships 38 South and 39 South; Thence, southerly to the intersection thereof with the south line of said Section 1, said point being also the Southwest (SW) corner of the Southeast one-quarter (SE1/4) of said Section 1; Thence, southeasterly to the intersection thereof with the east line of Section 12, Township 39 South, Range 30 East, said point being also the boundary line between Highlands and Glades Counties and also the Northeast (NE) corner of the Southeast one-quarter (SE1/4) of said Section 12; Thence, southeasterly to the Southeast (SE) corner of the Southwest one-quarter (SW1/4) of Section 7, Township 39 South, Range 31 East; Thence, southeasterly to the Southwest (SW) corner of Section 17, Township 39 South, Range 31 East; Thence, easterly along the south line of said Section 17 to the Northwest (NW) corner of Section 21, Township 39 South, Range 31 East; Thence, southeasterly to the Northwest (NW) corner of Section 35, Township 39 South, Range 31 East; Thence, southerly along the west line of said Section 35 to the intersection thereof with the boundary line between Townships 39 South and 40 South, said point being also the Southwest (SW) corner of said Section 35; Thence, easterly along said boundary line between said Townships 39 South and 40 South, being also 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 northerly extension of said southwesterly Right of Way line of said Levee 50 to the intersection thereof with the east line of Section 26, Township 40 South, Range 31 East; Thence, southerly along said east line of said Section 26 and the east line of Section 35, Township 40 South, Range 31 East to the intersection thereof with the north Right of Way line of South Florida Water Management District's Levee Dike 3; Thence, westerly and southwesterly along said Right of Way line of said Levee Dike 3 and the northwesterly Right of Way line of South Florida Water Management District's Levee 43 and its southwesterly extension to the intersection thereof with the center line of U.S. Highway 27 (State Road 25); Thence, southeasterly along said center line of said U.S. Highway 27 (State Road 25) to the intersection thereof with the center line of State Road 78; Thence, southwesterly and westerly along said center line of said State Road 78 to the intersection thereof with the boundary line between Ranges 29 East and 30 East, said point being on the east line of Section 13, Township 42 South, Range 29 East; Thence, northerly along said east line of said Section 13 and the east lines of Sections 12 and 1, Township 42 South, Range 29 East to the boundary line between Townships 41 South and 42 South, said point being also the Northeast (NE) corner of said Section 1; Thence, westerly along said boundary line, being

also the north line of said Section 1 and the north lines of Sections 2, 3, 4, 5 and 6, Township 42 South, Range 29 East, and the north lines of Sections 1, 2, 3, 4, 5, and 6, Township 42 South, Range 28 East, to the intersection thereof with the boundary line between Glades and Charlotte Counties, said point being also the boundary line between Ranges 27 East and 28 East and also the Northwest (NW) corner of Section 6, Township 42 South, Range 27 East; Thence, southerly along said boundary line between said Glades and Charlotte Counties and the boundary line between said Ranges 27 East and 28 East, being also the west line of said Section 6 and the west lines of Sections 7, 18, 19, 30 and 31, Township 42 South, Range 28 East, to the intersection thereof with the boundary line between Lee and Charlotte Counties, said point being also the boundary line between Townships 42 South and 43 South and also in part the northerly boundary line of the South Florida Management District and also the Southwest (SW) corner of said Section 31; Thence, westerly along said boundary line between said Lee and Charlotte Counties and its westerly extension and in part said boundary line between said Townships 42 South and 43 South and said northerly boundary line of said South Florida Water Management District and its westerly extension to the intersection thereof with the Gulf of Mexico, including the waters of said Gulf and the islands therein within the jurisdiction of the State of Florida, and the end of the specifically described line.

Specific Authority 373.044, 373.113, 373.171, F.S.
Law Implemented 373.016, 373.023, 373.216-249, 403.064(1), F.S.
History–New 11-17-91.

40E-23.031 Implementation

The effective date for rules established in this chapter is 11-17-91.

Specific Authority 373.044, 373.113, 373.171, F.S.
Law Implemented 373.016, 373.023, 373.216-249, 403.064(1), F.S.
History–New 11-17-91.

40E-23.043 Application

All water uses within the critical water supply problem areas designated on Figure 23-1 shall meet the applicable criteria specified in the Basis of Review for Water Use Permit Applications Within the South Florida Water Management District, incorporated by reference in Rule 40E-2.091(1)(a), F.A.C. If a water use project is divided by the boundary line designating the area a Critical Water Supply Problem Area, the entire project shall be treated as if it lies within the Critical Water Supply Problem Area.

Specific Authority 373.044, 373.113, 373.171, F.S.
Law Implemented 373.016, 373.023, 373.216-249, 403.064(1), F.S.
History–New 11-17-91.

40E-23.053 Criteria for Designation

The following criteria are used to designate critical water supply problem areas:

(1) Areas that have been designated as a Reduced Threshold Area and identified in Rule 40E-20.302, F.A.C.;

(2) Areas that have been designated as an Area of Special Concern pursuant to criteria contained in the Basis of Review for Water Use Permit Applications Within the South Florida Water Management District, incorporated by reference in Rule 40E-2.091(1)(a), F.A.C.;

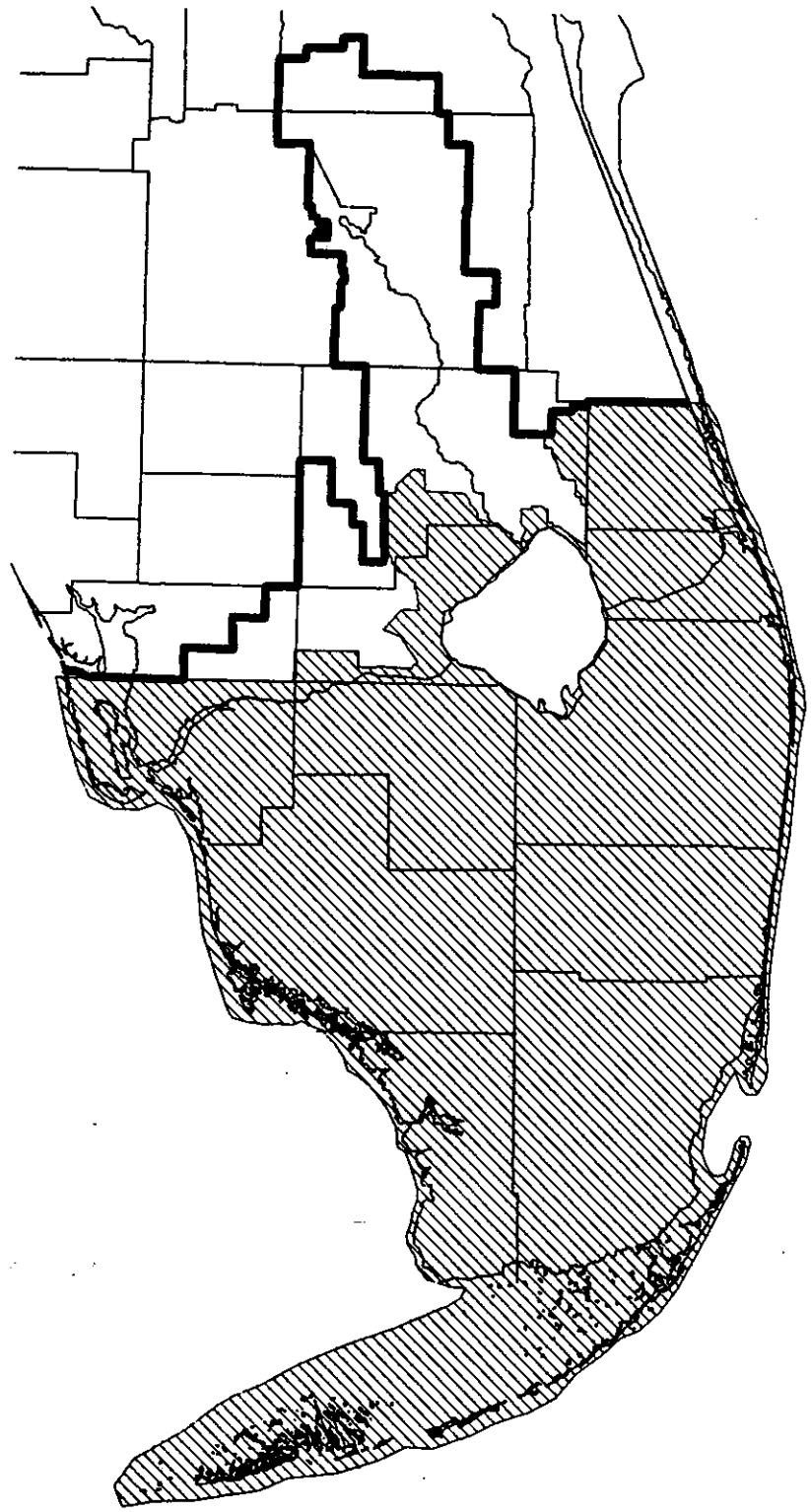
(3) Areas that have experienced water shortage restrictions pursuant to Rule 40E-21.231, F.A.C. of two or more declarations or one declaration of a duration of 90 days or more since May 31, 1982;

(4) Areas that have been designated as a Restricted Allocation Area pursuant to criteria contained in the Basis of Review for Water Use Permit Applications Within the South Florida Water Management District, incorporated by reference in Rule 40E-2.091(1)(a), F.A.C.;

(5) Areas that are experiencing saline water intrusion; or

(6) Other areas with known or anticipated water supply problems.

Specific Authority 373.044, 373.113, 373.171, F.S.
Law Implemented 373.016, 373.023, 373.216-249, 403.064(1), F.S.
History--New 11-17-91.



critical water supply problem areas

composition name:criticalsp.plt	
drawn by: rrm	date: 5/7/91
revised by:	date:
Planning Dept.	Div. 905

Figure 23-1

PART C

WATER MANAGEMENT RULES

CHAPTER 40E-30

GENERAL PERMITS FOR WELLS

CHAPTER 40E-30
GENERAL PERMITS FOR WELLS

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Rules of the South Florida Water Management District
GENERAL PERMITS FOR WELLS
Chapter 40E-30

40E-30.011 General Permit for Wells
40E-30.031 Implementation
40E-30.042 General Permit for Construction, Repair or Abandonment of Wells
40E-30.112 Notice of Intent
40E-30.141 Request for Additional Information
40E-30.302 Thresholds for South Dade County

40E-30.011 General Permit for Wells.

The rules in this Part grant general permits for certain specified well construction, repair or abandonment activities which have been determined by the District to exist in unique geographic areas. The purpose of this part is to set forth the requirements for qualifying for a general permit and the conditions under which it may be exercised. Non-exempt wells not qualifying for a general permit are required to obtain permits under Parts I and II.

The District reserves the right to require permits under Parts I and II of this Chapter if the proposed construction, repair or abandonment of the well does not comply with the provisions of this Part or may be harmful to the water resources of the District, inconsistent with the intent and purpose of Part III of Chapter 373, Florida Statutes, or with the overall objectives of this rule or may be otherwise contrary to the public interest.

Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.309, 373.313, 373.326, 373.342 F.S.
History–New 1-10-85.

40E-30.031 Implementation

The effective dates for the rules established in this Chapter is January 7, 1985.

Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.309, 373.313, 373.326, 373.342 F.S.
History–New 1-10-85.

40E-30.042 General Permit for Construction, Repair or Abandonment of Wells.

(1) The construction, repair or abandonment of wells in accordance with Rule 40E-30.302 are authorized subject to the requirements of this Part.

(2) No construction, repair or abandonment of wells shall be commenced until the permittee has received a written authorization to proceed from the District.

(3) The District shall issue the authorization to proceed within 30 days of receipt of the completed Notice of Intent and all requested additional information.

Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.309, 373.313, 373.326, 373.342 F.S.
History–New 1-10-85.

40E-30.112 Notice of Intent.

At least 30 days prior to the commencement of the construction, repair or abandonment of any well authorized in Rule 40E-30.302 the permittee shall file with the

District, a written Notice of Intent to Construct, Repair or Abandon Wells Pursuant to General Permits. The notice shall include the following information:

(1) The name, address, telephone number and license number of the licensed contractor who will be constructing the wells,

(2) The name, address and telephone number of the property owner and his agent, if applicable, on whose property the well is to be drilled,

(3) The total acreage and location of the property (to the nearest section or one-quarter section) and a map showing the location of the property,

(4) The number, diameter and depth of proposed wells,

(5) The proposed interval of spacing between wells,

(6) The type of crop proposed,

(7) The description of casing, grout or seals to be used in construction or repair, and

(8) The signature of the owner, leasee or his agent and the licensed water well contractor.

Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.309, 373.313, 373.326, 373.342 F.S.
History–New 1-10-85.

40E-30.141 Request for Additional Information.

If the information submitted is not in accordance with Rule 40E-30.112, the District may request the permittee to submit additional information within 30 days of receipt of the Notice of Intent.

Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.309, 373.313, 373.326, 373.342 F.S.
History--New 1-10-85.

40E-30.302 Thresholds for South Dade County.

(1) It is determined that compliance with Rules 40E-3.101, 40E-3.201, 40E- 3.301, 40E-.3321, 40E-3.411, 40E-3.507, 40E-3.512, 40E-3.517 and 40E-3.531 will create an undue hardship to those persons proposing to construct, repair or abandon wells used for agricultural water use within South 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 Part III of Chapter 373, Florida Statutes, 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) The wells which are included in the threshold area are those intended for agricultural use which do not exceed 25 feet in depth and which are located within the area depicted on Figure 30-1 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.

Specific Authority 373.044, 373.113 F.S.
Law Implemented 373.309, 373.313, 373.326, 373.342 F.S.
History–New 1-10-85.

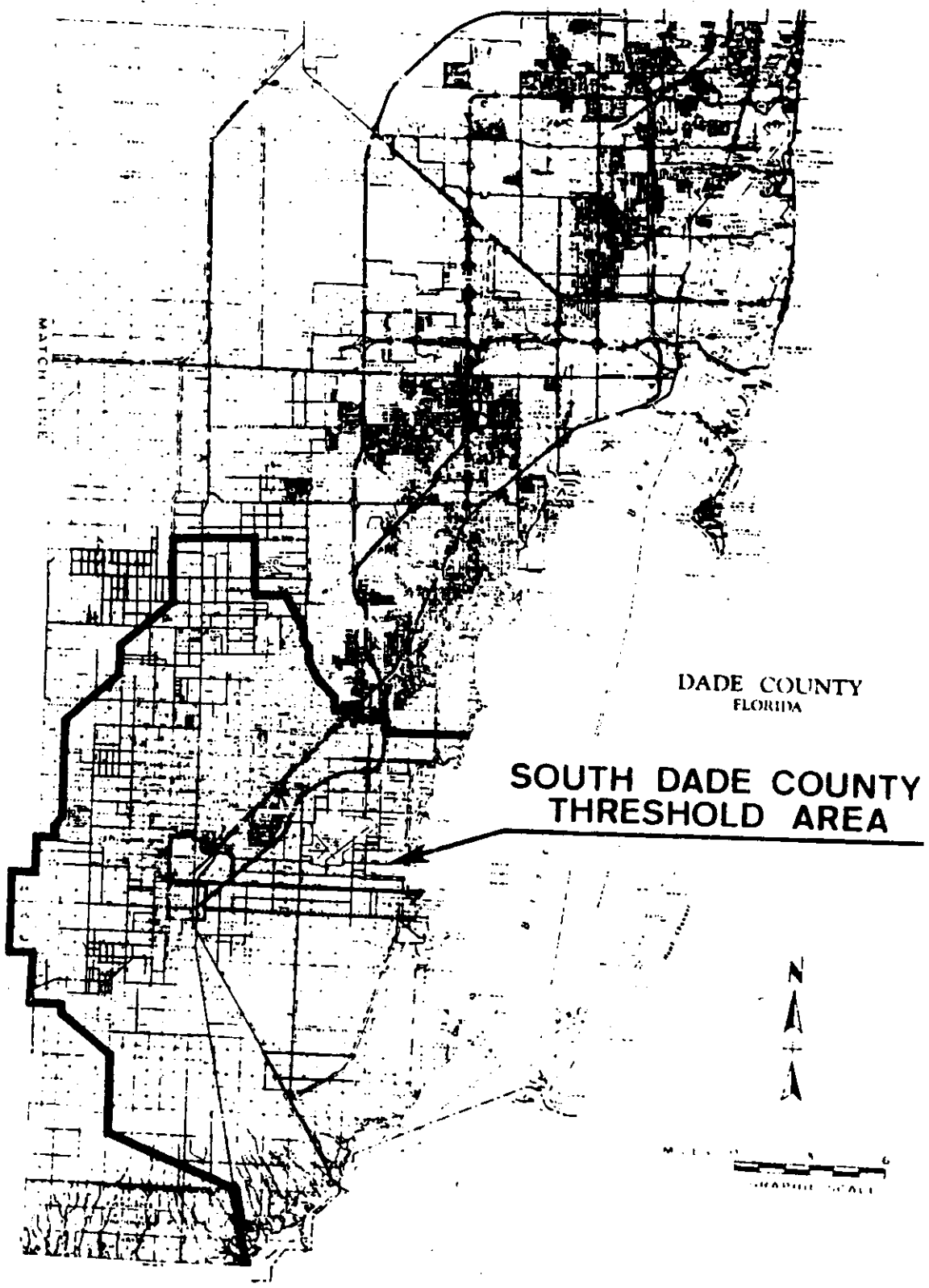
MATCH LINE
DADE COUNTY
FLORIDA
SOUTH DADE COUNTY
THRESHOLD AREA
N

Figure 30-1

APPENDIX - FORMS

FORMS

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RC-1A

ADMINISTRATIVE INFORMATION

FOR

WATER USE PERMIT APPLICATIONS

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

Form 0945-001
10/92

P.O. Box 24680
3301 Gun Club Road
West Palm Beach, FL 33416-4680
Telephone (407) 686-8800
Florida WATS 1-800-432-2045

SURFACE WATER MANAGEMENT PERMIT APPLICATIONS AND/OR WATER USE PERMIT APPLICATIONS

GENERAL INSTRUCTIONS

RELEVANT SECTIONS AND FORMS

In order to ensure efficient processing of your application, please provide the administrative information requested in RC-1A. Applicants for an individual surface water management permit or a general permit requiring full information must complete sections I, II and IV of RC-1A and all of RC-1S. Applicants for a general permit requiring limited information must complete sections I, II and IV of RC-1A and sections VII and VIII of RC-1S. Applicants for a water use permit must complete sections I, III and IV of RC-1A and all of RC-1W. If any of the proposed project is agricultural in nature, or if the project is in a Reduced Threshold Area (see Rule 40E-20.302 Florida Administrative Code), surface water management and water use permit applications must be processed concurrently.

SIGNATURE AND FEE

All applicants (or their authorized agents) must sign the application form in Section IV "Certification." No application for which a fee is required shall be considered filed until the appropriate application fee is submitted.

NUMBER OF COPIES

If you are applying for a conceptual approval concurrent with a Development of Regional Impact Application for Development Approval, please submit one completed copy of RC-1A, and eight copies of all other completed forms and items. For all other applications, please submit one completed copy of RC-1A and six copies of all other completed forms and items.

GUIDANCE

Please utilize the booklets titled "Guidance for Preparing an Application for a Surface Water Management Permit" and "Guidance for Preparing an Application for a Water Use Permit" to fill in all material which relates to the proposed project. Please refer to the item numbers to identify supporting material that is attached to the Form. If you have questions, please discuss your application with District staff prior to submittal.

AUTHORITY TO REQUIRE INFORMATION

Rules 40E-2.101, 40E-20.112, 40E-4.101 and 40E-40.112, Florida Administrative Code, specify information requirements to constitute a complete permit application.

GOVERNING BOARD ACTIONS

Applications for individual surface water management and/or water use permits will require District Governing Board action. Requests for modification of surface water management permits issued before December 1, 1982, may require District Governing Board action. If you have questions, please discuss your application with District staff prior to submittal.

OTHER PERMITS FROM THIS DISTRICT

Applicants who propose projects which involve utilization of District works or land must also submit Form 0122 "Application to the South Florida Water Management District for Authority to Utilize Works or Land of the District."

APPROVALS BY OTHER AGENCIES

The proposed projects may also require approval by other state and federal agencies. SFWMD informs other agencies of permit applications received, but the responsibility for requesting approval from other agencies rests with the owner.

SOUTH FLORIDA WATER MANAGEMENT DISTRICT
RC-1A ADMINISTRATIVE INFORMATION FOR SURFACE WATER MANAGEMENT PERMIT APPLICATIONS AND/OR WATER USE PERMIT APPLICATIONS

Form 0645-A01
10/92

I. GENERAL INFORMATION

THIS IS AN APPLICATION FOR (PLEASE CHECK APPROPRIATE BOXES):

☐ A SURFACE WATER MANAGEMENT PERMIT ☐ A WATER USE PERMIT

OWNER	APPLICANT (IF DIFFERENT FROM OWNER)
NAME	NAME
ADDRESS	ADDRESS
CITY, STATE, ZIP	CITY, STATE, ZIP
TELEPHONE ( )	TELEPHONE ( )
PROJECT ENGINEER, CONSULTANT OR AGENT	**PRE-APPLICATION MEETING**
NAME OF FIRM	HAVE ANY PRE-APPLICATION MEETINGS BEEN HELD WITH DISTRICT STAFF? ☐ YES ☐ NO
NAME OF CONTACT PERSON	DATE(S)
ADDRESS	LOCATION(S)
CITY, STATE, ZIP	NAME(S) OF KEY DISTRICT STAFF
TELEPHONE ( )	NAME(S) OF PROJECT REPRESENTATIVE(S)

PROJECT INFORMATION

NAME (INCLUDING THE PHASES COVERED BY THIS APPLICATION)

TOTAL PROJECT ACREAGE, INCLUDING ALL PHASES: _____ PHASE AREAS (IF APPLICABLE): _____

CITY, TOWN, OR VILLAGE (IF APPLICABLE) COUNTY

SECTION(S) OR GOVERNMENT LOT(S) _____ TOWNSHIP _____S RANGE _____E

SECTION(S) OR GOVERNMENT LOT(S) _____ TOWNSHIP _____S RANGE _____E

SECTION(S) OR GOVERNMENT LOT(S) _____ TOWNSHIP _____S RANGE _____E

II. SURFACE WATER MANAGEMENT

FORM OF PERMIT (PLEASE CHECK ONLY ONE BOX)

☐ A NEW INDIVIDUAL PERMIT, PURSUANT TO RULE 40E-4, FLORIDA ADMINISTRATIVE CODE (F.A.C.)	☐ A NEW GENERAL PERMIT, PURSUANT TO RULE 40E-40, F.A.C.
☐ A MODIFICATION OF EXISTING INDIVIDUAL PERMIT NO. _____	☐ A MODIFICATION OF EXISTING GENERAL PERMIT NO. _____

DESCRIBE IN GENERAL TERMS THE REQUESTED CHANGE(S) OR NEW WORK(S)

SURFACE WATER MANAGEMENT (CONTINUED)

Form 0645-A02

. YPE OF PERMIT (PLEASE CHECK AT LEAST ONE BOX)

☐ CONCEPTUAL APPROVAL OF A SURFACE WATER MANAGEMENT SYSTEM WHICH WILL SERVE THE ENTIRE _____- ACRE SITE. (PLEASE FILL IN THE ACREAGE OF YOUR ENTIRE PROJECT.)

☐ CONSTRUCTION AND OPERATION OF A SURFACE WATER MANAGEMENT SYSTEM WHICH WILL SERVE THE ENTIRE _____- ACRE SITE. (PLEASE FILL IN THE ACREAGE OF YOUR ENTIRE PROJECT.)

☐ *PHASES OF THE SITE: CONSTRUCTION AND OPERATION OF A SURFACE WATER MANAGEMENT SYSTEM WHICH WILL SERVE _____ ACRES (PLEASE FILL IN THE ACREAGE OF THE PART OF YOUR PROJECT FOR WHICH A CONSTRUCTION AND OPERATION PERMIT IS SOUGHT.) OF THE ENTIRE _____- ACRE SITE. (PLEASE FILL IN THE ACREAGE OF YOUR ENTIRE PROJECT.)

☐ OPERATION OF AN EXISTING SURFACE WATER MANAGEMENT SYSTEM WHICH SERVES THE ENTIRE _____- ACRE SITE. (PLEASE FILL IN THE ACREAGE OF YOUR ENTIRE PROJECT.)

☐ *PHASES OF THE SITE: OPERATION OF AN EXISTING SURFACE WATER MANAGEMENT SYSTEM WHICH SERVES _____ ACRES (PLEASE FILL IN THE ACREAGE OF THE PART OF YOUR PROJECT FOR WHICH AN OPERATION PERMIT IS SOUGHT.) OF THE ENTIRE _____- ACRE SITE. (PLEASE FILL IN THE ACREAGE OF YOUR ENTIRE PROJECT.)

*IF THIS IS THE CASE, YOU MUST ALSO USE THIS FORM TO APPLY FOR OTHER TYPES OF PERMITS FOR THE REST OF THE SITE, TO ASSURE THAT THE ENTIRE SITE IS COVERED BY THIS APPLICATION.

III. WATER USE

FORM OF PERMIT (PLEASE CHECK ONLY ONE BOX):

☐ A NEW INDIVIDUAL PERMIT PURSUANT TO RULE 40E-2.101, FLORIDA ADMINISTRATIVE CODE (F.A.C.)

☐ A NEW GENERAL PERMIT, PURSUANT TO RULE 40E-20, F.A.C.

☐ A MODIFICATION OF EXISTING PERMIT NO. _____

☐ RENEWAL OF EXISTING PERMIT NO. _____

c PURPOSE OF THIS REQUEST:

TYPE OF PERMIT (PLEASE CHECK AT LEAST ONE BOX):

☐ AGRICULTURAL IRRIGATION ☐ LANDSCAPING IRRIGATION ☐ GOLF COURSE IRRIGATION

☐ PUBLIC WATER SUPPLY ☐ MINING/DEWATERING ☐ INDUSTRIAL/COMMERCIAL

☐ RECREATIONAL ☐ AQUACULTURE ☐ OTHER (PLEASE DESCRIBE) _____

SOURCE OF WATER (PLEASE CHECK AT LEAST ONE BOX):

SURFACE WATER FROM THE FOLLOWING WATER BODY(IES):

☐ ON-SITE RETENTION POND(S) OR LAKE(S) ☐ ADJACENT LAKE, CANAL, RIVER, OR CREEK: _____ (NAME)

GROUND WATER FROM THE FOLLOWING NAMED AQUIFER(S) (PLEASE INDICATE, FOR EACH AQUIFER, WHETHER IT IS SHALLOW OR DEEP):

IV. CERTIFICATION

I hereby certify that, to the best of my knowledge, the total project acreage listed above is owned or controlled by me and encompasses the project referenced in this permit application. In addition, I agree to provide entry to the project site for South Florida Water Management District inspectors with proper identification or documents as required by law for the purpose of making preliminary analyses of the site. Further, I agree to provide entry to the project site for such inspectors to monitor permitted work if a permit is granted.

_____

ture (if not the owner, certify below) Date

I hereby certify that I am an authorized agent of the owner.

_____

(Title) Date

FOR DISTRICT USE ONLY

APPLICATION NUMBER _____

FEE REQUIRED _____

FEE PAID _____

RECEIPT NUMBER _____

RC-1W

APPLICATION

FOR A

WATER USE PERMIT

Form 0645.- W01
10/92

RC-1W APPLICATION FOR A WATER USE PERMIT

FOR SFWMD USE ONLY

Application No. _____

ALL PERMITS: SECTION I - SITE INFORMATION

✓			SFWMD ONLY N A I M
	A	LOCATION SKETCH IS SUBMITTED AS ITEM I-1.	☐☐☐☐
	B	AERIAL PHOTOGRAPH IS SUBMITTED AS ITEM I-2.	☐☐☐☐
	C	WETLANDS	
		EXISTING COVER IS SUBMITTED AS ITEM I-3.	☐☐☐☐
		PROPOSED PRESERVATION TECHNIQUES ARE SUBMITTED AS ITEM I-4.	☐☐☐☐
		WETLANDS CONTROL ELEVATION TABLE IS SUBMITTED AS ITEM I-5.	☐☐☐☐

ALL PERMITS: SECTION II - PROJECT INFORMATION

A	GENERAL INFORMATION	
	MAP OF PROJECT IS SUBMITTED AS ITEM II-1.	☐☐☐☐
	START DATE OF WATER USE IS: _____.	☐☐☐☐
B	SURFACE WATER MANAGEMENT	
	THE PROJECT IS PERMITTED, PERMIT NUMBER _____.	☐☐☐☐
	THE PROJECT IS EXISTING BUT UNPERMITTED. ☐	☐☐☐☐
	A SWM PERMIT IS APPLIED FOR, APPLICATION NO. _____.	☐☐☐☐
	A SWM PERMIT IS NOT REQUIRED. ☐	☐☐☐☐
C	RIGHT OF WAY OCCUPANCY	
	PROJECT IS PERMITTED FOR RIGHT OF WAY, PERMIT NUMBER _____.	☐☐☐☐
	RIGHT OF WAY PERMIT IS APPLIED FOR, APPLICATION NO. _____.	☐☐☐☐
	RIGHT OF WAY PERMIT IS NOT REQUIRED. ☐	☐☐☐☐
D	FACILITIES	
	TABLE OF EXISTING AND PROPOSED WELLS IS SUBMITTED AS ITEM II-2A	☐☐☐☐
	TABLE OF EXISTING AND PROPOSED SURFACE WATER WITHDRAWAL PUMPS IS SUBMITTED AS ITEM II-2B.	☐☐☐☐
	TABLE OF EXISTING AND PROPOSED WITHDRAWAL CULVERTS IS SUBMITTED AS ITEM II-2C.	☐☐☐☐
E	WATER PROBLEMS	
	EVALUATION OF EXISTING WATER USE PROBLEMS IS SUBMITTED AS ITEM II-3. ☐	☐☐☐☐
	NO EXISTING PROBLEMS ☐	☐☐☐☐
	EVALUATION OF POTENTIAL IMPACTS ASSOCIATED WITH THE PROPOSED WATER WITHDRAWALS IS SUBMITTED AS ITEM II-4.	☐☐☐☐
	PROPOSED MITIGATION IS SUBMITTED AS ITEM II-5.	☐☐☐☐
	NO WATER PROBLEMS OR IMPACTS ARE ANTICIPATED. ☐	☐☐☐☐
F	LOCATION OF POLLUTION SOURCES	
	NO KNOWN POLLUTION SOURCES. ☐	☐☐☐☐
	A MAP SHOWING POLLUTION SOURCES IS SUBMITTED AS ITEM II-6.	☐☐☐☐

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SECTION II - PROJECT INFORMATION (CONTINUED)

SFWMD ONLY
N A I M

G	TYPE OF WATER USE	
	IN ADDITION, PLEASE COMPLETE AT LEAST ONE:	
	☐ SECTION III FOR IRRIGATION WATER USE	☐☐☐☐
	☐ SECTION IV FOR PUBLIC WATER SUPPLY WATER USE	☐☐☐☐
	☐ SECTION V FOR MINING/DEWATERING WATER USE	☐☐☐☐
	☐ SECTION VI FOR INDUSTRIAL WATER USE	☐☐☐☐
	☐ SECTION VII FOR GENERAL WATER USE PERMITS	☐☐☐☐

INDIVIDUAL PERMITS: SECTION III - IRRIGATION WATER USE

A	OWNERSHIP AND LAND USE	
	PROOF OF OWNERSHIP IS SUBMITTED AS ITEM III-1.	☐☐☐☐
	PREVIOUSLY PERMITTED, NO CHANGE IN OWNERSHIP OR PROJECT ACREAGE. ☐ YES	☐☐☐☐
	LAND USE DOCUMENT IS SUBMITTED AS ITEM III-2.	☐☐☐☐
	PREVIOUSLY PERMITTED, NO CHANGE IN LAND USE. ☐ YES	☐☐☐☐
B	CROP TYPE AND IRRIGATION SYSTEM	
	TOTAL IRRIGATED (PLANTED) ACREAGE: _____ ACRES.	☐☐☐☐
	IRRIGATION FOR PHASED PROJECTS IS SUBMITTED AS ITEM III-3.	☐☐☐☐
	TABLE OF CROP REQUIREMENTS IS SUBMITTED AS ITEM III-4.	☐☐☐☐
C	WATER USAGE	
	QUANTITY OF WATER NEEDED FOR ALL CROPS: _____	☐☐☐☐
	BASIS FOR THE WATER REQUESTED IS SUBMITTED AS ITEM III-4A _____	☐☐☐☐
	WATER USE ACCOUNTING SYSTEM IS SUBMITTED AS ITEM III-4B _____	☐☐☐☐
D	WATER CONSERVATION PLAN SUBMITTED AS ITEM III-5.	☐☐☐☐
	RECLAIMED WATER USE FEASIBILITY IS SUBMITTED AS ITEM III-6.	☐☐☐☐
E	FREEZE PROTECTION	
	NO FREEZE PROTECTION REQUESTED. ☐	☐☐☐☐
	FREEZE PROTECTION REQUEST IS SUBMITTED AS ITEM III-7.	☐☐☐☐
F	GOLF COURSE IRRIGATION REQUEST IS SUBMITTED AS ITEM III-8.	☐☐☐☐

INDIVIDUAL PERMITS: SECTION IV - PUBLIC WATER SUPPLY WATER USE

A	POPULATION AND WATER DEMAND ANALYSIS	
	WATER USE FOR 12 MONTH PERIOD IS SUBMITTED AS ITEM IV-1.	☐☐☐☐
	PAST WATER USE IS SUBMITTED AS ITEM IV-2.	☐☐☐☐
	PROJECTED WATER USE IS SUBMITTED AS ITEM IV-3.	☐☐☐☐
	PROJECTED WATER DEMAND (PER CAPITA USE GREATER THAN 200 GPD) IS SUBMITTED AS ITEM IV-4.	☐☐☐☐
B	SERVICE AREA	
	SERVICE AREA MAP IS SUBMITTED AS ITEM IV-5.	☐☐☐☐

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SECTION IV - PUBLIC WATER SUPPLY WATER USE (CONTINUED)

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N A I M

INTERCONNECTIONS WITH OTHER SUPPLIERS ARE SUBMITTED AS ITEM IV-6. ☐☐☐☐
SERVICE AREA DOCUMENTATION IS SUBMITTED AS ITEM IV-7. ☐☐☐☐

C FACILITIES

DESCRIPTION OF FACILITIES IS SUBMITTED AS ITEM IV-8. ☐☐☐☐
AVERAGE DAILY EFFLUENT PRODUCTION: _____. ☐☐☐☐
DISPOSAL POINT OF EFFLUENT: _____. ☐☐☐☐

D INFORMATION ABOUT RAW WATER QUALITY IS SUBMITTED AS ITEM IV-9. ☐☐☐☐

E REVERSE OSMOSIS TREATMENT

NO REVERSE OSMOSIS. ☐ ☐☐☐☐
REVERSE OSMOSIS OPERATION DESCRIPTION IS SUBMITTED AS ITEM IV-10. ☐☐☐☐
LETTER OF APPROVAL TO DISCHARGE EFFLUENT BRINE IS SUBMITTED AS ITEM IV-11. ☐☐☐☐

F WATER CONSERVATION

LETTER OF COMPLIANCE WITH THE WATER CONSERVATION ACT, F.S. 553.14 IS SUBMITTED AS ITEM IV-12. ☐☐☐☐
RECLAIMED WATER USE FEASIBILITY IS SUBMITTED AS ITEM IV-13. ☐☐☐☐
WATER CONSERVATION PLAN IS SUBMITTED AS ITEM IV-14. ☐☐☐☐

G WELLFIELD PROTECTION

WELLFIELD WILL BE COVERED BY A WELLFIELD PROTECTION ORDINANCE ☐ ☐☐☐☐
DOCUMENTATION OF APPROVAL FROM APPROPRIATE AGENCY IS SUBMITTED AS ITEM IV-15. ☐☐☐☐
WELLFIELD WILL NOT BE COVERED BY A WELLFIELD PROTECTION ORDINANCE. ☐ ☐☐☐☐
PLAN FOR PROTECTION OF THE WELLFIELD IS SUBMITTED AS ITEM IV-16. ☐☐☐☐

H HEALTH REVIEW EVALUATION FROM GOVERNMENTAL AGENCY(IES) IS SUBMITTED AS ITEM IV-17. ☐☐☐☐

INDIVIDUAL PERMITS: SECTION V - MINING/DEWATERING WATER USE

A OWNERSHIP AND LAND USE

PROOF OF OWNERSHIP DOCUMENTATION IS SUBMITTED AS ITEM V-1. ☐☐☐☐
PREVIOUSLY PERMITTED, NO CHANGE IN OWNERSHIP OR PROJECT ACREAGE. ☐ YES ☐☐☐☐
LAND USE DOCUMENT IS SUBMITTED AS ITEM V-2 ☐☐☐☐
PREVIOUSLY PERMITTED, NO CHANGE IN LAND USE. ☐ YES ☐☐☐☐

B PROJECT DESCRIPTION

METHOD OF EXCAVATION: _____. ☐☐☐☐
EXCAVATION AREA DATA ARE SUBMITTED AS ITEM V-3. ☐☐☐☐
GROUND WATER WILL BE DRAWN DOWN TO: _____ (FT,NGVD). ☐☐☐☐
MAXIMUM DEPTH OF PIT WILL BE EXCAVATED TO: _____ FT. ☐☐☐☐
OPERATION SCHEDULE: _____ HRS/DAY, _____ DAYS/WEEK, _____ WEEKS/YEAR. ☐☐☐☐
REQUESTED ANNUAL ALLOCATION: _____ GALLONS. ☐☐☐☐
MAXIMUM DAY PUMPAGE: _____ GALLONS. ☐☐☐☐
BASIS FOR THE REQUESTED AMOUNTS: _____ ☐☐☐☐
_____. ☐☐☐☐
DURATION OF THE USE OF WATER: _____. ☐☐☐☐

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SECTION V - MINING/DEWATERING WATER USE(CONTINUED)

SFWMD ONLY
N A I M

CONTRACTOR: NAME: _____ PHONE: _____
ADDRESS: _____
_____
NO CONTRACTOR. ☐

C LOCATION

SITE MAP IS SUBMITTED AS ITEM V-4.
NOT A PHASED PROJECT. ☐
SITE MAP FOR PHASED PROJECT IS SUBMITTED AS ITEM V-5
A TOPOGRAPHIC MAP IS SUBMITTED AS ITEM V-6

D INFORMATION ON WATER QUALITY IS SUBMITTED AS ITEM V-7.

E HISTORICAL WATER USE

NOT APPLICABLE. ☐ YES
PUMPAGE RECORDS ARE SUBMITTED AS ITEM V-8.

F WATER TABLE AND GEOLOGIC DATA

WATER TABLE ELEVATIONS
☐ WET SEASON: _____ FT (NGVD) ☐ DRY SEASON: _____ FT (NGVD)
LITHOLOGIC LOGS ARE SUBMITTED AS ITEM V-9.
GEOPHYSICAL LOGS ARE SUBMITTED AS ITEM V-10.
LITHOLOGIC LOGS NOT AVAILABLE. ☐

G DRAINAGE SYSTEM AND STRUCTURAL STABILITY

PLAN FOR ROUTING OF STORMWATER IS SUBMITTED AS ITEM V-11.
PLAN FOR ON-SITE WATER RETENTION SYSTEM FACILITIES IS SUBMITTED AS ITEM V-12.
STRUCTURAL STABILITY INFORMATION IS SUBMITTED AS ITEM V-13.

H DEWATERING IN CONJUNCTION WITH LANDFILL OPERATIONS

LANDFILL DEWATERING NOT APPLICABLE. ☐
LANDFILL INFORMATION IS SUBMITTED AS ITEM V-14.

INDIVIDUAL PERMITS: SECTION VI - INDUSTRIAL WATER USE

A WATER DEMAND ANALYSIS

REQUESTED ANNUAL ALLOCATION: _____ GALLONS
MAXIMUM DAY PUMPAGE: _____ GALLONS.
MAXIMUM DAY TO AVERAGE DAY DEMAND RATIO: _____
EXPLAIN BRIEFLY THE BASIS FOR USING THIS NUMBER: _____
_____
FUTURE YEAR FOR WHICH WATER USE IS PROJECTED: _____
FOR EXISTING WATER USE, WATER USE FOR 12 MONTH PERIOD IS SUBMITTED AS ITEM VI-1.
WATER USE IS NOT NOW EXISTING, SO ITEM VI-1 NOT APPLICABLE. ☐

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SECTION VI - INDUSTRIAL WATER USE (CONTINUED)

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B FACILITIES

WATER TREATMENT PLANT CAPACITY: _____ GALLONS. ☐☐☐☐
TREATED WATER STORAGE CAPACITY: _____ GALLONS. ☐☐☐☐
IN-PLANT LOSSES: _____ ☐☐☐☐
FIRE-FLOW CAPABILITY: _____ ☐☐☐☐
STAND-BY CAPACITY: _____ ☐☐☐☐
PUMP/WELLFIELD OPERATION SCHEDULE IS SUBMITTED AS ITEM VI-2. ☐☐☐☐

C DESCRIPTION OF THE INDUSTRIAL PROCESS, WATER CHANGES DUE TO THE PROCESS, AND DISPOSAL OF WASTEWATER, IS SUBMITTED AS ITEM VI-3. ☐☐☐☐

D WATER CONSERVATION PLAN IS SUBMITTED AS ITEM VI-4, RECLAIMED WATER USE FEASIBILITY IS SUBMITTED AS ITEM VI-5. ☐☐☐☐

SECTION VII - GENERAL WATER USE PERMITS

A GENERAL INFORMATION

☐ PROPOSED PROJECT. ☐ EXISTING. HOW LONG: _____ ☐☐☐☐
ESTIMATED AVERAGE DAILY WATER USE: _____ GALLONS. ☐☐☐☐
ESTIMATED MAXIMUM DAY WATER USE: _____ GALLONS. ☐☐☐☐
NAME OF WELL DRILLER (IF APPLICABLE) _____ ☐☐☐☐

B TYPE OF WATER USE

IRRIGATION
CROP TYPE: _____ ☐☐☐☐
IRRIGATED ACREAGE: _____ ☐☐☐☐
IRRIGATION FOR PHASED PROJECTS IS SUBMITTED AS ITEM VII-1. ☐☐☐☐
PUBLIC WATER SUPPLY
TREATMENT PLANT CAPACITY: _____ GALLONS. ☐☐☐☐
POPULATION SERVED: _____ ☐☐☐☐
NUMBER OF UNITS SERVED: _____ ☐☐☐☐
AQUIFER REHABILITATION ☐☐☐☐
ESTIMATED DATE OF COMPLETION _____ ☐☐☐☐

SECTION VIII - WORKS OF THE DISTRICT SURFACE WATER IMPROVEMENT AND MANAGEMENT (SWIM)

A PROJECT IS PERMITTED FOR WORKS OF THE DISTRICT (SWIM), PERMIT NO.: _____ ☐☐☐☐

B WORKS OF THE DISTRICT (SWIM) PERMIT IS APPLIED FOR, APPLICATION NO.: _____ ☐☐☐☐

C WORKS OF THE DISTRICT (SWIM) PERMIT IS NOT REQUIRED. ☐ ☐☐☐☐

RC-1W

GUIDANCE FOR

PREPARING AN APPLICATION

FOR A

WATER USE PERMIT

Form 0645-G50
01/93

SOUTH FLORIDA
WATER MANAGEMENT DISTRICT

P.O. Box 24680
3301 Gun Club Road
West Palm Beach, FL 33416-4680

Telephone:
(407)686-8800
Florida WATS Line:
1-800-432-2045

GUIDANCE FOR PREPARING AN APPLICATION FOR A WATER USE PERMIT

Form 0645-G52

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INTRODUCTION

A complete discussion of District policies and requirements for water use permit applications is in the Basis of Review for Water Use Permit Applications within the South Florida Water Management District (commonly referred to as "The Basis of Review"). "The Basis of Review" is contained in the District publication Management of Water Use Permitting Information Manual Volume III (commonly referred to as "Volume III"). If you plan to file an application for a District water use permit, you should obtain a copy of Volume III and become familiar with those parts of it which pertain to your project. Copies of Volume III are available at the District main office and at most District field stations.

Applications for new water use permits will normally have to include more information than completed permit application forms. This publication is a description of the items frequently required for an application to be complete. If your application does not contain either all the items or written valid explanations of why those items have been omitted, your application processing will be delayed.

RC-1W lists the required checklists, tables, drawings, legal documents, and letters. Please identify them as required and include them in your submittal. A box has been provided beside the listing of each such item to check when supplying the item indicated. Recommended formats for some items are in this publication.

If the proposed or existing use of water is equal to or greater than 100,000 gallons per day, an Individual Water Use permit will be required. In most cases, uses of water less than 100,000 gallons per day qualify for a General Water Use permit, unless the project is located in a Reduced Threshold Area (RTA). If you have any questions relating to whether a project is located inside or outside of an RTA, or any other questions pertaining to a water use application, please contact District staff in the Water Use Division, before you submit your application.

All applicants must fill out Sections I and II of RC-1W. Applicants for an Individual Water Use permit must also fill out one or more (depending on how many types of water uses are being requested) of the following Sections: III, IV, V, and VI. Applicants for a General Water Use permit must fill out, in addition to Sections I and II, Section VII of RC-1W. Those applicants whose projects require a works of the District-surface water improvement and management (SWIM) permit must complete Section VIII.

An application for a modification to an existing permit or a renewal of an expiring permit often need not contain all the items described on the pages which follow, depending on what has been previously provided and the nature of the proposed modification. In such cases, it is even more important that you, the applicant, provide a brief written explanation of why those items are not being provided.

In most cases, your submittal should consist of:

1. One completed copy of RC-1A, and
2. Six copies of the completed RC-1W, and
3. Six copies of other submitted items.

SECTION I

SITE INFORMATION

A: Location Sketch

Submit, as Item I-1, an 8 1/2" x 11" detailed location sketch. It should contain enough information to allow someone who has general familiarity with the area to locate the project site on a map of the area.

B: Aerial Photograph

If a project is proposed (or existing), and an increase in allocation or change in crop type (i.e. from pasture to citrus) is requested, please submit as Item I-2 a vertical aerial photograph. (Oblique photographs are not acceptable substitutions.) The photograph, at a minimum, should: be the most recent available; not be an electrostatically printed or other poorly legible copy; be at a scale suitable for use in reviewing the water resource-related aspects of the project; have added to it the project boundaries; and have a north arrow and scale indicator.

C: Wetlands

Submit, as Item I-3, a written description of the existing vegetative cover.

Submit, as Item I-4, a written discussion of proposed area preservation techniques to be incorporated into the project. (This information will not be necessary if it is already included in the Surface Water Management Permit Application.)

Then, please present the data in the "Wetlands Control Elevation" format shown on page I-2 for all proposed wetlands in the project, and submit the data as Item I-5.

D: Other

In the course of developing the site information, you may have found it necessary to develop or use other items which do not conveniently fit into the approach described above. Submit those as Item I-6.

Form 0645 - G56

SFWMD ONLY

WETLANDS CONTROL ELEVATION TABLE

N A I M

WETLAND			WETLAND-SUPPORTING BASIN		
NUMBER/ LETTER	SIZE (ACRES)	CONTROL ELEVATION (FT, NGVD)	BASIN CONTROL ELEVATION (FT, NGVD)	BASIN NUMBER/ LETTER	

FOR PHASED PROJECTS

☐ PHASE 1 _____ TOTAL/IRRIGATED ACRES
INITIATION DATE _____

☐ PHASE 2 _____ TOTAL/IRRIGATED ACRES
INITIATION DATE _____

☐ PHASE 3 _____ TOTAL/IRRIGATED ACRES
INITIATION DATE _____

☐ PHASE 4 _____ TOTAL/IRRIGATED ACRES
INITIATION DATE _____

☐ ADDITIONAL PHASES _____
THIS APPLICATION IS FOR PHASE NO. _____

EXCAVATION PROJECTS

PHASE 1 _____ ACRES INITIATION/COMPLETION DATES _____
PHASE 2 _____ ACRES INITIATION/COMPLETION DATES _____
PHASE 3 _____ ACRES INITIATION/COMPLETION DATES _____
PHASE 4 _____ ACRES INITIATION/COMPLETION DATES _____
ADDITIONAL PHASES _____
THIS APPLICATION IS FOR PHASE NO. _____

SECTION II

PROJECT INFORMATION

A: General Information

1. Submit, as Item II-1, a large scale project map designating the exact locations of all water use withdrawal facilities such as wells, surface water pumps, and culverts, as well as ditches, roads, canals, lakes, and other landmarks. Identify wells, surface water pumps, and culverts to correspond with Tables A, B, and C.

2. Please give the date water use is going to start, or if the project is existing, the date water use was initiated.

B: Surface Water Management

Describe the surface water management (SWM) aspects of the project, indicating whether it has an existing system which is currently permitted - specifying Permit Number; an existing system which is unpermitted; a proposed system currently under District review - specifying Application Number; a proposed system for which an application has not yet been submitted; or a project which does not require a surface water management system. If either the surface water management is existing and unpermitted, or proposed but not yet submitted, please refer to RC-1S which provides instructions for the filling out of applications for District surface water management permits. Because of the inseparable nature of water use and surface water management, the water use application will not be considered complete until all necessary information for both applications has been provided.

C: Right-of-Way Occupancy

For withdrawals from the South Florida Water Management District (SFWMD) Canal System, you must submit either a verifiable application number and the date submitted (if an application has already been submitted for use of District works and lands), a verifiable permit number if a permit has already been issued for the proposed activities which affect District works or lands (designating the date permitted), or Form 0122 "Application to the South Florida Water Management District for Authority to Utilize Works or Lands of the District" if no application has yet been made.

D: Facilities

1. Describe all existing and proposed wells (including abandoned flowing and/or inactive wells) by using the Table A format as depicted on page II-4. Submit as Item II-2A.

2. Describe all existing and proposed surface water withdrawal pumps by using the Table B format as depicted on page II-5. Submit as Item II-2B.

3. Describe all existing and proposed withdrawal culverts by using Table C format as depicted on page II-5. Submit as Item II-2C.

E: Water Problems

If the project is existing, submit as Item II-3 a description of any water use problems you might be experiencing or adjacent water users are experiencing.

Submit, as Item II-4, an evaluation of potential impacts associated with the proposed withdrawals. At a minimum, the following should be addressed:

1. Adverse impact on a legal use of water existing at the time of permit application. (See further the Basis of Review for Water Use Permit Applications within the South Florida Water Management District (BOR), 3.2.1.1.3).

2. Adverse environmental impact. (See further BOR, 3.2.1.1.5).

3. Saline water intrusion. (See further BOR, 3.2.1.1.7).

4. Formation of sinkholes. Please describe any existing sinkhole features on-site and in the vicinity of the project.

5. Please submit an analysis of adverse impacts that withdrawals of water may cause. Please submit a proposed program for mitigating any adverse impacts. Submit these documents as Item II-5. (See further BOR, 3.2.1.1.3 and 3.2.1.1.4).

F: Location of Pollution Sources

Please provide, as Item II-6, a map which locates possible pollution sources, including but not necessarily limited to: landfills, percolation ponds, hazardous or toxic waste disposal sites, sewage mains (not including septic tanks), wastewater treatment facilities, industrial zoning or other zoning that may involve the use of hazardous materials, or saline water bodies within one mile of the wells and surface water pumps. The map should be keyed to a table which is numbered and corresponds accordingly to the type of pollution source.

G: Other

In the course of developing the project information, you may have found it necessary to develop or use other items which do not conveniently fit into the approach described above. Submit those as Item II-7.

H: Type of Water Use Information

Each application must additionally be accompanied by the responses to the appropriate water use type referenced below.

1. Livestock, nursery, recreational area, soil flooding, agricultural, freeze protection, golf course, and landscaping irrigation water uses must complete Section III-Irrigation Water Use.

2. Public water supplies must complete Section IV-Public Water Supply Water Use.

3. Mining/Dewatering water uses must complete Section V-Mining/Dewatering Water Use.

4. Power production, commercial and industrial processes, cooling and air conditioning, navigation, water-based recreation, aquaculture, diversion and impoundment into non-District facilities, and others not mentioned above, must complete Section VI-Industrial Water Use.

5. Applicants with small water uses, which have little potential for causing adverse impacts and meet the requirements of 40E-20, may be qualified for a General Water Use Permit. Those that are applying for this type of permit must complete Section VII. (See further BOR, 1.2).

Form 0845-G60

TABLE A
DESCRIPTION OF WELLS

WELL NUMBER				
MAP DESIGNATION				
EXISTING OR PROPOSED				
DIAMETER (INCHES)				
TOTAL DEPTH				
CASED DEPTH				
SCREENED INTERVAL				
PUMPED OR FLOWING				
WORKING VALVE, IF ARTESIAN (YES OR NO)				
PUMP MANUFACTURER AND MODEL NUMBER				
PUMP TYPE (CENTRIFUGAL, JET, DEEP JET, TURBINE, ETC.)				
INTAKE DEPTH (NGVD)				
PUMP OR FLOW CAPACITY (GPM AT _____ FT OF HEAD AT _____ PSI)				
ACTIVE (YES OR NO)				
YEAR DRILLED				
TYPE OF METER				

TABLE B
DESCRIPTION OF SURFACE WATER PUMPS

DRAINAGE DISTRICT				
PUMP NUMBER				
MAP DESIGNATION				
SURFACE WATER BODY				
EXISTING OR PROPOSED				
PUMP MANUFACTURER AND MODEL NUMBER				
PUMP TYPE				
PUMP CAPACITY (GPM)				
PUMP HORSEPOWER				
PUMP DIAMETER				
ELEVATION OF INTAKE (NGVD)*				
IS PUMP A TWO WAY PUMP?				

TABLE C
DESCRIPTION OF IRRIGATION CULVERTS

CULVERT NUMBER				
MAP DESIGNATION				
WATER BODY				
EXISTING OR PROPOSED				
DIAMETER**				
HEIGHT***				
WIDTH***				
TYPE OF CULVERT****				
CULVERT LENGTH				
INVERT ELEVATION (NGVD)*				
TYPE OF CONTROL DEVICE				

* NGVD IS APPROXIMATELY EQUAL TO MEAN SEA LEVEL
** FOR CIRCULAR CULVERTS
*** FOR ELLIPTICAL CULVERTS
**** CORRUGATED METAL, REINFORCED CONCRETE, ETC.

SECTION III

IRRIGATION WATER USE

A: Ownership and Land Use

1. Submit, as Item III-1, a copy of one of the following proof of ownership documents if this application is for a proposed water use, or if the project is permitted, and there is a change in ownership or project acreage:

   a. A properly recorded deed.
   b. An affidavit of ownership.
   c. An executed contract for purchase.
   d. Tax records.
   e. A lease agreement.

2. Land Use - Before an application will be considered for the issuance of a water use permit the proposed land use must be compatible with existing zoning or the local government comprehensive plan. If the proposed project is a Development of Regional Impact (DRI), a copy of the final approved Development Order must be provided as part of the application. Making application to local government for rezoning of the land will not suffice. Any necessary rezoning must be officially obtained prior to the application for a water use permit. Submit as Item III-2 at least one of the following documents:

   a. Evidence of compatible zoning.
   b. If the project is a Development of Regional Impact (DRI), a copy of the final approved development order.
   c. Evidence that the project is compatible with the Local Government Comprehensive Plan.

B: Crop Type and Irrigation System

Please indicate total irrigated acreage. Irrigated acreage is the actual planted acreage subtracting roads, ditches, canals, swales, and other non-irrigated acreage from total acreage.

For phased projects, show acreage and initiation dates for each phase as in the "For Phased Projects" table format, on page I-2. (See further BOR, 1.2.1.1). Please submit this as Item III-3.

Submit, as Item III-4, crop information using the Table D format, as depicted on page III-4. A line for each type of irrigation system (flood, drip, microjet, overhead, etc.) should be filled out. For example, if a grower has 150 acres of citrus on drip and 500 acres on flood, two lines of Table D would be filled out, one for drip and another for flood irrigation.

On the site map please outline irrigated acreages and crop types served by specific irrigation systems.

C: Water Use (See further BOR, 3.2.2.4; and Appendix 2,3.1,3.2, and 3.3)

1. Indicate the total amount of water needed to meet the irrigation demands of all crops on an annual basis. It is expected that most demands will be based on the system irrigation efficiencies shown in Table 3-1 of Appendix 2 (Irrigation Demand Management) to the BOR.

2. Explain the basis for the crop requirements. For the situations where the criteria in Table 3-1 are not applicable, the explanation should usually include, but not necessarily be limited to, a separate written discussion, submitted as Item III-4A, of such items as:

   a. site-specific soil characteristics
   b. evapotranspiration and effective rainfall
   c. depth to background water level
   d. height of ground water mound
   e. irrigation field boundary
   f. other specific information

3. Submit, as Item III-4B, plans which show that a reliable, calibrated water use accounting system has been, or will be, installed to monitor water useage. Acceptable water use accounting systems should usually include, but not necessarily be limited to, such methods as:

   a. flow meters
   b. clocks which totalize pump operations
   c. fuel consumption
   d. other reliable methods

D: Water Conservation (See further BOR, 3.3.1; and Appendix 2,3.5 and 3.6)

For landscape and golf course irrigation projects, please submit, as Item III-5, a water conservation plan. The following are mandatory plan elements and discussion of them must be provided:

1. The use of Xeriscape principles

2. The use of automatic rain- or soil moisture-sensor systems to override routine operations

Please submit, as Item III-6, any plans for either the use of reclaimed water or making reclaimed water available for other users.

E: Freeze Protection (See further BOR, 3.2.2.4.8)

The applicant may request a peak maximum daily withdrawal for freeze (or frost) protection, which is separate from the requested irrigation allocation. Freeze protection quantities should be based upon the number of acres to be protected, the protection type (flooding, micro-jet spray, overhead sprinklers, etc.), and the number of requested hours of pumpage time.

If the number of hours is not known, the maximum daily quantity should be based upon the lesser of either the best available data for frost/freeze recurrence and duration or the maximum rated withdrawal capacity of the permitted withdrawal facilities. Other methods should be discussed with District staff before the application is submitted. Please submit the freeze protection request and supporting documentation as Item III-7.

F: Golf Course Irrigation

On the site map, please show irrigated acreage for the following areas:

a. Rough	b. Fairway approaches	c. Fairways
d. Tees	e. Greens	f. Other

Please submit as Item III-8.

G: Other

In the course of developing the irrigation water use, you may have found it necessary to develop or use other items which do not conveniently fit into the approach described above. Submit those as Item III-9.

Form 0645-G65

TABLE D
CROP INFORMATION

	CROP 1	CROP 2	CROP 3	CROP 4
IRRIGATION SYSTEM				
NAME OF CROP				
ACRES PLANTED				
EXISTING OR PROPOSED				
NUMBER OF PLANTINGS*				
MONTH FIRST PLANTING*				
MONTH LAST PLANTING*				
TIME FROM PLANTING TO HARVEST (DAYS)*				

*SEASONAL CROPS

TABLE E
WATER USE FOR 12 MONTH PERIOD
FROM _____ TO _____

MONTH	RAW WATER PUMPAGE		TOTAL RAW WATER PUMPAGE (MGM)	TOTAL WATER TREATED (MGM)
	AVG. DAY	MAX. DAY		
TOTAL		N/A		
AVG.		N/A		

RATIO OF WATER PUMPED TO WATER TREATED _____.
MAXIMUM DAY PUMPAGE WAS _____ MGD AND OCCURRED ON _____.
RATIO OF MAXIMUM DAY PUMPAGE TO AVERAGE DAY PUMPAGE WAS _____.

SECTION IV

PUBLIC WATER SUPPLY WATER USE

A: Population and Water Demand Analysis (See further BOR, 3.2.2.1; and Appendix 1,3.1)

Water use for a 12-month period (Item IV-1), past water use (Item IV-2), and projected water use (Item IV-3) should be submitted using the formats for Table E (depicted on page III-4), Table F (depicted on page IV-4), and Table G (depicted on page IV-4), respectively.

The proposed consumption of water per capita should be based on a permanent population. Include calculations showing the water savings expected to result from the implementation of water conservation measures. For each measure, be sure to identify the affected demand components, and calculate the estimated demand savings.

If proposed per capita consumption is greater than existing, explain the difference. If proposed per capita consumption is greater than 200 GPD, submit, as Item IV-4, the information using the Table H format, depicted on page IV-5.

The duration of Water Use permits varies geographically. Please consult District staff on this item.

B: Service Area (See further BOR, 3.1.1.1)

1. Please submit, as Item IV-5, a map showing the area served by the utility.
2. List interconnections with other suppliers and indicate ability to supply water via the connections. Please submit as Item IV-6.
3. Please submit, as Item IV-7, at least one of the following for service area documentation:
   a. A copy of the Public Service Commission (PSC) certification describing the service area.
   b. Applicants within Dade County submit documentation that your service area is franchised by the Miami Dade Water and Sewer Board.
   c. If the applicant is regulated by local government, submit a copy of a local government franchise with the application.

Applicants not regulated by either the PSC or local government must submit applicable documentation. (See further BOR, 3.1.1.1.4)

C: Facilities

1. Please submit, as Item IV-8, descriptions of the following facilities:

   a. Location of existing flow meters on individual wells, before treatment, after treatment, and/or at the customer's connections.
   b. Storage facilities.
   c. Existing and proposed water treatment plants, DER rated capacity, potential capacity, and method of treatment.
   d. Fire flow and stand-by capacity.
   e. The existing wellfield operations schedule. This schedule should include those wells that are primary, secondary, stand-by, and any well rotation schedule.

2. Indicate the average daily sewage effluent production for the past 12 months, and the disposal point of the effluent.

D: Raw Water Quality

Provide, as Item IV-9, recent information on raw water quality, including but not necessarily limited to data from on-site testing/monitoring wells installed by the applicant, USGS monitoring wells, or any existing on-site wells.

E: Reverse Osmosis Treatment

Please submit, as Item IV-10, the following Reverse Osmosis (RO) treatment information, if applicable:

1. Treatment capacity of the RO plant.

2. The recovery efficiency.

3. The highest level of total dissolved solids (TDS) or chlorides that can be efficiently and economically treated using the installed membranes.

4. The chloride ion concentration in both the reject water and receiving water body.

5. A map showing the location of effluent discharge.

Please submit, as Item IV-11, a copy of approval letter from the Department of Environmental Regulation for discharge of effluent brine resulting from the treatment process.

F: Water Conservation (See further BOR,3.3.2; and Appendix 1,3.1.1.1)

If the applicant for public water supply use is a local government, then a copy of the ordinance must be submitted with the application indicating that the applicant is in compliance with the Water Conservation Act, F.S. 553.14, requiring water conserving fixtures in new construction. If the applicant for a public water supply use is not a local government, then a copy of a letter sent to the local government in which the use exists or is proposed, requesting that the provisions of the Water Conservation Act be implemented, or a copy of any existing ordinance must be submitted. Please submit this information as Item IV-12.

Please submit, as Item IV-13, any plans for either the use of reclaimed water or making reclaimed water available for other users.

For potable public water supply projects, please submit, as Item IV-14, a water conservation plan. The following are mandatory plan elements and discussion of them must be provided:

1. Limitation of lawn and ornamental irrigation hours
2. Use of Xeriscape principles
3. Requirement of ultra-low volume plumbing in new construction
4. Water conservation based rate structures
5. Leak detection programs
6. Requirements of rain-sensor override for new lawn sprinkler systems
7. Water conservation public education programs
8. Analysis of economic, environmental, and technical feasibility of reusing reclaimed and/or recycled water
9. A schedule and processes for implementing, assessing, and periodically updating the water conservation plan
10. Any other appropriate elements

G: Wellfield Protection

If the wellfield is covered by a wellfield protection ordinance, submit, as Item IV-15, documentation of approval from an appropriate governmental agency.

If the wellfield will not be protected by a wellfield protection ordinance, submit, as Item IV-16, a plan for protection of the welfield.

H: Health Review (See further BOR, 3.2.1.1.6)

As part of the application, evaluation of the application for impacts on public health is required. Submit a request for evaluation to the applicable governmental agency requesting a copy of the response be sent to the District. Submit, as Item IV-17, copies of the requests (whichever are applicable).

Governmental agencies responsible for public health include the following:

1. Department of Environmental Regulation.
2. Health departments for Dade, Broward, Palm Beach, Polk, and Lee Counties.
3. Dade County Department of Environmental Resources Management (DERM).
4. Palm Beach County DERM.
5. Lee County Environmental Protection Services.
6. Other local public health agencies.

I: Other

In the course of developing the public water supply water use, you may have found it necessary to develop or use other items which do not conveniently fit into the approach described above. Submit those as Item IV-18.1

TABLE F
PAST WATER USE

YEAR	PAST POPULATION	NUMBER OF UNITS*	PER CAPITA USAGE	TOTAL ANNUAL (MG)	AVG. DAY (MG)	MAX. DAY (MG)
19						
19						
19						
19						
19						
19						
19						
19						
19						
19						
19						
19						

TABLE G
PROJECTED WATER USE

YEAR	PROJECTED POPULATION	NUMBER OF UNITS*	PER CAPITA USAGE	TOTAL ANNUAL (MG)	AVG. DAY (MG)	MAX. DAY (MG)
19						
19						
19						
19						
19						
19						
19						
19						
19						
19						
19						
19						

* CUMULATIVE

Form 0645-G70

TABLE H
PROJECTED WATER DEMAND

(PER CAPITA USE GREATER THAN 200 GPD)

TYPE OF UNIT OR WATER USE TYPE	SINGLE FAMILY	MULTI-FAMILY	INDUS-TRIAL	COMMER-CIAL	MOBILE HOME	OTHER	TOTAL WATER DEMAND
YEAR 19___ (A)							
(B)							
(A x B)							
YEAR 19___ (A)							
(B)							
(A x B)							
YEAR 19___ (A)							
(B)							
(A x B)							
YEAR 19___ (A)							
(B)							
(A x B)							
YEAR 19___ (A)							
(B)							
(A x B)							
YEAR 19___ (A)							
(B)							
(A x B)							

(A) = NUMBER OF UNITS
(B) = PER UNIT RATE
(A x B) = WATER DEMAND

SECTION V

MINING/DEWATERING WATER USE

A: Ownership and Land Use

1. Submit, as Item V-1, a copy of one of the following proof of ownership documents if this application is for a proposed water use, or if the project is permitted but there is a change in ownership or project acreage:

   a. A properly recorded deed.
   b. An affidavit of ownership.
   c. An executed contract for purchase.
   d. Tax records.
   e. A lease agreement.

2. Land Use - Before an application will be considered for the issuance of a water use permit, the proposed land use must be compatible with existing zoning or the local government comprehensive plan. If the proposed project is a Development of Regional Impact (DRI), a copy of the final approved Development Order must be provided as part of the application. Making application to local government for rezoning of the land will not suffice. Any necessary rezoning must be officially obtained prior to the application for a water use permit. Submit, as Item V-2, at least one of the following documents:

   a. Evidence of compatible zoning.
   b. If the project is a Development of Regional Impact (DRI), a copy of the final approved development order.
   c. Evidence that the project is compatible with the Local Government Comprehensive Plan.

B: Project Description (See further BOR, 3.2.2.3)

1. Explain in detail the method of excavation and show total excavated acreage.

2. For phased projects, show acreage, and initiation and completion dates for each phase, as in the "Excavation Projects" table format on page I-2. (See further BOR, 1.2.1.1). Please submit as Item V-3.

3. Indicate the elevation (ft. NGVD) to which the ground water will be lowered as a consequence of the dewatering.

4. State the maximum depth of the pit to be excavated.

5. Indicate the working hours: hours/day, days/week, weeks/year.

6. State the quantity of water requested as an annual (gals/year) and maximum day allocation. Explain briefly the derivation of the requested amounts.

   State the duration of the use of water. The District will consider projected needs for a 3 year period or less.

7. Provide the name, address, and phone number of the contractor if different from the applicant.

C: Location

1. Provide, as Item V-4, a site map. Show the pit area (existing and/or proposed dimensions, including the maximum depth of excavation), stockpile area, dike and levees (cross-sections designating height, width, side slopes), retention area location and linear extent, pumps, culverts, and canals (designating side slopes and dimensions including height, width, and depth), staff gauges,monitoring wells and direction of natural run-off.

   Submit, as Item V-5, a site map with the above information for each phase if this is a phased project.

2. Submit, as Item V-6, a topographic map of the presently existing project site. At a minimum the map should:

   a. Extend to, and cover, all adjacent hydrologically related areas.
   b. Contain one-foot contour lines which extend at least 100 feet beyond the project in all directions.
   c. Show at least one permanent bench mark in the vicinity of each proposed major water control structure, related to National Geodetic Vertical Datum (NGVD).

D: Water Quality

Provide, as Item V-7, recent information on water quality, including but not necessarily limited to, data from on-site test/monitoring wells installed by the applicant, USGS monitoring wells, and any existing on-site wells.

E: Historical Water Usage

Submit, as Item V-8, pumpage records of existing water usage and the time period of usage.

F: Water Table and Geologic Data

1. Provide information on wet season and dry season water table elevations.

2. Submit, as Item V-9 or V-10 respectively, copies of lithologic and/or geophysical logs which have been made at the pit site.

G: Drainage System and Structural Stability

1. Submit, as Item V-11, plans for routing of stormwater, and Item V-12, plans for on-site water retention system facilities.

2. Provide, as Item V-13, information on the structural stability of dikes, levees, structures, and pit slopes.

H: Dewatering in Conjunction with Landfill Operation

Please provide, as Item V-14, the following:

1. Landfill location and site map.

2. Date landfill began operation.

3. Expected life of landfill.

4. Type of waste accepted. Please indicate the type of waste accepted in the past if different from waste accepted presently.

5. Method of waste disposal. Indicate how and where the waste is and has been buried. Elaborate on waste buried below the water table, wet season elevation.

6. Site engineering plans and information, to include:

   a. Ground water pollution control measures.
   b. Leachate collection system and treatment. Has leachate been found at the site?
   c. Location and type of liners.

7. Monitoring program for ground water pollution control.

   a. Indicate the location of monitoring wells on a map, showing areal extent and location of the landfill.
   b. Provide well logs and well construction details.
   c. Supply all water quality and water level data collected during the monitoring program.
   d. Supply any additional information or reports related to the effect of the landfill on ground water levels or water quality.

I: Other

In the course of developing the mining/dewatering water use, you may have found it necessary to develop or use other items which do not conveniently fit into the approach described above. Submit those as Item V-15.

SECTION VI

INDUSTRIAL WATER USE

A: Water Demand Analysis (See further BOR, 3.2.2.2; and Appendix 1,3.1)

Provide the following information concerning existing and proposed water use:

1. Existing or projected quantity of water applied for as an annual allocation (gals/year). The requested allocation should equal the average day pumpage multiplied by 365 days/year. Include calculations showing the water savings expected to result from the implementation of water conservation measures. For each measure, be sure to identify the affected demand and components, and calculate the estimated demand savings.

2. Maximum day pumpage associated with the average day pumpage.

3. Maximum day to average day demand ratio used in calculating the projected maximum day pumpage. Explain briefly the derivation of this number.

4. Future year on which the quantity of water is based. The District will consider projected needs for a 10-year period or less. In Broward and Lee Counties, water use projections are considered for a five year period only. If project is existing, please submit as Item VI-1 the most recent 12 months of pumpage records using the Table E format, as depicted on page III-4.

B: Facilities

1. On the site map submitted as Item II-1, locate wastewater treatment facilities, water treatment plants, and disposal points.

2. Describe the water treatment plant capacity, treated water storage capacity, and in-plant losses.

3. Describe the fire-flow capability and stand-by capacity.

Please submit, as Item VI-2, a pump/wellfield operation schedule. Include in the schedule which pumps are primary, secondary, stand-by, and pump rotation.

C: Processes and Wastewater Disposal (See further BOR, 3.2.1.1.4.1)

Please submit, as Item VI-3, the following information:

1. Description of the industrial process and how water is used in the process.

2. Descriptions of the changes to the water by the process, including thermal, physical, and chemical changes.

3. Description of the manner in which wastewater is disposed (i.e., evaporation, percolation ponds, injection wells, canal discharge, spray irrigation, etc.).

D: Water Conservation (See further BOR, 3.3.4; and Appendix 1,3.1.2.1)

Please submit, as Item VI-4, a water conservation plan. The following are mandatory plan elements and discussion of them must be provided:

1. A water use audit plan with emphasis on leak detection and follow-up repair, and recovery and recycling
2. A program for making technical, procedural, or programmatic changes to decrease water use
3. The development and use of water conservation awareness education programs for employees and consumers
4. A schedule and processes for implementing, assessing, and periodically updating the water conservation plan

Please submit, as Item VI-5, any plans for either the use of reclaimed water or making reclaimed water available for other users.

E: Other

In the course of developing the industrial water use, you may have found it necessary to develop or use other items which do not conveniently fit into the approach described above. Submit those as Item VI-6.

SECTION VII

GENERAL WATER USE PERMITS

A: General Information

For existing projects, show how long the project has been in existence.

Show the average existing or proposed daily water usage, and the maximum water used or proposed to be used, in a day.

B: Type of Water Use

Irrigation - Show the crop type and total irrigated acreage. Crop types include grass, citrus, nursery stock, etc. Irrigated acreage is the actual planted acreage subtracting roads, ditches, canals, swales, and other non-irrigated acreage from total acreage.

For phased projects, show acreage and initiation dates for each phase. (See further BOR, 1.2.1.1). Please use the "For Phased Projects" table format, on page I-2, and submit as Item VII-1.

C: Other Information

Provide, as Item VII-2, any other information that might be helpful in the evaluation of this application.

SECTION VIII

WORKS OF THE DISTRICT - SURFACE WATER IMPROVEMENT AND MANAGEMENT

If your proposed project is on a parcel or parcels for which a works of the District - surface water improvement and management (SWIM) permit is required, you must apply for and obtain such a permit, if you have not already done so. Please contact District staff before making your submittal, if you have any questions.

If a works of the District (SWIM) permit has already been issued for the proposed project, please provide the Permit number.

If a works of the District (SWIM) permit has been applied for, but the permit has not yet been issued, supply the date of the application, and (if known) the application number.

ADMINISTRATIVE

PERMIT

TRANSFER

South Florida Water Management District

Request for Permit Transfer

Form #0483
Rev. 2/91

South Florida Water Management District
P.O. Box 24680
West Palm Beach, Florida 33416-4680

Date_____

Please Check Appropriate Box

☐ Surface Water Management ☐ Use of Works of the District ☐ Water Use

Request for transfer of District Permit(s) No(s).____

FROM:

Name:____

Address:____

City:____ State:____ Zip:____

Project Name:____ Acreage:____

TO:

Name:____

Address:____

City:____ State:____ Zip:____

New Project Name:____ Acreage:____

The reason(s) for this permit transfer is (are)____

____

It is agreed that all terms and conditions of the permit and subsequent modifications, if any, are understood and accepted. Any proposed modification shall be applied for and obtained prior to such modification.

The instrument transferring ownership of the property should be for the entire permitted project.

If this is not the case for a surface water management permit, the new owner has the option of becoming a co-permittee on the current permit or applying for a modification to the permit.

If this is not the case for a water use permit, the current permittee must apply for a modification to the permit and the new owner is required to obtain a separate water use permit.

____
Applicant

By ____
Name

Its ____
Title

____
Telephone

Enclosure:
( ) Recorded copy of transfer of ownership

FOR OFFICE USE ONLY							
☐	SURFACE WATER	____	DATE ____	☐	ROW	____	DATE ____
☐	WATER USE	____	DATE ____	☐	NRM	____	DATE ____
				☐	FIELD ENGINEERING	____	DATE ____

NOTICE

OF

INTENT

TO

SHORT-TERM

DEWATER

South Florida Water Management District

P.O. Box 24680, West Palm Beach, FL 33416-4680

NOTICE OF INTENT TO SHORT-TERM DEWATER
(CHAPTER 40E-20, F.A.C.)

APPLICANT'S NAME: _____

PROPERTY OWNER'S NAME: _____

CONSULTANT'S NAME: _____

APPLICANT OR AUTHORIZED AGENT _____

MAILING ADDRESS: _____

CITY _____ STATE _____ ZIP _____ PHONE (_____) _____

PROJECT NAME: _____

PROJECT LOCATION: CITY _____ COUNTY _____

SECTION(S)_____ TOWNSHIP(S) _____ RANGE(S) _____

ADDRESS OF PROJECT (or nearest landmark and distance): _____

CITY _____ STATE _____ ZIP _____

EVIDENCE OF SITE OWNERSHIP: (_____)OWNED (_____)LEASED (_____)EASEMENT (_____)AFFIDAVIT OF OWNERSHIP

SURFACE WATER MANAGEMENT PERMIT NUMBER, IF ANY; _____

DESCRIBE THE PURPOSE OF USE OR WITHDRAWAL AND THE ACTIVITY TO BE PERFORMED : _____

_____

GIVE A DETAILED STATEMENT OF WHY DEWATERING IS NECESSARY: _____

_____

_____

_____

METHOD OF PROPOSED EXCAVATION: _____

AVERAGE DAILY PUMPAGE: _____ HOW DERIVED: _____

MAXIMUM DAILY PUMPAGE: _____ HOW DERIVED: _____

PUMP RATING(S): _____ GPM _____

DESCRIBE ALL EXISTING PUMPS: _____

_____

DESCRIBE ALL PROPOSED PUMPS: _____

_____

DESCRIBE ALL EXISTING CULVERTS: _____

_____

DESCRIBE ALL PROPOSED CULVERTS: _____

_____

GROUNDWATER DRAW DOWN ELEVATION: _____ MAXIMUM DEPTH OF EXCAVATION: _____

DEWATERING CONTRACTOR'S NAME (if different from applicant): _____

ADDRESS: _____

CITY _____ STATE _____ ZIP _____

BRIEF STATEMENT OF FACTS WHICH SHOW WHY THE PROPOSED ACTIVITIES QUALIFY FOR A GENERAL PERMIT: _____

_____

_____

DATE OF EXPECTED COMMENCEMENT: _____ DATE OF EXPECTED COMPLETION: _____

ESTIMATED AMOUNT OF WATER TO BE WITHDRAWN BY EACH PUMP: _____

_____

BRIEF STATEMENT EXPLAINING HOW POSSIBLE ADVERSE ENVIRONMENTAL IMPACTS WILL BE AVOIDED: _____

_____

PROPOSED DISCHARGE LOCATION (if applicable): _____

_____

_____

WILL THE CONTRACTOR COMMENCE DEWATERING WHILE THIS NOTICE IS UNDER REVIEW, IF THE CONDITIONS OF RULE 40E-20.302(4)ARE SATISFIED? _____

I HEREBY CERTIFY THAT THE LIMITING CONDITIONS SPECIFIED IN RULE 40E-20.381, F.A.C. WILL BE SATISFIED.

APPLICANT'S SIGNATURE: _____

APPLICANT'S NAME: _____ TITLE: _____

(IF NOT THE OWNER, CERTIFY BELOW)

I HEREBY CERTIFY THAT I AM AN AUTHORIZED AGENT OF THE OWNER

SIGNATURE: _____

NAME: _____ TITLE: _____

NOTE:

1. Attach pertinent evidence of site ownership;

2. Include a recent aerial photo, topographic map of the site, site plan showing dewatering operation layout, and

3. Voluntary publication of the Notice of Intent pursuant to Rule 40E-1.606(3)(b), must provide the information as set forth in Rule 40E-1.606(3)(b)2. and occur within seven days of submission to the District, if at all. Once received, proof of publication must be submitted to the District.

FORM #0445

WATER

SHORTAGE

VARIANCE

South Florida Water Management District

P.O. Box 24680 • 3301 Gun Club Road • West Palm Beach, FL 33416-4680 • (407) 686-8800 • FL WATS 1-800-432-2045

RES 16-08

The following information is being provided to assist you in preparing an application for variance from the mandatory water shortage restrictions.

Please answer all questions on the back of this form as fully as possible and upon completion, mail it to the Government Assistance Division at the above address. Although not a specific requirement, it would be helpful if you would provide an accurate location drawing for the requested variance site.

Rule 40E-21.275 Variances

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.

Limiting Conditions - Variances granted shall be subject to the following conditions, unless waived or modified by the Board:

(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.

Governing Board:
Allan Milledge, Chairman - Miami
Valerie Boyd, Vice Chairman - Naples
Ken Adams - West Palm Beach
James E. Nall - Fort Lauderdale
Annie Betancourt - Miami
Franklin B. Mann - Fort Myers
Leah G. Schad - West Palm Beach
Frank Williamson, Jr. - Okeechobee
Timer E. Powers, Interim Executive Director
Tilford C. Creel, Deputy Executive Director
Thomas K. MacVicar, Deputy Executive Director

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

APPLICATION FOR VARIANCE

Pursuant to Rule 40E-21.275, Florida Administrative Code

Additional information the applicant believes is material may be attached. Additional sheets may be used if necessary, for any of the responses.

A. Name: _____ Phone #: ( ) _____

Address: _____
Street City State Zip

Location of property for which relief is being requested if different from above:

_____
Street City State Zip Code

SFWMD Permit Number: _____ Project Name: _____

B. Specific rule, order, water shortage phase or restriction from which relief is requested: _____

_____

C. Description of relief requested: _____

_____

D. Facts supporting this request : (be as specific as possible) _____

_____

E. Period of time for which variance is sought and the reasons and facts for such: _____

_____

F. Damage or harm which may result from compliance with the Water Shortage Rule or order:

_____

G. If restrictions cannot be met because of extent or cost, describe measures necessary to meet all restrictions, restrictions which can be met, and the date of compliance: _____

_____

H. If this request is for a golf course which is unable to meet the front nine-back nine requirement, submit a map showing the proposed alternative division of the course in half and an explanation of the proposed irrigation scheme.

_____ _____ _____
Name Signature Date

.....For District Use Only.....

Date Received: _____ Date Application Complete: _____ Control No.: _____

Compliance Yes____ No____

_____ _____
Form Sent Received

WELL

CONSTRUCTION

PERMIT

APPLICATION

South Florida Water Management District

Well Construction Permit Application

Form #0123
Rev 8/96

For use by SFWMD personnel only	Send to: WATER WELL PERMITTING,	FEE SCHEDULE
Date Rec'd: _____	SOUTH FLORIDA WATER MANAGEMENT DISTRICT	All Wells $100 00
Permit No. _____	P.O. Box 24680	Abandonment No Fee
Well Completion Report _____	3301 Gun Club Road	
	West Palm Beach, Florida 33416-4680	
	PHONE: (407) 686-8800 TOLL FREE 1-800-432-2045	

APPLICATION TO SOUTH FLORIDA WATER MANAGEMENT DISTRICT FOR: ( ) New Well Construction ( ) Well Abandonment ( ) Repair
WATER USE PERMIT: ( ) Request submitted concurrently; ( ) Permit granted: Permit No _____

PROJECT NAME _____ **COUNTY** _____ **WELL #** _____
LOCATE WELL ON BACK OF FORM

OWNER, BUSINESS, OR CORPORATION

NAME _____
ADDRESS _____
CITY _____ STATE _____ ZIP _____
PHONE ( ) _____

CONSULTING ENGINEER OR GEOLOGIST

NAME _____
ADDRESS _____
CITY _____ STATE _____ ZIP _____
PHONE ( ) _____

WELL CONTRACTOR

NAME _____
ADDRESS _____
CITY _____ STATE _____ ZIP _____
PHONE ( ) _____
LICENSE NUMBER _____

AUTHORIZED AGENT

NAME _____
ADDRESS _____
CITY _____ STATE _____ ZIP _____
PHONE ( ) _____

WELL USE: ( ) Fire Well ( ) Public Water Supply ( ) Test ( ) Monitor ( ) Irrigation ( ) Aquifer Remediation
( ) Industrial ( ) Other _____

NOTE: For PWS attach SFWMD Form 0195 and 3 copies of site plan. Well location must be staked.

CONSTRUCTION SPECIFICATIONS:

Rotary with MUD ( ) or Air ( ), Casing Driven ( ), Cable Tool ( ), Jetting ( ) Other _____ Borehole _____" diameter,
Surface or outside casing will be _____"(in) diameter x _____'(ft) depth. Grouted bottom to top ( ) Bottom 5, Top 20 ( ) Top 3 ( ) with _____ # of bags
Single or inside casing will be _____"(in) diameter x _____'(ft) depth Grouted bottom to top ( ) Bottom 5, Top 20 ( ) Top 3 ( ) with _____ # of bags
Grout composition with % additives: _____ Total depth of well _____'(ft) Open hole from _____' (ft) to _____' (ft).
Screen s.steel ( ) PVC ( ) Fiberglass ( ), slot size _____, diameter _____" (in) x _____' (ft).
Screened from _____' (ft) to _____' (ft) Gravel packed to _____' (ft) above screen.
Casing Material: PVC ( ) Schedule # _____ Fiberglass ( ) Black Steel ( ) Galv ( ) _____ lbs/ft. Other _____

ANTICIPATED START DATE _____
METHOD OF PLUGGING OR ABANDONMENT _____
DESCRIPTION OF WELL REPAIR _____

I HEREBY CERTIFY THAT THE CONSTRUCTION, ABANDONMENT OR REPAIR OF THE WELL WILL COMPLY WITH THE RULES OF THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT, WILL NOT ADVERSELY AFFECT THE WATER RESOURCES, AND THAT A WATER USE PERMIT, IF NEEDED HAS OR WILL BE OBTAINED FOR THIS PROJECT PRIOR TO COMMENCEMENT OF WELL CONSTRUCTION. I FURTHER AGREE TO PROVIDE A WELL COMPLETION REPORT TO SOUTH FLORIDA WATER MANAGEMENT DISTRICT WITHIN 30 DAYS FROM COMPLETION OF THE WELL. ISSUANCE OF A PERMIT PURSUANT TO THIS APPLICATION DOES NOT RELIEVE THE APPLICANT OF THE RESPONSIBILITY TO ACQUIRE ANY NECESSARY APPROVALS FROM ANY OTHER FEDERAL, STATE, OR LOCAL GOVERNMENT AGENCIES.

_____
SIGNATURE OF OWNER OR AUTHORIZED AGENT

DATE _____

_____
CONTRACTOR'S SIGNATURE

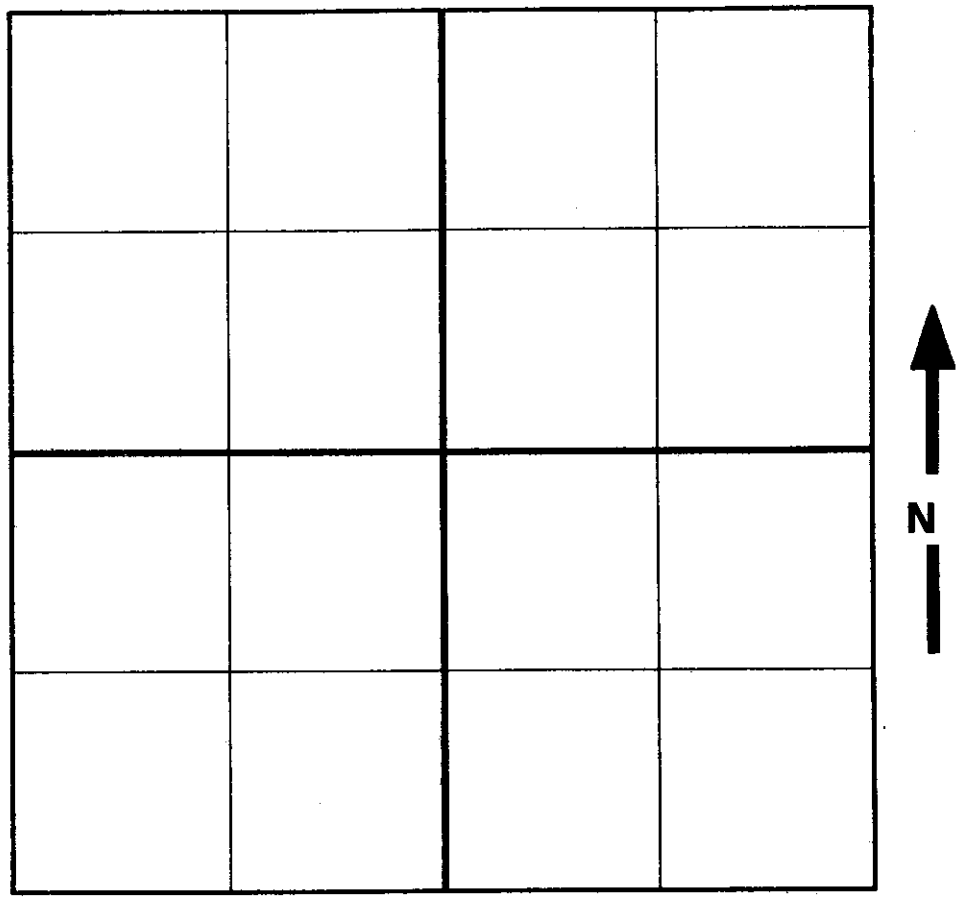
DATE _____

(over)

Form # 0123
Rev 8/91

SECTION MAP

NW1/4 NE1/4



SW1/4 SE1/4

PUMP SPECIFICATIONS:

Pump Type_____Capacity_____ GPM. Pump Size_____H.P. Intake Depth _____Ft (from ground)

EXPECTED USAGE:_____ Gallons per day

WELL LOCATION: _____

(site address or closest two roads with distance to well)

_____ 1/4_____ 1/4 SEC_____ TWP_____S; RGE_____E.

-or-

LATITUDE_____ LONGITUDE_____.

(to the nearest second)

-or-

Planar Coordinates _____E_____N.

Draw an accurate map in section below showing property boundaries, well location, nearby roads and distance in feet from known landmarks. **Scale: 1" = 1,100' (approx.)**

DO NOT WRITE BELOW THIS LINE PERMIT ACTION

Permit Rejected ( ) Reason_____

Permit Granted ( ) Conditions or Variances_____

Well Cuttings Required: ( ) No ( ) Yes_____

Signature of authorized district representative_____Application fee received $_____

Permit valid for six months (6) from this date_____

PUBLIC WATER SUPPLY

WELL

INFORMATION

AND

CLASSIFICATION

Form #0195
Rev. 6/91

South Florida Water Management District

Public Water Supply Well Information & Classification Form

This form is to be completed by the applicant for the construction of any well which may be classified, based upon use, as a public water supply well. Please fill out this form and submit it with the "Well Construction Permit Application and Permit" (Form 0123). Well classification will be based on definitions as indicated on this form. For Chapter 17-555 Public Supply Wells, attach hereto a plat or well site plan signed by the owner or his agent certifying accuracy of information depicting the well location relative to existing or proposed topography and physical features, property boundaries, known and proposed sources of contamination in the vacinity, flood elevations and well accessibility. The well site plan should be legibly drawn and four (4) photostatically reproducable copies submitted on paper not larger than 24" x 36".

1. Name of Owner: _____ Phone _____
2. Name or type of facility served: _____

   _____
3. Will the facility be open to general public? [ ] Yes [ ] No
4. Average number of people served water per day used:

   (a) Residents _____ (b) Employees _____

   (c) Visitors _____ (d) Others _____
5. How many days per year will the facility be used? _____
6. Check the following purposes for which water will be used:

   [ ] Consumed as a beverage; [ ] Consumed as ice or as a mixer in a drink;
   [ ] Used in dishwashing or food processing; [ ] Used in toilet facilities;
   [ ] Used in showering facilities; [ ] Other uses; Describe _____

   _____
7. Number of service connections: If serving a mobile home park, number of homes, etc. _____
8. The facility will produce a total sewage flow of _____ gallons.
9. Distance to existing water service main. _____
10. Owner's Consultant: _____ Phone _____
11. Signature of Owner or Authorized Agent _____
    Note: Authorization letter required from owner if signed by agent.

    Date _____

Form #0195
Rev. 6/91

DO NOT WRITE BELOW THIS LINE - FOR OFFICIAL USE ONLY

Application/Permit No._____ Date_____

Well Classification Determination:

[ ] 17-555 Community Water System

[ ] 17-555 Non-Community Water System

[ ] 17-555 Special Non-Community Water System

[ ] Non-Public Supply Well

[ ] 10D-4 Well

SFWMD Liason:_____Date_____

Title:_____

HEALTH DEPT. Reviewer:_____Date_____

Title:_____

DEFINITIONS FOR PUBLIC SUPPLY WELL CLASSIFICATION

1. Chapter 17-555, F.A.C., "COMMUNITY WATER SYSTEM" means a public water system which serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents.

2. Chapter 17-555, F.A.C., "NON-COMMUNITY SYSTEM" means a public water system which provides piped water for human consumption to at least 15 service connections or which serves at least 25 individuals at least 60 days out of the year but which is not a community water system. NOTE: The difference between community water systems and non-community water systems is that the former serves inhabitants whereas the latter serves transients or non-residents who otherwise do not inhabit the building served by the system. Other public water systems are addressed in Chapter 10D-4, F.A.C.

3. Non-Public Supply Well: Means a well intended for withdrawal of ground water for purposes other than public water supply; such as domestic, irrigation, industrial, etc.

4. Chapter 10D-4.18, F.A.C., 10D-4 Well: Means a well intended, presently or in the future, for withdrawal of ground water to supply a system providing piped water to the public for human consumption, culinary or domestic purposes provided such system has less than 15 but more than 4 service connections serving individual family units used by year round residents or serves less than 25 individuals daily on a public basis 60 or more days out of the year or 25 or more individuals daily less than 60 days out of the year. (These wells will not need a Well Construction permit, however they will need a Water Use permit.)

5. Chapter 17-555, F.A.C., "SPECIAL NON-COMMUNITY SYSTEM" means a non-community system that serves a school; or, a seasonal recreational vehicle park or mobile home park that serves 50 or more persons at least 4 consecutive months during the year.

NOTIFICATION

OF

WELL

GROUTING

_____, 19____

Dear Sir:

You are hereby advised of our proposed work as indicated below:

PROJECT NAME: _____

WELL CONTRACTOR: _____

CONSTRUCTION PERMIT NO. _____

STARTING DATE: _____

APPROXIMATE GROUTING DATE _____

COMPLETION DATE: _____

Notice to Permittee:

Please fill in this card with the dates required, and mail so as to be received 5 days before starting work.

Also please telephone 24 hours before grouting.

The above information is necessary for the scheduling of inspection.

FORM 0196 Rev. 10/89

No Postage Stamp Necessary If Mailed in the United States

BUSINESS REPLY CARD

FIRST CLASS PERMIT NO. 266 W. PALM BCH., FLA.

Postage will be Paid by Addressee

WATER WELL PERMITTING
REGULATION DEPARTMENT
South Florida Water Management District
Post Office Box 24680
West Palm Beach, Fl 33416-4680

OIL

WELL

CONSTRUCTION

APPLICATION

NOTICE OF INTENT TO USE WATER IN CONJUNCTION WITH OIL WELL DRILLING IN LEE, COLLIER AND HENDRY COUNTIES (Chaper 40E-20)

SUBMITTED TO: Governing Board of
South Florida Water Management District
Post Office Box 24680
West Palm Beach, FL 33416-4680

1. THE NAME OF THE PERMITTEE: _____
2. THE NAME OF THE PROPOSED PROJECT: _____
3. THE LOCATION OF THE PROJECT: (Please attach location map) _____
4. A BRIEF DESCRIPTION OF THE PROJECT: _____
5. THE NAME OF THE WELL DRILLER: _____
6. A BRIEF STATEMENT OF FACTS WHICH SHOW WHY THE PROPOSED USE OR WITHDRAWAL QUALIFIES FOR A GENERAL PERMIT: _____

_____

7. A STATEMENT THAT ALL NECESSARY FEDERAL, STATE, LOCAL AND SPECIAL DISTRICT AUTHORIZATIONS HAVE BEEN RECEIVED OR WILL BE RECEIVED PRIOR TO INITIATION OF DRILLING OR ANY ACTIVITY AT THE SITE. WHERE REQUIRED: (Please list pertinent permit numbers or attach copies of the permits)

_____

_____

8 THE DATE ON WHICH USE OR WITHDRAWAL IS EXPECTED TO COMMENCE: _____
9. ESTIMATED AMOUNT OF WATER TO BE WITHDRAWN FROM EACH WELL: _____
10. SURFACE DISCHARGES OF SALT WATER, IF ANY: _____
11. ENVIRONMENTAL IMPACT OF THE WATER WITHDRAWAL: _____
12. LOCATION OF ANY SURFACE WATER USE OTHER THAN THAT OF PERMITTEE WITHIN 300 FEET OF THE PROPOSED WATER WELLS: _____

_____

_____

I HEREBY CERTIFY THAT ALL NECESSARY FEDERAL, STATE, LOCAL AND SPECIAL DISTRICT AUTHORIZATIONS HAVE BEEN OR WILL BE RECEIVED PRIOR TO INITIATION OF DRILLING OR ANY ACTIVITY AT THE SITE.

Permittee's Name (type or print) _____

Signature _____ Date _____

This notice required by Rule 40E-20 112(2) F.A.C.

WELL

COMPLETION

REPORT

WELL COMPLETION REPORT
FORM 0124
Rev 11-90

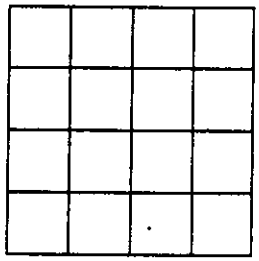
WELL PERMIT NO. _____
SFWMD WATER USE PERMIT NO. _____

Owner | Address | City | State | Zip

Contractor's Signature | License No. | Completion Date | Casing Depth | Total Depth | Well #

TYPE OF WORK: Construct ( ) Repair ( ) Abandon ( )
WELL USE: Domestic Well ( ) Public ( ) Monitor ( ) Test ( )
Irrigation ( ) Fire Well ( ) Other _____
METHOD: Rotary with MUD ( ) or Air ( ), Cable Tool ( ), Jet ( )
Casing Driven ( ), Other _____
STATIC WATER LEVEL _____ Ft. below top of casing
PUMPING WATER LEVEL _____ Ft. after _____ Hrs. at _____ GPM
PUMP SIZE _____ H.P. CAPACITY _____ GPM
PUMP TYPE _____ INTAKE DEPTH _____
From top of ground

LOCATION
Located Near _____
County _____
¼ ¼ Section Township Range
Latitude-Longitude



LOCATE IN SECTION

Cuttings sent to District? ( ) Yes
( ) No

Note: PWS Wells attach a site map if well location is different from site location on permit application.

Grout	Casing & Screen		Depth (ft)		DRILL CUTTINGS LOG
Thick-ness & Depth	Diameter & Depth		From	To	Examine cuttings every 20 ft. or at formation changes. Give color, grain size, and type of material. Note cavities, depth to producing zones.
Number of bags					

Casing: Black Steel ( ) Galv. ( ) PVC ( )Fiberglass ( )
Screen: Type _____ Slot size _____
Screened from _____ (ft.) to _____ (ft.)
Type of grout with % additives _____
Water: Clear ( ) Colored ( ) Sulphur ( ) Salty ( ) Iron ( )
Conductivity _____ Chlorides _____ mg/l

No Postage Stamp Necessary If Mailed in the United States

BUSINESS REPLY MAIL
FIRST CLASS PERMIT NO. 266 WEST PALM BEACH, FLORIDA
Postage will be Paid by Addressee

South Florida Water Management District
Attn: Well Permitting, R.C.
P.O. Box 24680
West Palm Beach, Fl. 33416-9944

MONITOR

WELL

DATA

MONITORING WELL DATA FORM

Name of Permitted System_____

SFWMD Water Use Permit_____

Month, Day, and Year of Data Collection_____

Well #	Total Depth (ft)	Cased Depth) ft)	Elevation of top of casing (TOC) (ft NGVD*)	Depth from top of casing to water surface (ft)	Water Table Elevation TOC - Depth (ft NGVD)	Date and Time of Measurement	Chlorides (mg/1)	Sampling Depth (ft NGVD)	Conductivity (Ohms/cm)

*National Geodetic Vertical Datum

Data Collector_____

Sampling Technique_____(Pumped or Grab).

Chloride concentration determined by_____(method).

SEND TO: Water Use Division
Regulation Department
South Florida Water Management District
Post Office Box 24680
West Palm Beach, FL 33416-4680

PUMPAGE

REPORT

Form #0188
Rev 1/93

South Florida Water Management District
Pumpage Report

This report must be completed and submitted to the South Florida Water Management District as required by your Permit.

PLEASE COMPLETE ITEMS 1 THRU 7.

1. Permit Number: _____
2. Issued to: _____
   Address: _____
   City, State, Zip: _____
   Phone Number: ( ) _____
3. Recording Period: **AS REQUIRED BY YOUR PERMIT**
4. Report Due: **AS REQUIRED BY YOUR PERMIT**
5. Month: _____, 19___

DAY		GALLONS
1		GALLONS
2		GALLONS
3		GALLONS
4		GALLONS
5		GALLONS
6		GALLONS
7		GALLONS
8		GALLONS
9		GALLONS
10		GALLONS
11		GALLONS
12		GALLONS
13		GALLONS
14		GALLONS
15		GALLONS

DAY		GALLONS
16		GALLONS
17		GALLONS
18		GALLONS
19		GALLONS
20		GALLONS
21		GALLONS
22		GALLONS
23		GALLONS
24		GALLONS
25		GALLONS
26		GALLONS
27		GALLONS
28		GALLONS
29		GALLONS
30		GALLONS
31		GALLONS

TOTAL MONTHLY PUMPAGE _____ GALLONS

6. Name of Person Completing Form: _____
   Print or Type
7. Signature: _____ Date _____

RETURN TO: South Florida Water Management District
ATTN: Regulation Department/Water Use
P O Box 24680
West Palm Beach, Florida 33416-4680