

SUWANNEE RIVER WATER MANAGEMENT
DISTRICT

Water Use Permit Applicant's Handbook

Incorporated by Reference in 40B-2.301,
Florida Administrative Code

Effective November 2025



Table of Contents

1.0	General Provisions
1.1	Definitions
1.2	Acronyms and Abbreviations
1.3	Water Use Permit Program Objectives, Organization, and Authorizations
1.4	Permitting Procedures
1.4.1	Permits Required, Thresholds, and Permits by Rule
1.4.1.1	General Permits by Rule
1.4.1.2	Individual Permits
1.4.1.3	Exemptions and Variances
1.4.1.4	Temporary Water Use Permits
1.4.2	Pre-application Meetings
1.4.2.1	Third Party Interests
1.4.3	Competing Applications
1.4.4	Phased Projects
1.4.5	Water Well Permitting Concurrency
1.4.6	Application Review Process
1.4.6.1	Submittal of Application
1.4.6.2	Processing Time Frames
1.4.6.3	Public Noticing Requirements
1.4.6.4	Staff Review and Requests for Additional Information
1.4.7	Professional Certification of Supporting Documents
1.4.8	Contiguous and Non-contiguous Parcels
1.4.9	Fees
1.4.10	Permit Modifications
1.4.11	Permit Renewals
1.4.12	Governing Board Meetings
1.5	Permit Duration
2.0	Demonstration of Water Need, Source(s), and Demand
2.1	Demonstration of Water Need
2.1.1	Legal Control Over Project Site
2.1.2	Legal Control Over Withdrawal and Diversion Facilities
2.2	Source Identification
2.2.1	Alternative Water Supply Feasibility Determination
2.3	Demonstration of Demand and Conservation
2.3.1	General Criteria
2.3.1.1	Withdrawal Quantities Assigned by Wells and Sources
2.3.1.2	Annual Allocation
2.3.1.3	Water Conservation Plans
2.3.2	Public Water Supply
2.3.2.1	Per Capita Daily Water Use
2.3.2.2	Population Estimates
2.3.2.2.1	Population Data
2.3.2.3	Water Conservation Plans for Public Supply Use
2.3.2.4	Well Field Operation
2.3.3	Agriculture
2.3.3.1	Supplemental Irrigation Requirement

- 2.3.3.2 Improved Pasture Demand
 - 2.3.3.3 Frost/ Freeze Protection Demand
 - 2.3.3.4 Livestock Demand
 - 2.3.3.5 Aquaculture Demand
 - 2.3.3.6 Other Agricultural Demand
 - 2.3.3.7 Water Conservation Plans for Agricultural Uses
 - 2.3.4 Commercial
 - 2.3.4.1 Beverage Processing
 - 2.3.5 Industrial
 - 2.3.5.1 Hydrostatic Testing
 - 2.3.6 Institutional
 - 2.3.7 Mining/ Dewatering
 - 2.3.8 Water Conservation Plans for CII and Mining/ Dewatering Uses
 - 2.3.9 Recreation and Landscape Irrigation
 - 2.3.9.1 Golf Course Irrigation
 - 2.3.10 Water Conservation Plans for Recreation and Landscape Irrigation Uses
- 3.0 Water Resource Impact Evaluation
 - 3.1 Data Collection, Evaluation, and Modeling
 - 3.2 Water Supply Planning Area Delineations
 - 3.3 Evaluation of Impacts to Water Resources
 - 3.3.1 Wetlands and Other Surface Waters
 - 3.3.2 Permit Application Submittals
 - 3.3.3 “No Harm” Standards and Thresholds
 - 3.3.3.1 Harm Standards for Wetlands
 - 3.3.3.2 Harm Standards for Estuaries, Rivers, Streams, and their Tributaries
 - 3.3.3.3 Harm Standards for Lakes
 - 3.3.3.4 Harm Standards for Springs
 - 3.3.4 Site Specific Considerations
 - 3.3.5 Elimination or Reduction of Harm
 - 3.3.6 Mitigation of Harm
 - 3.3.6.1 Mitigation Requirements
 - 3.3.7 Elimination/ Reduction or Mitigation of Harm Considerations for Permit Renewals
 - 3.4 Saline Water Intrusion
 - 3.5 Pollution of the Water Resources
 - 3.6 Existing Offsite Land Uses
 - 3.7 Interference with Existing Legal Uses
 - 3.8 Otherwise Harmful
 - 3.9 Minimum Flows and Levels
 - 3.10 Aquifer Storage and Recovery Systems
 - 3.11 Water Reservations
- 4.0 Monitoring Requirements
 - 4.1 Measuring Withdrawal Quantities
 - 4.1.1 Monitoring Methods
 - 4.1.2 District Monitoring
 - 4.1.3 Self-Monitoring and Reporting
 - 4.1.4 Flow Measurement and Verification
 - 4.2 Special Case Monitoring and Reporting Requirements
 - 4.2.1 Back-Up and Freeze Protection Water Uses

- 4.2.2 Livestock and Other Non-Irrigation Agricultural Uses
 - 4.2.3 Withdrawal Points with Seasonal/ Temporary Pumping Equipment
 - 4.3 Monitoring Requirements in Water Supply Planning Areas
- 5.0 Permit Limiting Conditions
 - 5.1 Standard Conditions
 - 5.2 Special Conditions
 - 5.2.1 Public Supply Use
 - 5.2.2 Landscape Irrigation and Recreation Uses
 - 5.2.3 Agricultural Use
 - 5.2.4 Commercial, Industrial, Institutional, and Mining/ Dewatering Uses
 - 5.2.5 Alternative Water Supply
 - 5.2.6 Required Hydrologic and Wetlands Monitoring and Reporting
 - 5.2.7 Well Construction
 - 5.2.8 Water Use Accounting
 - 5.2.9 Surface Water Management
 - 5.2.10 10-year Compliance Reports
- Appendix A: Eastern Water Supply Planning Area
- Appendix B: Western Water Supply Planning Area

1.0 General Provisions

The purpose of this Water Use Permit Applicant's Handbook is to assist in the understanding of the water use permitting process. It establishes the framework for the applicant to meet the conditions for issuance of water use permits contained in section 40B-2.301, Florida Administrative Code (F.A.C.), thereby providing a consistent review process.

The Water Use Permit Applicant's Handbook is incorporated by reference into chapter 40B-2, F.A.C. The Water Use Permit Applicant's Handbook must be read in conjunction with section 120.60, Florida Statutes (F.S.), and chapters 40B-1 and 40B-2, F.A.C., as applicable. All criteria in the Water Use Permit Applicant's Handbook apply to processing individual permit applications. Copies of these statutes and rules are available online at www.mysuwanneeriver.com, or at District headquarters.

1.1 Definitions

1. Agricultural Use - The use of water associated with the irrigation of crops (including biofuel), greenhouse and nursery products, sod, forage, and pasture and non-irrigation uses associated with freeze protection, livestock and other domestic animals, aquaculture, and other uses associated with agricultural operations.
2. Alternative Water Supplies - Saltwater; brackish surface and ground water; surface water captured primarily during wet-weather flows; sources made available through the addition of new storage capacity for surface or ground water; water that has been reclaimed after one or more public supply, municipal, industrial, commercial, or agricultural uses; the downstream augmentation of water bodies with reclaimed water; storm water and any other water supply sources that is designated as non-traditional for a water supply planning region in the applicable regional water supply plan.
3. Aquaculture Use - The use of water for the spawning, cultivating, harvesting, or marketing of fin-fish, shellfish, crustaceans, alligators, or other aquatic organisms that have economic value.
4. Aquifer - A geologic formation, group of formations, or part of a formation that contains sufficient saturated, permeable material to yield water to wells and springs.
5. Aquifer Remediation - A use of water involving the withdrawal of ground water for the authorized removal of contaminants for the purposes of restoring water quality.
6. Aquifer Storage and Recovery - Projects involving approved Class V injection wells for the injection of water into a groundwater reservoir as a means of storing the water with the intent of later withdrawing (recovering) the water stored.
7. Area of Influence – For groundwater systems, the area of influence is defined by the cone of depression, and for surface water systems the area of influence is defined as the extent to which the withdrawal results in a measurable change in surface water levels or flows.
8. Augmentation Use - The addition of water to artificially maintain the level of natural or artificial water bodies to either protect habitat for fish and wildlife, or to provide for recreational uses.
9. Average Daily Rate of Withdrawal (ADR) - The volume of water withdrawn during 365 consecutive days divided by 365, expressed in million gallons per day. The total volume may be calculated using historical data or projected based on the best available information.
10. Basin - As used in the context of interbasin transfer, those major river basin areas delineated on Map Series Number 72, published by the Florida Department of Natural Resources, Bureau of Geology, 1975, down to the accounting unit level of recognition. The best information available shall be used to precisely define basin boundaries.
11. Best Available Information – Existing facts, data, or documents obtained from investigations that need not be created, studied or collected.
12. Best Available Technology – The most effective and efficient development and operational techniques that are

economically and technically viable to reduce water use.

13. Beverage Processing Use – The sealing of drinkable liquids (including bottled water, as defined in section 500.03(1)(d), F.S.) in bottles, packages, or other containers and offered for sale for human consumption.
14. Center Pivot Irrigation – A type of self-propelled overhead irrigation system that travels in a circle and emits water under low pressure at a distance of three to four feet above the crop and at a rate ranging from four to sixteen gallons per minute.
15. Commercial Use - The self-supplied use of water (indoor and outdoor) associated with the production of goods or provisions of services by a commercial establishment.
16. Cone of Depression – The conical shape created by the potentiometric surface which shows the relationship of drawdown with distance as a result of pumping from one or more wells.
17. Desalination - A process to remove dissolved solids from water to meet standards for the proposed use.
18. Dewatering Use - The removal of water to control surface or groundwater when performing activities such as construction or excavation.
19. Diversion and Impoundment - The diversion or extraction of surface water into impoundments and delivery systems designed for such purposes as maintaining structural integrity, maintaining control elevations for groundwater recharge, and supplying water to meet the reasonable-beneficial demands of secondary uses.
20. Drawdown - The vertical distance between the potentiometric surface and the surface of the cone of depression.
21. Elevation - The height in feet above mean sea level according to the National Geodetic Vertical Datum or North American Vertical Datum (NGVD 1929 or NAVD 1988). It may also be expressed in feet above mean sea level (MSL) as the reference datum.
22. Evapotranspiration - The loss of water to the atmosphere by evaporation from land and water surfaces and by transpiration from plants.
23. Existing Legal Use - All uses of water which are exempt under chapter 373, F.S., or 40B-2, F.A.C., or which have a valid chapter 373, Part II, F.S., permit.
24. Florida-Friendly Landscape – Quality landscapes that conserve water, protect the environment, are adaptable to local conditions, and are drought tolerant. The principles of Florida-Friendly landscape include planting in the right place, efficient watering, appropriate fertilization, mulching, attraction of wildlife, responsible management of yard pests, recycling yard waste, reduction of stormwater runoff, and waterfront protection. Additional components of Florida-Friendly landscape include planning and design, soil analysis which may include the use of solid waste compost, practical use of turf, and proper maintenance.
25. Golf Course Use - A type of recreational water use that involves the irrigation of roughs, fairways, greens, and tees on a golf course.
26. Hydroperiod - The range and duration of water levels in a surface water body, including wetlands.
27. Impact Offset – The use of reclaimed water to reduce or eliminate a harmful impact that has occurred or would otherwise occur as a result of other surface water or groundwater withdrawals as set forth in subsection 62-40.416(7), F.A.C.
28. Impoundment - Any lake, reservoir, pond or other containment of surface water occupying a depression or bed in the earth's surface and having a discernible shoreline.

29. Industrial Use - The use of water (indoor and outdoor) associated with the production of goods or provisions of services by a self-supplied industrial facility. Industrial uses include manufacturing plants, chemical processing plants, power generation plants, and other industrial facilities.
30. Institutional Use - The use of water (indoor and outdoor) associated with the production of goods or provisions of services by a self-supplied institutional establishment.
31. Irrigation Return Flow - The flow of water under the influence of gravity to a watercourse, which occurs as surface water flow or shallow groundwater flow, resulting from the application of water for supplemental irrigation purposes.
32. Landscape Irrigation Use - The use of water for landscape irrigation including parks, common areas, large lawns and landscaped areas, cemeteries, medians and public right-of-ways.
33. Linear Move Irrigation System - A type of self-propelled overhead irrigation system that travels laterally and emits water under low pressure at a distance of three to four feet above the crop and at a rate ranging from four to sixteen gallons per minute.
34. 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.
35. Minimum Flows and Levels - The minimum flow for a watercourse or the minimum water level for ground water in an aquifer or the minimum water level for a surface water body at which further withdrawals would be significantly harmful to the water resources or ecology of the area. These levels have been established by the District for designated water bodies in chapter 40B-8, F.A.C.
36. Mining Use - The use of water associated with the extraction, transport, and processing of subsurface materials and minerals.
37. New Water Use – A proposed use, a use for which the permit has expired, or an existing use that has never been permitted and is not exempt under part II, chapter 373, F.S., or chapter 40B-2, F.A.C.
38. Other Uses - The use of water for aquifer remediation; environmental augmentation; cleaning and maintenance; and other purposes not described in section 40B-2.501, F.A.C.
39. Permit Retirement – The voluntary elimination of all or part of a verifiable water use authorized by an individual water use permit for the purpose of eliminating or reducing the equivalent impacts of another withdrawal.
40. Physically Proximate – Adjacent properties not separated by a county-maintained or state-maintained road.
41. Potable Water - Water that is suitable for drinking, culinary, and other domestic purposes.
42. Potentiometric Surface – A surface which represents the hydraulic head in an aquifer and is defined by the level to which water will rise above a datum plane in wells that penetrate the aquifer.
43. Power Generation Use - A component of industrial use involving generation of electricity and that may include the use of water for cooling.
44. Project Site – The real property on which the withdrawal facilities are located and the proposed water use will occur. For the purpose of public supply use, the project site is the service area and the real property on which the withdrawal facilities are located.
45. Public Interest - Broad-based interests and concerns that are collectively shared by members of a community, or residents of the District or the State.

46. Public Supply Use - The use of water provided by any municipality, county, regional water supply authority, special district, public or privately owned water utility, multijurisdictional water supply authority, or other entity consistent with the Florida Safe Drinking Water Act, for human consumption and other purposes.
47. Public Water Supply - Water treated to drinking water standards for potable purposes.
48. Reasonable-Beneficial Use - The use of water in such quantity as is necessary for economic and efficient consumption for a purpose and in a manner which is both reasonable and consistent with the public interest.
49. Recreation Use - The use of water for the creation, maintenance and operation of recreational facilities such as golf courses, athletic fields, playgrounds, water-based recreation areas for hunting, fishing, boating, swimming, or for wildlife enhancement.
50. Saline Water/Brackish Water- An aqueous solution with a chloride concentration greater than 250 mg/L and less than that of seawater.
51. Saline Water Interface – The hypothetical surface of chloride concentration between freshwater and saline water where the chloride concentration is 250 mg/L at each point on the surface.
52. Seawater - An aqueous solution with a chloride concentration equal to or greater than 19,000 mg/L.
53. 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 plant use.
54. Substitution Credit – The use of reclaimed water to replace all or a portion of an existing permitted use of resource-limited surface water or groundwater, allowing a different user to use or initiate a withdrawal or increase its withdrawal from the same resource-limited surface water or groundwater source, provided that the withdrawal creates no net adverse impact on the limited water resource or creates a net positive impact, if required by district rule as part of a strategy to protect or recover a water resource as described in subsection 62-40.416(8), F.A.C.
55. Supplemental Irrigation Requirement (SIR) – The volume of water, usually expressed in acre-inches, representing the difference between the estimated evapotranspiration of a given crop and the rainfall expected for a specific geographic area over a prescribed time period.
56. Traveling Guns - Sprinklers that discharge water through the air above the level of the plant being irrigated which are self-propelled and move slowly across the area being irrigated, such as lateral move or linear irrigation systems.
57. Water Conservation – The efficient use of water that leads to a reduction of water use.
58. Water Resource Caution Area - A geographic area identified by a District as having existing water resource problems or an area in which water resource problems are projected to develop during the next twenty years.
59. Water Table - The surface of an unconfined aquifer at which the pressure is equal to that of the atmosphere. It is defined by the level where water within an unconfined aquifer rises in a well.
60. Water Use - Any use of water which reduces the supply from which it is withdrawn or diverted.
61. Water Utility Use - Water used for withdrawal, treatment, transmission, and distribution by potable water systems. Water utility uses include community and non- community public water systems as defined in chapter 62-550, F.A.C.

1.2 Acronyms and Abbreviations

RESERVED

1.3 Water Use Permit Program Objectives, Organization, and Authorizations

Chapter 373, F.S., authorizes and directs the District to regulate the use of water within its jurisdictional boundaries. The water use permit program ensures that water uses permitted are reasonable-beneficial, will not interfere with any presently existing legal uses of water, and are consistent with the public interest, as required by section 373.223, F.S. The District has adopted rules for regulating water uses, which are set forth in chapters 40B-1 and 40B-2, F.A.C., and in this Water Use Permit Applicant's Handbook.

1.4 Permitting Procedures

1.4.1 Permits Required, Thresholds and Permits by Rule

The District has established procedures for issuing permits based on the quantity of water requested and the use type. Procedures for processing water use permit applications are set forth in section 40B-1.703, F.A.C. Specifically, these rules set forth procedures for applying for water use permits, requesting additional information, public noticing of permit applications, and requesting administrative hearings.

1.4.1.1 General Permits by Rule

General permits by rule shall be considered as prescribed in 40B-2.041, F.A.C.

1.4.1.2 Individual Permits

Individual permits must be obtained for water use activities that are not exempt pursuant to section 40B-2.051, F.A.C., or that do not qualify for a general permit by rule pursuant to section 40B-2.041, F.A.C.

1.4.1.3 Exemptions and Variances

Exemptions shall be considered as prescribed in 40B-2.051, F.A.C. Procedures governing the District's proceedings under chapter 120, F.S., for variances and waivers, are contained in chapter 28-104, F.A.C., Uniform Rules of Procedure. Exceptions to the Uniform Rules of Procedure were granted by the Administration Commission and are set forth in chapter 40B-1, F.A.C.

1.4.1.4 Temporary Water Use Permits

Requests for temporary water use permits must be submitted to the District in the form of a letter or electronic mail. A water use permit application for the proposed use must be pending with the District. The letter must contain the reason for the request, the amount requested, the proposed use of the water, the source of the water, and the length of time the water is needed. Temporary water use permits shall not be issued as a result of the applicant's failure to properly plan for the need to use water. Temporary permits issued by the District will expire on the day following the next regular Governing Board meeting, at which meeting the Governing Board will determine whether the requested water use meets the criteria in subsection 373.223(1), F.S., and is necessary prior to final action on the related water use permit application. At such meeting, the Governing Board may reauthorize the temporary use to expire on the day following the next regular Governing Board meeting. The Governing Board will terminate a temporary permit if the water use does not meet the criteria in subsection 373.223(1), F.S., is causing adverse effects to occur, or is no longer needed. The issuance of a temporary water use permit under this section and section 373.244, F.S., does not obligate the District to issue a water use permit pursuant to section 373.223, F.S.

1.4.2 Pre-application Meetings

Pre-application meetings are encouraged. The purpose of a pre-application meeting is to identify issues that need to be addressed in detail. Pre-application meetings assist the applicant with submitting a complete application. Information provided during a pre-application meeting is considered preliminary (draft) and not part of the formal application process.

1.4.2.1 Third Party Interests

Governmental entities, organizations, and affected citizens may have an interest in a permit action. Third party interests that would be substantially affected by issuance of a permit will have the opportunity to comment on the application and request an administrative hearing pursuant to subsection 40B-1.703(2)(b), F.A.C.

1.4.3 Competing Applications

Pursuant to section 373.233, F.S., complete applications are considered to be competing when staff evaluation indicates that the proposed use of water by two or more applicants will exceed the amount of water that is available for use. All complete permit applications that are pending at the same time and are requesting water from the same source will be considered competing. Competing permit applications will be processed pursuant to section 373.233, F.S.

1.4.4 Phased Projects

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

1.4.5 Water Well Permitting Concurrency

In the event the proposed water use is associated with a project that requires a water well permit under chapter 373, Part III, F.S., and District rules, the water well construction permit shall not be issued until the water use permit has been issued.

1.4.6 Application Review Process

1.4.6.1 Submittal of Application

All permit application materials, notices, and verifications of exemption must be submitted to the District's headquarters in Live Oak, Florida, in either paper form or electronic form for consideration by the District. Applications shall be considered received by the District on the date submitted before 5:00 p.m., Monday through Friday, excluding designated District holidays.

1.4.6.2 Processing Timeframes

The completed permit application shall be processed within the prescribed timeframes as set forth in section 40B-1.703, F.A.C.

1.4.6.3 Public Noticing Requirements

Noticing of individual applications shall occur as prescribed in subsection 40B-1.703(2)(b), F.A.C. Upon request, the District shall furnish copies of permit application materials to the person making the request. Payment for copying charges may be required.

1.4.6.4 Staff Review and Requests for Additional Information

Proposed water uses for general permit by rule and individual permits must meet the conditions for issuance of permits pursuant to section 40B-2.301, F.A.C. All applications shall be processed as proposed water uses, including existing

unpermitted uses of water and uses previously authorized by a permit that has expired. Prior construction of or the physical existence of withdrawal facilities will not be considered in approving or denying an application for a permit. Pursuant to section 40B-1.703, F.A.C., the District shall require the applicant to submit additional information if the application is incomplete. The need for additional information will be based, in part, on the amount of the proposed withdrawal, characteristics of the requested water source in the region, potential for environmental harm, potential for interference with existing legal uses, and feasibility of providing data.

1.4.7 Professional Certification of Supporting Documents

Any supporting information or calculations required to be prepared by a professional regulated under Florida law shall bear the certification of such professional.

1.4.8 Contiguous and Non-contiguous Parcels

A water user shall obtain one permit for all withdrawals that are intended to serve contiguous property. Two or more properties represented by their owners to be separate properties shall be aggregated and treated as a single property for permitting purposes when the District determines that the properties are physically proximate and either share the same irrigation infrastructure or are operated as a common enterprise. However, when multiple use types, as defined in Rule 40B-2.501, F.A.C., are served by separate withdrawal facilities, separate individual permits may be issued. Applicants with legal control over multiple non-contiguous parcels within the same county may apply for one permit encompassing all such parcels, provided that it is shown that the water use for each parcel is in the same water use classification.

1.4.9 Fees

Fees for processing water use permit applications are as prescribed in section 40B- 1.706, F.A.C.

1.4.10 Permit Modifications

Permits may be modified as provided in Rule 40B-2.331, F.A.C. An application for a permit modification for an increased allocation will be processed as a proposed water use for the quantity of the increased allocation requested.

1.4.11 Permit Renewals

Applications for permit renewal shall be made pursuant to section 40B-2.361, F.A.C. Permits for which renewal applications have been submitted prior to the expiration date shall remain in effect until final agency action occurs.

1.4.12 Governing Board Meetings

Governing Board meetings are held at least once per month and are open to the public. The District's website (www.mysuwanneeriver.com) may be viewed for copies of meeting agendas and minutes.

1.5 Permit Duration

The Governing Board shall approve permit durations up to the statutory limits specified in sections 373.236 and 373.250, F.S., provided that the applicant demonstrates reasonable assurance that the proposed use meets the conditions for issuance in section 40B- 2.301, F.A.C., for the requested duration. Otherwise, the Governing Board is authorized to issue permits for a shorter duration that reflects the period for which such reasonable assurances can be provided. The Governing Board shall grant a permit of lesser duration to address case-specific considerations (e.g., short duration projects) or to provide for the protection of the resource or existing legal uses (e.g., insufficient data for long-term authorization) or for other considerations as provided by Florida Statutes. Special duration factors to be considered include:

- (a) Location wholly or in part within a Water Supply Planning Area;
- (b) Location wholly or in part within an area with localized water resource concerns;
- (c) The duration of a lease or other legal document demonstrating the legal right to conduct water use on the property and maintain legal control over withdrawal or diversion facilities;
- (d) The duration of reasonable demand for the requested use for a specified period of time; and
- (e) The duration for which reasonable assurances can be provided, as set forth in sections 373.236(1) and 373.250(9), F.S.

2.0 Demonstration of Water Need, Source(s), and Demand

2.1 Demonstration of Water Need

2.1.1 Legal Control over Project Site

Applicants shall demonstrate the legal right to conduct the water use on the project lands or site. Legal right is demonstrated through property ownership of or other property interest in (such as a lease) the project site; or control of the water supply to the receiving entity or entities. Applicants shall provide documentation demonstrating ownership or control of the property or properties to which water is supplied through the requested permit duration. The recommended permit duration shall take into consideration the time period of the legal interest in the property. The requirements of this section shall not apply to proposed water uses reviewed in accordance with 40B-2.025(2), F.A.C., under the Florida Power Plant Siting Act.

2.1.2 Legal Control over Withdrawal and Diversion Facilities

All applicants proposing to lease the lands on which the proposed water use will occur must maintain legal control to access and maintain the withdrawal and diversion facilities through the conditions of the lease as necessary to ensure permit compliance.

2.2 Source Identification

District permits are required for all non-exempt existing and proposed uses of fresh and saline water sources. Sources are classified as surface water, groundwater, or alternative water supplies, all of which may be further identified with the name of the water body and/or aquifer. If a source is not reliable throughout the year, the applicant may request withdrawal quantities from secondary and standby sources of water, which may be used when the primary source is limited. The permit will identify the secondary and standby sources and the conditions under or time periods during which they may be needed or used. The applicant must consider the availability of the lowest quality water which is acceptable for the intended use. If a water source of lower quality is available and is environmentally, technologically and economically feasible for all or a portion of an applicant's proposed use, this lower quality water must be used. Such lower quality water may be in the form of reclaimed water, recycled irrigation return flow, storm water, saline water, or other source.

2.2.1 Alternative Water Supply Feasibility Determination

The encouragement and promotion of water conservation and use of alternative water supplies are state objectives and considered to be in the public interest, pursuant to section 373.1961, F.S. Permit applicants shall evaluate the feasibility of using alternative water supplies to meet all or a portion of their needs, as follows:

- (a) Environmental Feasibility: The use of an alternative water supply is considered environmentally feasible if the source is permitted or capable of being permitted under chapter 373 or chapter 403, F.S.
- (b) Technical Feasibility: The use of an alternative water supply is considered technically feasible if an uncommitted, adequate supply of alternative water supply is available at the site of the proposed use to meet all or part of the applicant's water needs. Determination of technical feasibility will be based on the following:
 - 1. An uncommitted supply of alternative water supply means the average amount of alternative water produced during the three lowest-flow months minus the amount of alternative water that the provider is contractually obligated to provide to another user.
 - 2. In the event the uncommitted supply of alternative water is not adequate to meet the project's demands, the applicant may request a partial allocation of water from a traditional source. However, such partial allocation will not exceed the amount necessary to compensate for the shortfall in uncommitted water supply, considering total project demands calculated pursuant to this Handbook.
 - 3. Available at the project site means that the supplier has initially provided the distribution facilities to the project boundary. In the event distribution lines are not provided at the project boundary, the applicant must provide an assessment of extending the lines as part of the economic feasibility analysis.
- (c) Economic Feasibility: If the applicant asserts that the use of an alternative water supply is not economically feasible, the applicant must provide the District with an assessment of the economic feasibility. The applicant's economic feasibility analysis must include all of the following:
 - 1. Capital and operation and maintenance costs.

2. Adjustment in the fees and rates charged by the applicant to account for the increased costs associated with using an alternative water supply; and
3. Design life of the alternative water supply system as compared with the time required to recover the capital cost.

2.3 Demonstration of Demand and Conservation

Section 373.223, F.S., provides the following three-pronged test for evaluating each proposed water use:

1. The use must be reasonable-beneficial;
2. The use must not interfere with any existing legal use of water; and
3. The use must be consistent with the public interest.

Reasonable assurances that the proposed water use from both an individual and cumulative basis meets this three-pronged test must be provided by the applicant in order to obtain a water use permit. The following sections provide technical guidelines for determining whether a water use meets the conditions for issuance set forth in section 40B-2.301, F.A.C. If the criteria described in these sections are not met, applicants may consider reducing the requested withdrawal quantities, proposing a pumping rotation schedule or mitigation, changing the withdrawal source, or other means to bring the proposed use into compliance with the technical criteria. The proposed withdrawal of water must be supported by the information specified in this section, demonstrating that the withdrawal quantities are necessary to supply a specified reasonable need or demand. Only that portion of the requested demand that is supported by adequate documentation will be recommended for approval for the permit duration.

2.3.1 General Criteria

Under section 373.223, F.S., in order to receive an individual permit, an applicant must demonstrate that the proposed water use is a reasonable-beneficial use of water. As part of the demonstration that a water use is reasonable-beneficial, the applicant must show demand for the water in the requested amount. This section describes the factors involved in determining whether there is demand and the appropriate permit allocation for a proposed water use. Demonstration of need requires the applicant to have legal control over the project site, facilities, and for potable water supply, the proposed service area, as required in sections 2.1.1 and 2.1.2. The allocation permitted to serve the applicant's need for water must be based on the demonstrated demand. Sections 2.3.2. through 2.3.4 identify the components of demand that must be identified by applicants for individual permits for each water use type.

2.3.1.1 Withdrawal Quantities Assigned by Wells and Sources

Applicants for individual permits must identify the quantities needed for each component of demand in order to justify the quantities requested in the permit application. Applicants must request quantities in gallons per day for each component of demand according to the designations listed below. The District will evaluate the quantities requested and specify the quantity allocated in gallons in each permit. The resulting allocation shall be reported million gallons per day on an average annual basis. If the proposed use of water is from multiple water sources, each source must be identified in order of priority. Each of the sources will receive a separate allocation in the permit.

2.3.1.2 Annual Allocation

The annual allocation is determined by calculating the quantity of water to be withdrawn over a 12-month period under a 10 percent annual chance of drought condition for the designated use class. Applicants, other than for irrigation uses, must determine the annual demand by adding together each component of demand for the proposed uses. The total demand is then considered along with other factors affecting withdrawals such as treatment losses, other sources of water, conservation practices employed, and water purchased, sold, or transferred, to determine the annual withdrawal quantity. For agricultural irrigation uses, the annual allocation is determined under section 2.3.3.

2.3.1.3 Water Conservation Plans

Allocations will reflect reduced water demands resulting from the applicant's implementation of a District-approved water conservation plan.

2.3.2 Public Water Supply

Individual permit applicants for public water supply must identify the demand for each of the uses listed in (a) below. Information required to demonstrate reasonable demand for each component of the proposed water use includes the number, type, and size of service connections; past pumpage records; projected population data for the service area; data on the specific uses; and data specific to the forecasting models used. Demand quantities must be based on raw water demand or that volume of water necessary to be withdrawn from existing or proposed sources. The quantities requested must be expressed in average gallons per day for each component of demand. Where metering, billing, or other record-keeping methods do not provide accurate use estimates, the applicant must provide the best estimates for each use type and documentation of the estimation method used. All potable water supply applicants for an individual permit must identify the demand for the following components of the proposed water use:

1. Residential uses must be divided into single-family residential use and multi-family residential use.
2. Other metered uses must include all uses other than residential.
3. Unaccounted uses are calculated by the total water system output minus the accounted for uses. Unaccounted water uses include, but are not limited to, unmetered uses, leaks, distribution line flushing, and fire-fighting. Applicants with unaccounted use greater than 10 percent are required to reduce the losses.
4. Treatment and distribution losses are the result of losses in the system during distribution or because the water must undergo a treatment process before it is potable. Some water treatment technologies, such as desalination or sand filtration, may cause significant portions of the water withdrawn to become non-potable. In such cases, the applicant must specify the withdrawal quantity that has been treated, the percent product (potable) water, the percent reject (non-potable) water, and the manner in which the reject water will be disposed.
5. User agreements - for those applicants who provide water to other entities through user agreements or other similar contracts, the quantity of water delivered to each end user (both average and peak day) and the duration of the water service delivery agreement shall be identified. For those applicants who purchase supplemental water from another utility, the volume of water contracted for purchase based on history and future projections for both an average and maximum daily basis and the duration of the contract shall be provided.

2.3.2.1 Per Capita Daily Water Use

Per capita daily water use is a guideline which the District uses to evaluate the reasonableness of the withdrawal requests of public water supply applicants for an individual permit. Per capita water use includes population-related withdrawals associated with metered residential, business, institutional and industrial uses, other miscellaneous metered uses, and unmetered unaccounted-for uses. The average per capita daily use rate is calculated for the last five years or for the period of record, whichever is less, by dividing the average daily water withdrawals for each year of record by the permanent or seasonally adjusted population served by the utility for the same period of time. The per capita use rate that is most representative of the anticipated demands, considering the water conservation plans required under section 2.3.2.3., shall be identified and used for water demand projection purposes. The historical demand patterns may not always be appropriate for projection purposes. This may occur when there are current large users whose growth is not related to population, or when future development may take on characteristics very different than those of present development. In such cases, alternative per capita estimates, such as a design per capita based on dwelling unit type, population characteristics, seasonality of the population, and comparison with adjacent similar developments, must be submitted accompanied by supporting documentation. If no historical water use data exists or in the case of proposed developments, a design per capita use shall be based on the above alternative criteria. Per capita daily water use greater than 150 gallons per capita per day (gpcd) must be supported with additional information justifying the high rate of use.

2.3.2.2 Population Estimates

In service areas without significant seasonal population fluctuations, the use of permanent population estimates is appropriate. In service areas where there are significant seasonal population changes, the individual permit applicant must estimate the seasonal population for use in conjunction with the permanent population numbers in the calculation of per capita daily water demand. Permanent and seasonal (if applicable) population growth must be projected on a yearly basis for the requested duration of the permit for the area to be served by the proposed water use. When population estimates are required for years in between published or referenced estimates, the applicant must interpolate the data. The applicant may assume population increases in equal increments in the years between established estimates.

2.3.2.2.1 Population Data

Population data must be derived from accepted sources of population data to validate the variance including, but not limited to the following: (1) University of Florida Bureau of Economics and Business Research (BEBR), (2) Regional Planning Council (RPC), (3) County Planning Departments, or (4) District planning documents.

2.3.2.3 Water Conservation Plans for Public Supply Use

In addition to any required conservation measures required pursuant to an applicable adopted minimum flow and level recovery or prevention strategy, all public water supply applicants shall implement either a standard water conservation plan described in section 2.3.2.3(a) or a goal-based water conservation plan described in section 2.3.2.3(b). The proposed water conservation plan shall allow no reduction in, and increase where environmentally, technically, and economically feasible, overall utility- specific water conservation effectiveness. The applicant may use publications and materials from Conserve Florida, the Alliance for Water Efficiency, and other similar industry guidance to assist in developing and supporting the selection of measures in its conservation plan and in demonstrating that increases in water use efficiency were achieved through water conservation. The elements and implementation schedule for the water conservation plan shall be developed by the applicant. The District shall review and approve the plan submitted by the applicant as part of the public water supply permit. In reviewing the applicant's proposed plan for sufficiency, the District will consider whether the elements and sub-elements proposed to be implemented in the plan, taken as a whole, will promote effective conservation. The water conservation plan shall be subject to the schedule and reporting requirements specified in the permit. If implementation of the plan fails to demonstrate progress toward achieving permit requirements for water use efficiency, the permittee shall request a permit modification, if necessary, to revise the plan to address the deficiency.

(a) Standard Water Conservation Plan

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

1. A water conservation public education program. The applicant will consider one or more of the education sub-elements such as those listed below in the program. Implementation of these sub-elements may be achieved through collaboration with other entities, including the District. For each educational sub-element included in the applicant's program, the applicant's program shall provide the frequency, duration, and implementation schedule for the sub-element.
 - a. Water conservation public service announcements;
 - b. Water conservation speakers, posters, literature, videos, and/or other information provided to schools and community organizations;
 - c. Public water conservation exhibits;
 - d. Water conservation articles and/or reports provided to local news media;
 - e. A water audit customer assistance program to address indoor and outdoor water use;
 - f. Water conservation information provided to customers regarding year-round landscape irrigation conservation measures;
 - g. Water conservation information posted on the supplier's website;
 - h. The construction, maintenance, and publication of water efficient landscape demonstration projects;
 - i. Water conservation information provided in customer bills or separate mailings; or
 - j. Other means of communication proposed by the applicant.
2. An outdoor water use conservation program. The applicant shall consider the following sub-elements:
 - a. The adoption of an ordinance or condition of service limiting lawn and landscape irrigation that is provided to the District, and is either no less stringent than or consistent with any irrigation restrictions adopted by the District.
 - b. The adoption of an ordinance or condition of service requiring the use of Florida-Friendly landscaping principles, Florida Water Star, or other similar generally accepted water conservation programs, guidelines, or criteria that address outdoor water conservation.
 - c. The adoption of an ordinance or condition of service consistent with section 373.62, F.S., relating to

- automatic landscape irrigation systems.
 - d. The provision of a landscape irrigation audit program for businesses and residents, including the provision of information to assist customers in implementing the recommendations of the audit. The applicant shall provide a description of the program including implementation details and the content of the audits to be provided.
 - e. An education element focusing on outdoor conservation as part of the water conservation public education program required by paragraph (a)1. of this section.
 - f. Any other conservation measures or programs proposed by the applicant designed to reduce outdoor water use.
3. The selection of a rate structure designed to promote the efficient use of water by providing economic incentives. A rate structure may include, but not be limited to, increasing block rates, seasonal rates, quantity-based surcharges, and/or time of day pricing as a means of reducing demands. The District shall afford a utility wide latitude in adopting a rate structure in accordance with subsection 373.227(3), F.S.
 4. A water loss reduction program. If system water losses exceed 10 percent as determined using an approved industry-standard method for calculating real water loss, the applicant shall provide a water system audit.
 5. An indoor water use conservation program. The applicant will consider indoor conservation sub-elements such as those listed below. Implementation of these sub-elements may be achieved through collaboration with other entities, including the District. For each indoor conservation sub-element included in the applicant's program, the applicant's program shall provide the frequency, duration, and implementation schedule for the element.
 - a. Plumbing retrofit rebates;
 - b. Faucet aerator and showerhead giveaways;
 - c. An education element focusing on indoor conservation as part of the water conservation public education program required by paragraph (a)1. of this section; or,
 - d. Other indoor conservation measures proposed by the applicant.

(b) Goal-Based Water Conservation Plan

A public water supply applicant may propose a goal-based water conservation plan in lieu of a standard water conservation plan. A goal-based plan allows the applicant to demonstrate effective water conservation by selecting plan elements that are different from those in the standard water conservation plan, but which are appropriate to the applicant's service area. A permittee operating under a standard conservation plan pursuant to this rule, or conservation plan required by a permit issued prior to this rule's effective date, may request to convert its current conservation plan to a goal-based plan through a letter modification. A goal-based water conservation plan prepared pursuant to subsection 373.227(4), F.S., shall contain the following:

1. A description of water conservation measures selected for implementation and an implementation schedule for each measure; and
2. An explanation of why the alternative elements included in the goal-based plan are appropriate to achieve effective water conservation in the applicant's service area if any of the five elements of the standard water conservation plan are not selected for inclusion in the goal-based plan.

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

2.3.2.4 Well Field Operations

Public water supply applicants using multiple withdrawal facilities will submit a well field operating plan. Multiple withdrawal configurations are acceptable provided each configuration meets the conditions for permit issuance, the total withdrawals of each configuration do not exceed the allocation, and each withdrawal configuration represents normal operation protocol for the use. Emergency operating plans are not required. Implementation of approved operating plans will be required through permit conditions. Changes to an approved operating plan involving the normal operating protocols approved in the permit must be authorized through the issuance of a modification pursuant to section 40B-2.331, F.A.C. Temporary disruptions in operations associated with emergencies or well field maintenance will not require a modification of the well field operating plan.

2.3.3 Agriculture

Applicants for an individual permit must demonstrate that the quantities requested represent actual irrigation water needs. This is demonstrated by providing information on the planted acreage, planting dates, length of growing season, the type of irrigation system used and related efficiency data, soil types, crop type and rotation, frost/ freeze protection, and other specific use information. Demand for agricultural water use depends on the specific agricultural use. Where more than one use is served by the same allocation, e.g., improved pasture and crop irrigation, the allocation shall represent the sum of the components. The need for irrigation water use is equal to the supplemental irrigation requirement (see section 2.3.3.1. below) divided by the system efficiency. Factors limiting the actual need for irrigation water include the available water supply or the applicant's ability to withdraw the water. If the total rated capacity of all existing and proposed withdrawal facilities is less than the calculated demand, the recommended allocation will be based on the lesser value.

2.3.3.1 Supplemental Irrigation Requirement

The supplemental irrigation requirement is the amount of water needed for a particular crop in addition to rainfall. The District uses the Agricultural Field Scale Irrigation Requirements Simulation (AFSIRS) model developed by the University of Florida, Institute of Food and Agricultural Sciences (IFAS) to estimate supplemental irrigation requirements. The AFSIRS model simulates daily water balance of the crop root zone using historic climate data (rainfall and evapotranspiration). Input data for the AFSIRS model includes the crop type(s), irrigation system type and efficiency, planting season(s), soil type(s), soil water holding capacity, water table depth, and other parameters. The District evaluates supplemental irrigation needs based on the 1-in-10 year drought conditions, which reflect below-average rainfall and above-average evapotranspiration. Applicants may calculate AFSIRS amounts for supplemental irrigation needs using the online GIS-Based Water Resources and Agricultural Permitting and Planning System available at <http://webapub.sjrwmd.com/agws10/gwrapps/>.

2.3.3.2 Improved Pasture Demand

Authorization to use water for improved pasture will be given provided the applicant demonstrates that an irrigation system exists or is proposed which is capable of delivering the requested amount, and the conditions for issuance are met. For proposed systems, a schedule for implementation of the irrigation system is required. The applicant will be required to document the amount of improved pasture acreage reasonably expected to be irrigated in any given growing season as the basis for the net irrigated acreage. Applications to use water for the irrigation of unimproved pasture will not be approved.

2.3.3.3 Frost/ Freeze Protection Demand

Frost/ freeze protection quantities shall be based on the irrigated acreage, the type of irrigation used, and the pumpage hours required. If the number of hours is unknown, the maximum daily quantity shall be based on the best available data for frost/ freeze recurrence and duration. Alternate calculations shall be considered, but they must be documented. Permit applicants must provide reasonable assurances that offsite discharge of melting frost/ freeze protection water will not cause an unmitigated adverse impact on existing adjacent land uses. Water quantities for frost/ freeze protection shall not be considered in the determination of the permit type (general permit by rule or individual).

2.3.3.4 Livestock Demand

The need of water for livestock use is determined based on application of industry-standard water consumption to head of livestock (per cowpita) using IFAS or another District-approved source.

2.3.3.5 Aquaculture Demand

The water need for aquaculture is determined by the number and volume of ponds and tanks and the filling and recirculation requirements of each of these, as well as other factors that may contribute to maintaining necessary water levels or water quality. Permit applicants must provide reasonable assurances that offsite discharge of recirculation water will not cause an unmitigated adverse impact on existing adjacent land uses.

2.3.3.6 Other Agricultural Demand

The water need for other agricultural uses is determined based on supporting information provided by the applicant. The water need for silvicultural operations with field-planted seedlings is determined by supporting information provided by the applicant. Consideration will be given to applicants proposing to establish seedlings that are less than one year old. Quantities shall not be allocated once the seedlings are greater than one year old.

2.3.3.7 Water Conservation Plans for Agricultural Water Uses

Applicants for an individual water use permit for agricultural water uses shall submit a water conservation plan. To meet the applicable conditions for issuance contained in Rule 40B-2.301, F.A.C., the plan shall contain specific activities designed to conserve water and provisions for:

- (a) An analysis of current water use conservation practices and the water savings potential of proposed practices;
- (b) Irrigation system leak detection and repair;
- (c) Irrigation of planted (target) areas only;
- (d) Use of the lowest quality water source to the extent feasible; and
- (e) An implementation schedule for proposed conservation measures.

2.3.4 Commercial

Commercial establishments include general businesses, office complexes, commercial cooling and heating, beverage processing plants, food processing, restaurants, gas stations, hotels, car washes, laundry facilities and the use of water at zoos, theme parks, waterslides, and attractions. The requested allocation for commercial use must be supported by a water balance calculation submitted by the applicant. The water balance demonstrates water input and output, including quantities disposed of or reused in the commercial facility. The water balance may be in the form of a spreadsheet or flow diagram that indicates all water sources and water losses. A demonstration of commercial demand may require an accounting of other minor water use types including, but not limited to, landscape irrigation, potable supply, and power generation.

2.3.4.1 Beverage Processing

In determining whether a proposed beverage processing use is reasonable-beneficial and consistent with the public interest, the Governing Board will consider the following information:

- (a) Whether there is a need for the requested amount of water;
- (b) The location of the withdrawal;
- (c) The location of the beverage processing facility;
- (d) Plan to convey water from withdrawal facility to beverage processing facility;
- (e) A site plan for the beverage processing facility;
- (f) Existing land use and zoning designations;
- (g) A market analysis;
- (h) Schedule for completion of construction of the beverage processing facility;
- (i) Contractual obligation to provide water for beverage processing;
- (j) Other evidence of physical and financial ability to process the requested amount; and
- (k) Other documentation necessary to complete the application.

2.3.5 Industrial

Industrial uses include the use of water (indoor and outdoor) at facilities associated with the production of goods such as water used at manufacturing plants, chemical processing plants, and other industrial uses. Water demands for power generation shall be reviewed as specified in the Florida Electrical Power Plant Siting Act, Part II, chapter 403, F.S., concurrent with Florida Department of Environmental Protection. The requested allocation for industrial use must be supported by a water balance calculation submitted by the applicant. The water balance demonstrates water input and output, including quantities disposed of or reused in the industrial processes. Example processes include, but are not limited to, boiler feed and make-up water, equipment cooling, heat exchanges, emission control, product content, product mixing and dilution, and cleaning and maintenance. The water balance may be in the form of a spreadsheet or flow diagram that

indicates all water sources and water losses. A demonstration of industrial demand may require an accounting of other minor water use types including, but not limited to, landscape irrigation, potable supply, and power generation.

2.3.5.1 Hydrostatic Testing

Applicants for water use permits specifically for hydrostatic testing must identify the volume of water necessary for filling the pipe system and other components of the system. The applicant will also indicate the length of time necessary to perform the test and describe the water disposal method and its location.

2.3.6 Institutional

Institutional establishments include hospitals, group home / assisted living facilities, churches, prisons, schools, universities, and military bases. The requested allocation for institutional use must be supported by a water balance calculation submitted by the applicant. The water balance demonstrates water input and output, including quantities disposed of or reused in the institutional facility. The water balance may be in the form of a spreadsheet or flow diagram that indicates all water sources and water losses. A demonstration of institutional demand may require an accounting of other minor water use types including, but not limited to, landscape irrigation, potable supply, and power generation.

2.3.7 Mining/ Dewatering

The requested allocation for mining use must be supported by a water balance calculation submitted by the applicant. The water balance demonstrates water input and output, including quantities disposed of or reused in the mining processes. Example processes include, but are not limited to, water recirculated back to the mine pit, water content of mined product, evaporative losses, and truck washing. The water balance may be in the form of a spreadsheet or flow diagram that indicates all water sources and water losses. A demonstration of mining demand may require an accounting of other minor water use types including, but not limited to, landscape irrigation, potable supply, and power generation. Applicants for dewatering use must identify the duration, volume, and withdrawal rate from the construction site necessary to perform the dewatering. In addition, the applicant will describe the water disposal method and its location. The applicant must adhere to erosion and sediment control measures. Applicants who have obtained and are in compliance with a National Pollutant Discharge Elimination System (NPDES) or Environmental Resource Permit (ERP) for dewatering shall be found to not cause harmful water quality impacts from dewatering discharge to receiving waters.

2.3.8 Water Conservation Plans for CII and Mining/ Dewatering Uses

Applicants for commercial, industrial, institutional, and mining/ dewatering water use permits shall develop a conservation plan and submit the plan at the time of permit application. Implementation of the approved water conservation program will be required by condition of the permit. At a minimum, the plan shall incorporate the following elements:

(a) An audit of water use in the applicant's various operational processes. In the case of initial proposed uses, an audit will not be required as a condition of permit issuance; however, an audit must be conducted within two years of permit issuance. An audit must be conducted during each 10-year compliance review for permit durations of 20 years or longer. The following measures must be implemented within the first year of permit issuance or upon completion of the audit, unless the applicant demonstrates that implementation is not economically, environmentally, or technologically feasible:

1. A leak detection and repair program;
2. A water conservation program providing for technological, procedural or programmatic improvements to the applicant's facilities; and
3. Other best available technologies to decrease water consumption.

(b) An employee awareness and customer education program concerning water conservation.

(c) Procedures and time-frames for implementation of plan elements.

2.3.9 Recreation and Landscape Irrigation

The applicant must demonstrate that the quantities applied for are reasonable personal/sanitary, irrigation, and other specific needs. This demonstration is accomplished by providing the following:

- (a) The population to be served;
- (b) The type and amount of turf and plants to be irrigated;
- (c) The timing and the method of irrigation used;
- (d) The scheduled draining, filling and augmentation of ponds, pools, flumes, and aquatic habitats;
- (e) Animal needs; and
- (f) Other specific water uses.

Applicants for recreation and landscape uses must identify the demand for each of the following components:

- (1) Personal/sanitary water use for personal needs or for household purposes such as drinking, bathing, cooking, sanitation, or cleaning spaces occupied by employees and visitors. Calculations should take into consideration the average number of visitors and employees per shift, the number of shifts per work day, and the number of work days per year. A quantity range from 8 gallons (for office workers and visitors) to 26 gallons (for employees working in shop areas) per person per 8-hour shift may be used;
- (2) Landscape irrigation use includes water for the irrigation of lawns, landscapes, and intensive recreational areas such as, but not limited to, playgrounds, football, baseball, and soccer fields. This quantity may be determined by multiplying the total acres to be irrigated by the appropriate application rate, based on the vegetation type and irrigation system type. If the applicant is irrigating plants with special irrigation needs not met by the standard coefficients (such as high-value specimens), separate documentation of such needs should be submitted;
- (3) Drinking and washing water for animals may also include augmentation and other water requirements of aquatic habitats;
- (4) Water-based recreation use includes water used for public or private swimming and wading pools, including water flumes and slides. Calculations should take into consideration filling and draining schedules, water change, showers, and other specific requirements; and
- (5) Other use is determined by subtracting the uses accounted for (see Items 1. through 4.) from total withdrawals. This use may include water not accounted for previously, system leaks, and unidentifiable uses. Other use should generally not exceed 15 percent of total withdrawals.

2.3.9.1 Golf Course Irrigation

The requested allocation must be supported by showing the acreage of greens, fairways and other landscape areas to be irrigated. In addition, the sources shall include any storm water, reuse or groundwater pumpage. An allocation will not be permitted for rough areas of the course.

2.3.10 Water Conservation Plans for Recreation and Landscape Irrigation Uses

All permit applicants for recreation and landscape projects shall develop a conservation plan and submit the plan at the time of permit application. Implementation of the approved water conservation program will be required by condition of the permit. At a minimum, the plan shall incorporate the following elements:

- (a) Florida-Friendly landscaping principles must be used in constructing proposed projects. Unless the applicant demonstrates that it is not economically feasible, these principles must be used when modifications to existing projects are requested.
- (b) The installation and use of automatic rain sensor shut-off devices is required.
- (c) A program for increasing water use efficiency of the applicant's project, including best management practices, if available.
- (d) An employee awareness and customer education program concerning water conservation.
- (e) Procedures and time-frames for implementation.

3.0 Water Resource Impact Evaluation

This part provides technical guidelines for determining whether a water use meets the conditions for issuance set forth in section 40B-2.301, F.A.C. If the criteria described in this part are not met, applicants may consider reducing the requested withdrawal quantities, proposing a pumping rotation schedule or mitigation, changing the withdrawal source, or other means to bring the proposed use into compliance with the technical criteria.

3.1 Data Collection, Evaluation, and Modeling

Applicants shall provide reasonable assurance of satisfying conditions for issuance of permits through data collection, evaluation, and modeling except when the District possesses sufficient information to enable it to evaluate the application. Data collection may involve the compilation of existing data and/or collection of new data. Models are predictive tools used to assess the harm to water resources. Models are one component in the application evaluation process. The scale of the model must be appropriate for the quantity of withdrawal and proximity to water resources. All submitted models must be documented and include calibration results. The District shall evaluate applications for individual and cumulative impacts to the adopted minimum flows and levels (MFLs), as set forth in chapter 40B-8, F.A.C., by using its regional model. The District model is available upon request. District staff does not provide detailed guidance or training to applicants on the regional model. Applicants may propose alternative models for MFL evaluations. The results of data collection, evaluation, and models that are submitted to support the requested allocation must provide reasonable assurance to satisfy the conditions for issuance. Should the applicant disagree with the allocation recommended by District staff, the applicant may conduct an independent evaluation. An evaluation may involve collection and interpretation of field data, analysis of impacts, movement of the saline water interface, migration of pollution plumes, and additional modeling.

3.2 Water Supply Planning Area Delineations

The Governing Board designates the Eastern Water Supply Planning Area as delineated in Appendix A and Western Water Supply Planning Area as delineated in Appendix B. The Eastern Water Supply Planning Area and Western Water Supply Planning Area are Water Resource Caution Areas for purposes of Chapter 403, F.S. and Chapter 62-40, F.A.C.

3.3 Evaluation of Impacts to Water Resources

This section establishes the standards and thresholds for protection of wetlands and other surface waters from harm pursuant to the condition for permit issuance in section 40B-2.301(2), F.A.C. The standards and thresholds shall apply to all water uses regulated by the District. Impact offsets and substitution credits may be used to eliminate or reduce harm. This section requires assessment of whether the projected impacts of a proposed water use constitute harm. If the assessment shows that a water use is likely to cause harm, then the applicant must comply with the elimination or reduction of harm provisions in section 3.3.5 and, if necessary, the mitigation requirements of section 3.3.6. Impacts to wetlands and surface water bodies whether or not associated with wetland enhancement, restoration, creation, preservation or other mitigation permitted pursuant to Part IV of chapter 373, F.S., or other wetland regulatory program implemented by a local, regional, or federal governmental entity, shall be considered under this section. The hydrologic characteristics resulting from construction or alterations undertaken in violation of chapter 373, F.S., or District rule, order or permit, shall be evaluated based on historic, pre-violation conditions, as if the unauthorized hydrologic alteration had not occurred. In the evaluation of the impacts from proposed withdrawals on adopted minimum flows and levels for surface and ground waters within chapter 40B-8, F.A.C., the best available information including the technical documents developed and adopted by the District in support of the minimum flows and levels, will be used.

3.3.1 Wetlands and Other Surface Waters

- (a) Delineation. Wetlands and other surface waters within the area of influence of a water use, delineated pursuant to sections 62-340.100 through 62-340.600, F.A.C., as ratified by section 373.4211, F.S., are subject to this section, except as provided in section (b) below. In accordance with subsection 62-340.300(1), F.A.C., reasonable scientific judgment shall be used to evaluate the existence and extent of a wetland or other surface water, including all reliable information, such as visual site inspection and aerial photo interpretation, in combination with ground-truthing. In addition, relevant information submitted pursuant to chapter 62-340, F.A.C., in support of an ERP/ Surface Water Management Permit shall be considered. Field delineations of wetlands and other surface water boundaries shall be required if such boundaries are in dispute. In determining the location of wetlands and surface waters, the applicant may use staff reports of previously issued ERP and Surface Water Management Permits for the site and adjacent sites, National

Wetland Inventory (NWI) Maps, Land Use/ Land Cover maps, Natural Resource Conservation Service soils maps, formal wetland determinations conducted by the District, wetland maps produced by local governments, and information, studies, reports, data, or modeling prepared by the applicant. District staff may inspect the site to confirm the location and delineation of wetlands and surface waters, and other site-specific information. In the event that access to offsite wetlands or surface waters is denied by the property owner, the District and the applicant shall agree on a method of establishing the locations and delineations of the offsite wetlands or surface waters.

- (b) Exclusions. Harm to the following wetlands and surface waters shall not require elimination or reduction of harm or, if necessary, mitigation, under this section:
 - 1. Wetlands or surface waters which have been authorized to be impacted under an ERP or designated in chapter 403, F.S.
 - 2. Artificial water bodies including borrow pits, mining pits, canals, ditches, lakes, ponds, and water management systems, not part of a permitted wetland creation, preservation, restoration or enhancement program. However, impacts to the design functions of water management systems shall be considered under section 3.6., Existing Offsite Land Uses.
 - 3. Wetlands or surface waters to the extent impacts have been specifically authorized or mitigated pursuant to section 3.3.6., in a water use permit, unless the applicant is proposing additional impacts.

3.3.2 Permit Application Submittals

The applicant shall submit the following information, if requested by the District:

- (a) For purposes of determining whether the wetland or surface water is excluded under section 3.3.1(b) above, the applicant shall provide documentation supporting the reason for exclusion including a scaled map and recent aerial photograph marked with the wetland or surface water location. If it is demonstrated that the wetland or surface water is excluded under section 3.3.1., no additional information will be required under this section.
- (b) For wetlands or surface waters that are not excluded under section 3.3.1.above, the applicant shall provide:
 - 1. Scaled maps and recent aerial photographs that identify:
 - a. The area of influence of the water use;
 - b. In accordance with section 3.3.1.(a), the locations of all wetlands and surface waters that occur within the area of influence of the water use, including wetlands and surface waters located outside the applicant's property boundaries; and
 - c. The locations of existing and proposed withdrawal facilities.
 - 2. Information about the hydrology and the current condition of the wetlands and surface waters.
 - 3. Information regarding the potential impact of the water use on the wetland or surface water in its current condition.
 - 4. Information regarding site-specific considerations required to be submitted pursuant to section 3.3.4 below.
 - 5. Where there is potential for harm, information necessary to determine the extent of elimination or reduction of harm pursuant to section 3.3.5 and mitigation required under section 3.3.6, including an assessment of the use of the wetlands and surface waters by listed species.
 - 6. A monitoring plan to assess the effects of the water use, if requested. A monitoring plan shall be required to provide continued verification that no harm is occurring as a result of the water use.
- (c) If the applicant asserts that the exclusions in section 3.3.1(b) apply to wetlands or surface waters within the area of influence of the proposed water use, the applicant must provide sufficient information supporting this assertion.

3.3.3 "No-Harm" Standards and Thresholds

To demonstrate that no harm will occur to wetlands and surface waters, reasonable assurances must be provided by the applicant that the standards below are satisfied. The analysis for determining harm shall include an assessment of the projected hydrologic alterations caused by the water use and cumulatively with other existing legal uses, and the resulting impacts on wetlands and other surface waters. In circumstances of cumulative contributions to harm, an applicant shall only be required to address its relative contribution of harm to the wetlands and other surface waters. In evaluating the applicant's water use, the District shall consider the extent of hydrologic alterations to wetlands and other surface waters

caused by the applicant's water use based upon analytical or numerical modeling, or monitoring data, as required by this section. The determination of harm shall consider the temporary nature of water use drawdowns and the seasonal application of certain water uses in assessing whether the hydrologic alteration is constant or recovers seasonally.

3.3.3.1 Harm Standards for Wetlands

- (a) Withdrawals must not cause a change in wet season water levels from their normal range.
- (b) Withdrawals must not cause a change in wetland hydroperiods from their normal range and duration to the extent that wetland plant species composition and community zonation are adversely impacted.
- (c) Wetland habitat functions, such as providing cover, breeding, and feeding areas for obligate and facultative wetland animals must be temporally and spatially maintained and not adversely impacted as a result of withdrawals.
- (d) Withdrawals must not cause habitat alteration for threatened or endangered species to the extent that use by these species is impaired.

3.3.3.2 Harm Standards for Estuaries, Rivers, Streams, and their Tributaries

- (a) Withdrawals must not cause a change in flow rates from the normal rate and range of fluctuation to the extent that water quality, vegetation, and animal populations and their habitat are adversely impacted.
- (b) Withdrawals must not cause a change in temporal and spatial distribution of flows to downstream waterbodies to the extent that the water resources are adversely impacted.
- (c) Withdrawals must not cause a reduction in flow rates from the existing level of flow to the extent that salinity distributions in tidal streams and estuaries are altered resulting in adverse impacts to water quality, vegetation, and animal populations and their habitat.
- (d) Withdrawals must not cause a change in flow rates from the normal rate and range of fluctuation to the extent that recreational use or aesthetic qualities of the water resource are adversely impacted.

3.3.3.3 Harm Standards for Lakes

Withdrawals must not cause a change in water levels from the normal rate and range of fluctuation, to the extent that:

- (a) Water quality, vegetation, or animal populations and their habitat are adversely impacted;
- (b) Flows to downgradient watercourses are adversely impacted;
- (c) Recreational use or aesthetic qualities of the water resource are adversely impacted.

3.3.3.4 Harm Standards for Springs

Withdrawals must not cause a change in water levels or flows from the normal rate and range of fluctuation, to the extent that:

- (a) Water quality, vegetation, or animal populations and their habitat are adversely impacted;
- (b) Flows to downgradient watercourses are adversely impacted;
- (c) Recreational use or aesthetic qualities of the water resource are adversely impacted.

3.3.4 Site Specific Considerations

Site-specific information shall be submitted by the applicant for determining whether the performance standards are met. The applicant shall provide site-specific information on the local hydrology, geology, actual water use, or unique seasonality of water use, including, but not limited to:

- (a) Evaluation of site-specific hydrologic or geologic features that affect the projected drawdown, including the existence of clay layers that impede the vertical movement of water under the wetland, preferential flow paths, seepage face wetlands that receive high rates of inflow, or the effects of soil depth and type on moisture retention, to the degree that actual field data support how these factors affect the potential for impacts of the water use on the wetland or other surface water.
- (b) Information required to assess the potential for harm to wetlands and surface waters, such as the condition, size, depth, uniqueness, location, and fish and wildlife use, including listed species, of the wetland or surface water.

If the applicant asserts that actual water use has not caused harm to wetlands or surface waters, site-specific information on the condition of the wetlands or surface waters must be provided in conjunction with pumpage records or other relevant evidence of actual water use to substantiate the assertion. Applicable monitoring data as described in section 4.0 shall also be submitted, if available.

3.3.5 Elimination or Reduction of Harm

The applicant shall modify the project design or proposed water use, to the extent practicable, to eliminate or reduce harm to protected wetlands and surface waters if the District determines that harm will occur. Modifications to the project or water use include, but are not limited to, developing alternative water supply sources, modification of pumping, relocation of withdrawal facilities, implementation of water conservation measures, use of impact offsets and substitution credits, retirement of a non-expired individual water use permit for the duration of the desired elimination or reduction, and implementation of water resource development projects. Proposals to use impact offsets and substitution credits using reclaimed water will be evaluated pursuant to the criteria contained in subsections 62-40.416(7) and (8), F.A.C. A proposed modification that is not technically capable of being implemented, not economically feasible, or adversely affects public safety through the endangerment of lives or property, is not considered practicable. In determining whether a proposed modification is practicable, consideration shall be given to:

- (a) Whether the wetlands and other surface waters have been impacted by authorized activities other than the water use (such as development, adjacent land use, drainage activities, or an ERP or Surface Water Management Permit), and will continue to be impacted by such activities;
- (b) The cost of the modification for elimination or reduction of harm compared to the environmental benefit such modification would achieve, including consideration of existing infrastructure; and
- (c) If a permit renewal, the considerations in section 2.2.1.

3.3.6 Mitigation of Harm

When the District determines that elimination or reduction of harm is not practicable, the District shall consider proposals for mitigation. Mitigation is required to offset the harm to the functions of wetlands and surface waters caused by the water use. In certain cases, mitigation cannot offset impacts sufficiently to yield a permittable project. Such cases often include activities that harm Outstanding Florida Waters, established minimum flows and levels waterbodies, habitat for listed species, or wetlands or surface waters not likely to be successfully recreated. Mitigation shall not be required for impacts to wetlands and surface waters previously mitigated through federal, state or local permit authorizations, such as other water use permits, ERPs, or Surface Water Management Permits. The District shall assess the condition of the wetland or surface water as it exists at the time of the application submittal when determining mitigation requirements. This assessment shall be conducted in accordance with chapter 62-345, F.A.C. If a permit renewal, mitigation requirements shall also be based on the provisions in section 3.3.7.

3.3.6.1 Mitigation Requirements

- (a) Mitigation to offset the proposed harm shall be provided within the same watershed or recharge area as the proposed harm, unless the applicant demonstrates that mitigation proposed outside of the watershed or recharge area can fully offset the harm. Watershed and recharge area boundaries shall be based on best available data.
- (b) In determining whether mitigation proposed outside of the watershed or recharge area fully offsets the harm, consideration shall be given to the effect on the values of the remaining wetland and surface water functions within the watershed or recharge area.

3.3.7 Elimination/ Reduction or Mitigation of Harm Considerations for Permit Renewals

In addition to the considerations in section 3.3.5., the determination of whether elimination/ reduction or mitigation will be required for impacts to wetlands or surface waters not identified or expressly authorized to be impacted by the previous water use permit, shall be made considering the following:

- (a) The existing wetland and surface water functions;
- (b) The degree to which the wetland or surface water functions are reasonably expected to recover if the withdrawal is reduced or eliminated;
- (c) The projected impacts on the existing functions of the wetlands or surface waters from continuing the water use;

- (d) Whether the wetland or surface water is connected by standing or flowing surface water to, or is part of an Outstanding Florida Water, established MFL waterbodies, Aquatic Preserve, state park, or other publicly owned conservation land with significant ecological value;
- (e) Whether the wetland or surface water is used for resting, nesting, breeding, feeding or denning by listed species as part of the fish and wildlife use considerations in (a), (b), and (c) above;
- (f) Whether the impacts are caused or contributed to as a result of modifications to an applicant's use required by another governmental body; and
- (g) Applicants proposing an impact offset or substitution credit must demonstrate that the conditions for permit issuance are met.

3.4 Saline Water Intrusion

RESERVED

3.5 Pollution of the Water Resources

A water use permit application shall be denied if the withdrawals would cause degradation of surface or groundwater quality through the induced movement of pollutants into a water source to the extent that sources are rendered unusable for reasonable-beneficial uses of water or pollutants interfere with an existing legal use.

Applicants who have obtained and are in compliance with a National Pollutant Discharge Elimination System (NPDES) or ERP for dewatering shall be found to not cause harmful water quality impacts from wastewater discharges to receiving waters.

3.6 Existing Offsite Land Uses

The permit application shall be denied based on inconsistency with the public interest if the proposed withdrawals of water would cause an unmitigated adverse impact on an adjacent land use existing at the time of the permit application. This section does not establish a property right in water, but prohibits harm from withdrawals to land uses that are dependent on water being on or under the land surface, based on the considerations set forth below. If unanticipated adverse impacts occur, the District shall revoke the permit in whole or in part to curtail or abate the adverse impacts, unless the impacts can be mitigated by the permittee. Adverse impacts include, but are not limited to:

- (a) Reduction in water levels or water quality in an adjacent surface water body such as lakes, impoundments, springs, streams, wetlands, or other water bodies that impair the water body;
- (b) Land collapse or subsidence caused by a reduction in water levels;
- (c) Damage to crops and other types of vegetation, including wetlands and other surface waters; and
- (d) Damage to the habitat of endangered or threatened species.

An applicant for a new water use permit must provide reasonable assurances that the proposed withdrawal of water will not cause an unmitigated adverse impact on an adjacent land use existing at the time of the permit application. An applicant for renewal of a water use permit must provide reasonable assurances that the continued withdrawal of water will not cause an unmitigated adverse impact on an adjacent land use existing at the time of the permit application. In determining whether the continued withdrawal will cause an unmitigated adverse impact on an adjacent land use, the District shall consider the impact evaluation made during the most recent previous permit cycle. An applicant proposing to modify a water use must provide reasonable assurances that the proposed withdrawal of water will not cause an unmitigated adverse impact on an adjacent land use existing at the time of the permit application. In determining whether the modified withdrawal will cause an unmitigated adverse impact on an adjacent land use, the District shall consider only the proposed modification.

3.7 Interference with Existing Legal Uses

Presently existing legal uses at the time of application are protected from interference by proposed uses of water. Existing legal uses are all uses of water which are exempt under chapter 373, F.S., or 40B-2, F.A.C., or which have a valid chapter 373, Part II, F.S., permit. Pursuant to subsection 373.223(1)(b), F.S., the applicant must provide reasonable assurance that it will not interfere with any presently existing legal use of water. Interference is considered to occur when the requested use would impair the withdrawal capability of an existing legal use to a degree that the existing use would require modification or replacement of the withdrawal facilities. An applicant for a new water use must provide reasonable assurances that the proposed withdrawal of water, together with other exempt or permitted withdrawals within the cone of influence of the

proposed withdrawal, will not result in interference with existing legal uses. An applicant for renewal of a water use must provide reasonable assurances that the continued withdrawal of water, together with other exempt or permitted withdrawals within the cone of influence of the continued withdrawal, will not result in interference with existing legal uses. In determining whether the continued withdrawal will interfere with existing legal uses, the District shall consider the interference evaluation made during the most recent previous permit cycle. An applicant proposing to modify a water use must provide reasonable assurances that the proposed withdrawal of water, together with other exempt or permitted withdrawals within the cone of influence of the modified withdrawal, will not result in interference with existing legal uses. In determining whether the modified withdrawal will interfere with existing legal uses, the District shall consider only the proposed modification. If the permit applicant cannot provide reasonable assurance that a proposed withdrawal will not interfere with existing legal uses, the applicant must submit a mitigation plan for District approval. The plan shall identify actions to mitigate for interference and may require a permit modification under section 40B-2.331, F.A.C. Mitigation may include, but shall not be limited to, pumpage reduction, modification of the impacted user's well or pump, relocation of withdrawal points, change in withdrawal source, or other means. The permittee must mitigate interference with existing legal uses caused in whole or in part by the permittee's withdrawals, consistent with the approved mitigation plan. The mitigation plan will either require a permittee to mitigate immediately or at the time of the actual interference. The determination of when mitigation is required is based upon the likelihood that the interference is projected to occur.

3.8 Otherwise Harmful

The issuance of a permit will be denied if the withdrawal or use of water would otherwise be harmful to the water resources pursuant to subsection 40B-2.301(2)(g), F.A.C.

3.9 Minimum Flows and Levels

Where the District or the Department has adopted a recovery or prevention strategy for the MFL water body from which an applicant proposes to directly or indirectly withdraw or divert water, the applicant's proposed water use shall be consistent with the recovery or prevention strategy for the MFL water body pursuant to subsection 40B-2.301(2)(h), F.A.C.

3.10 Aquifer Storage and Recovery Systems

RESERVED

3.11 Water Reservations

RESERVED

4.0 Monitoring Requirements

Applicants shall implement monitoring methods for all non-domestic water withdrawals from wells with a primary casing inside diameter of eight (8) inches, or greater, and surface water pumps with a cumulative intake diameter of six (6) inches or greater, prior to commencement of withdrawals; and report water usage as set forth in this Section. Additional monitoring requirements may apply in Water Supply Planning Areas as set forth in section 4.3.

4.1 Measuring Withdrawal Quantities

4.1.1 Monitoring Methods

The applicant shall indicate the method of monitoring and reporting water withdrawals on the application form. Monitoring methods may include reporting of electrical usage, use of telemetry devices or base stations, flowmeters, or self-monitoring methods. The District shall evaluate the proposed monitoring and reporting methods based on data reliability, consistency, format, and cost to the applicant and to the District.

4.1.2 District Monitoring

District monitoring by any method requires the permittee to provide District personnel or contractors access to the water withdrawal point for obtaining electric meter information, monitoring equipment installation, maintenance of monitoring equipment, inspections, initial flow measurements, or subsequent flow measurement verification.

4.1.3 Self-Monitoring and Reporting

Self-monitoring methods include totalizing flow meters, logging of pump run time, or other verifiable methods. Applicants who elect to self-monitor shall implement monitoring methods at their own expense. Permittees shall submit monthly water use from each active monitored withdrawal point, including the reporting of unused active withdrawal points, no less than every six months to the District using the District's online portal.

4.1.4 Flow Measurement and Verification

Flow measurements are required for all monitored active withdrawal points. Acceptable methods for determining flow include Mobile Irrigation Laboratory (MIL) evaluations, ultrasonic or acoustic velocity measurements, portable or inline flowmeters, or other verifiable methods. Flow measuring equipment shall be calibrated to maintain an accuracy of $\pm 10\%$, and flow measurements for each active monitored withdrawal point shall be verified upon permit issuance and no less than every ten years thereafter. Self-verified flow measurements may be provided to the District in a written or photographic format using the District's online portal.

4.2 Special Case Monitoring and Reporting Requirements

4.2.1 Back-Up and Freeze Protection Water Uses

Permittees that do not report water use from monitored withdrawal points using the electrical usage or telemetry methods, and are required by the District to self-report their back-up or freeze protection water use, shall provide a separate accounting of water used for back-up and freeze protection to the District using the District's online portal.

4.2.2 Livestock and Other Non-Irrigation Agricultural Uses

Permittees that do not report water use from monitored withdrawal points using the electrical usage or telemetry methods, and are required by the District to self-report their livestock or other non-irrigation agricultural water use, shall estimate livestock use as set forth in section 2.3.3.4 and report the use annually to the District using the District's online portal. Other non-irrigation agricultural uses such as tank filling, crop washing, and employee water use shall be estimated using tank size and filling frequency, employee numbers, or other industry-standard methods; and reported to the District annually using the District's online portal.

4.2.3 Withdrawal Points with Seasonal and/or Temporary Pumping Equipment

Permittees that do not report water use from monitored withdrawal points using the electrical usage or telemetry methods, and are required by the District to self-report their seasonal and/or temporary water use, shall estimate water use from withdrawal points with pumping equipment installed on a seasonal or temporary basis using irrigation emitter size and number applied to crop type and acreage; and report the use annually to the District using the District's online portal.

4.3 Monitoring Requirements in Water Supply Planning Areas

Applicants located wholly within or in part within a Water Supply Planning Area may be required to implement monitoring methods for all or a portion of non-domestic water withdrawals from wells with a primary casing inside diameter less than eight (8) inches and surface water pumps with a cumulative intake diameter less than six (6) inches prior to commencement of withdrawals pursuant to a Minimum Flows and Level prevention or recovery strategy set forth in Chapters 40B-8 or 62-42, F.A.C.; or water reservation set forth in Section 3.11.

5.0 Permit Limiting Conditions

Water use permits shall be conditioned, as necessary, to ensure that the permitted consumptive use continues to meet the conditions for issuance in section 40B-2.301, F.A.C. There are two categories of permit conditions that will be applied to water use permits – standard conditions and special conditions.

5.1 Standard Conditions

Standard conditions contain general information and operational constraints that generally apply to all water uses unless waived or modified by the District upon a determination that the conditions are inapplicable to the use authorized by the permit. The following standard conditions shall apply to all water use permits:

- (a) All water uses authorized by this permit shall be implemented as conditioned by this permit, including any documents incorporated by reference in a permit condition. The District may revoke this permit, in whole or in part, or take enforcement action, pursuant to sections 373.136 or 373.243, F.S., unless a permit modification has been obtained. The permittee shall immediately notify the District in writing of any previously submitted information that is later discovered to be inaccurate.
- (b) This permit does not convey to the permittee any property rights or privileges other than those specified herein, nor relieve the permittee from complying with any applicable local government, state, or federal law, rule, or ordinance.
- (c) The permittee shall notify the District in writing within 30 days of any sale, transfer, or conveyance of ownership or any other loss of permitted legal control of the Project and / or related facilities from which the permitted water use is made. Where the permittee's control of the land subject to the permit was demonstrated through a lease, the permittee must either submit documentation showing that it continues to have legal control or transfer control of the permitted system / project to the new landowner or new lessee. All transfers of ownership are subject to the requirements of section 40B-2.351, F.A.C. Alternatively, the permittee may surrender the water use permit to the District, thereby relinquishing the right to conduct any activities under the permit.
- (d) Nothing in this permit should be construed to limit the authority of the District to declare a water shortage and issue orders pursuant to chapter 373, F.S. In the event of a declared water shortage, the permittee must adhere to the water shortage restrictions, as specified by the District. The permittee is advised that during a water shortage, reports shall be submitted as required by District rule or order.
- (e) With advance notice to the permittee, District staff with proper identification shall have permission to enter, inspect, observe, collect samples, and take measurements of permitted facilities to determine compliance with the permit conditions and permitted plans and specifications. The permittee shall either accompany District staff onto the property or make provision for access onto the property.
- (f) A permittee may seek modification of any term of an unexpired permit. The permittee is advised that section 373.239, F.S., and section 40B-2.331, F.A.C., are applicable to permit modifications.
- (g) The permittee must mitigate interference with existing legal uses caused in whole or in part by the permittee's withdrawals, consistent with a District-approved mitigation plan. As necessary to offset such interference, mitigation may include, but is not limited to, reducing pumpage, replacing the existing legal user's withdrawal equipment, relocating wells, changing withdrawal source, supplying water to existing legal user, or other means needed to mitigate the impacts.
- (h) The permittee must mitigate harm to existing off-site land uses, including flooding, caused by the permittee's withdrawals. When harm occurs, or is imminent, the permittee must modify withdrawal rates or mitigate the harm.
- (i) The permittee must mitigate harm to water resources caused by the permittee's withdrawals. When harm occurs or is imminent, the permittee must modify withdrawal rates or mitigate the harm.
- (j) The permittee's consumptive use of water as authorized by this permit shall not reduce a flow or level below any minimum flow or level established by the District or the Department of Environmental Protection pursuant to Sections 373.042 and 373.0421, F.S. If the permittee's use of water causes or contributes to such a reduction, then the District shall revoke the permit, in whole or in part, unless the permittee implements all provisions applicable to the permittee's use in a District-approved recovery or prevention strategy.
- (k) The District reserves the right to open this permit, following notice to the permittee, to include a permit condition prohibiting withdrawals for resource protection.

5.2 Special Conditions

The following special conditions vary among use classes, source classes, and geographic locations; and may be project-specific:

- (a) This permit shall expire on (expiration date). The permittee must submit the appropriate application form incorporated by reference in subsection 40B-2.402(8)(a), F.A.C., and the required fee to the District pursuant to section 40B-2.361, F.A.C., up to one year prior to this expiration date in order to continue the use of water.
- (b) Use classification is (primary water use type and secondary water use types).
- (c) Source classification is (source classification).
- (d) The permitted water withdrawal facilities consist of the items in the Withdrawal Point Information table on page 1.
- (e) The permittee shall use an available lower-quality water source or alternative water supply in lieu of groundwater unless the permittee demonstrates that it is not economically, environmentally, or technologically feasible to do so.
- (f) All correspondence sent to the District regarding this permit must include the permit number (2-###-#####-#).

5.2.1 Public Supply Use

- (a) The permittee must modify the permit for any change in service area boundaries.
- (b) The permittee must implement the District-approved wellfield operating plan submitted on (date).
- (c) The permittee must implement the District-approved water conservation plan submitted on (date) and all District-approved updates. Updates and progress reports must be submitted with the 10-year compliance review.
- (d) The permittee shall submit a water use compliance report every ten years from the date of permit issuance for review and approval by District staff.

5.2.2 Landscape Irrigation and Recreation Uses

- (a) The permittee must implement the District-approved water conservation plan submitted on (date) and all District-approved updates. Updates and progress reports must be submitted with the 10-year compliance review.
- (b) Irrigation is prohibited between the hours of 10:00 A.M. and 4:00 P.M., except as follows:
 1. Uses whose average annual allocation is comprised of 100 percent reclaimed water may irrigate at any time.
 2. Irrigation of, or in preparation for, planting new golf course, landscape or recreational areas is allowed at any time for one 30-day period provided irrigation is limited to the amount necessary for sod or plant establishment. Irrigation of newly seeded or sprigged golf course areas is allowed at any time for one 60-day period.
 3. Watering in of chemicals, including insecticides, pesticides, fertilizers, fungicides and herbicides, when required by law, recommended by the manufacturer, or constitutes best management practices, is allowed anytime within 24 hours of application of the chemicals.
 4. Irrigation systems may be operated anytime for maintenance and repair purposes.

5.2.3 Agricultural Use

- (a) The permittee must implement the District-approved water conservation plan submitted on (date) and all District-approved updates. Updates and progress reports must be submitted with the 10-year compliance review.
- (b) The permittee shall submit a water use compliance report every ten years from the date of permit issuance for review and approval by District staff.
- (c) Watering of impervious surfaces is prohibited.
- (d) Irrigation systems shall water only those areas authorized by the permit.
- (e) Water use for frost/ freeze protection shall not be included in the total Average Daily Rate (ADR) or the total Annual Allocation permitted.
- (f) The permittee shall report to the District the date(s) and run time(s) that the irrigation system ran for frost/ freeze protection at the next regular reporting interval.
- (g) The permittee must notify the District in writing prior to implementing any changes in the water use that may alter the permit allocations. Such changes include, but are not limited to, changes in irrigated acreage, crop type, irrigation system, water source, or extent of project ownership or control. In the event a proposed change will alter the allocation, permittee must first obtain a permit modification.

5.2.4 Commercial, Industrial, Institutional, and Mining/ Dewatering Uses

- (a) The permittee must implement the District-approved water conservation plan submitted on (date) and all District-approved updates. Updates and progress reports must be submitted with the 10-year compliance review.
- (b) The permitted average/maximum daily rate is dependent on (waterbody) flow rate during low flow events (5, 20, 50 and 100-year flow recurrences) for Power Generation uses.
- (c) In the event the permittee does not use water for beverage processing within two years of the effective date of this

permit, District staff shall request Governing Board authorization to initiate revocation proceedings for non-use under section 373.243, F.S.

5.2.5 Alternative Water Supply

- (a) Upon written notification from the District of alternative water supply availability, The permittee must investigate the feasibility of using such an alternative source.
- (b) The permittee must apply for a permit modification to reflect that portion of the allocation which will be supplied using an alternative source.
- (c) The permittee must continue to investigate the feasibility of using an alternative source throughout the duration of the permit. The permittee must provide the District with an alternative supply feasibility report ten years from date of permit issuance. This report must evaluate the feasibility of using an alternative supply and specifically consider: (1) whether a suitable alternative supply source is available; (2) whether alternative supply lines are accessible at the property boundary in sufficient capacity; (3) whether the permittee is capable of using the alternative supply source through distribution lines on the property; (4) whether use of alternative supply is technically, environmentally, and economically feasible; and (5) if applicable, whether use of an alternative supply would adversely affect the permittee's stormwater management system.

5.2.6 Required Hydrologic and Wetlands Monitoring and Reporting

The permittee shall implement the (water level, saline water intrusion, groundwater contamination, or wetland) monitoring plan submitted to the District on (date).

5.2.7 Well Construction

- (a) If a proposed well location changes from a location specified in the water use permit application, the permittee must submit to the District prior to construction of such well, an evaluation of the impacts from pumping at the new location on existing legal uses, pollution sources, environmental features, the saline water interface, and surface water bodies.
- (b) Within 90 days of completion of any new wells, the permittee must submit to the District an updated Well Description Table identifying the actual total and cased depths, pump manufacturer and model numbers, pump types, intake depths, and type of meters.
- (c) Within six months of permit issuance, the permittee must submit to the District an updated Well Description Table identifying the wells that have been properly plugged and abandoned in accordance with section 40B-3.531, F.A.C., and the wells to be maintained as water level monitoring wells.
- (d) Within six months of permit issuance, the permittee must plug and abandon the following wells in accordance with chapter 40B-3, F.A.C.
- (e) Within six months of permit issuance, the permittee must submit to the District a well survey which includes the following information: well cased depth, well total depth, and chloride ion concentration in wells not described in the Well Description Table. This survey must be submitted for the following wells: (list individual wells identified based on project specifications).
- (f) Within 30 days of completing construction of a new well, the permittee must perform a step drawdown test on that well. Prior to conducting the test, the permittee must submit a testing plan to the District for staff review and approval. Within 30 days of completing the step drawdown test, permittee must submit the results for the following wells to the District: (list individual wells identified based on project specifications). Information on performing step drawdown tests is available from the District.
- (g) The permittee must perform an aquifer performance test on the proposed wells. Prior to conducting the test, the permittee must submit a testing plan to the District for staff review and approval. Within 30 days of completion of the testing, the following must be submitted to the District: A list of wells monitored during the test and their location relative to the pumped well, pumping rate during all phases of the test, duration of the test, and the resulting drawdowns at the end of the test. Information on performing aquifer performance tests is available from the District.

5.2.8 Water Use Accounting

- (a) The permittee shall implement monitoring of groundwater withdrawals, at permittee's expense, upon commencement of withdrawals. Monthly reports shall include volume pumped by each well of inside diameter eight inches or greater at land surface and shall be delivered within the following month in an approved District format.
- (b) Total withdrawal from (well name) (Station ID #####) must be recorded continuously, totaled monthly, and reported to

the District at least every six months for the duration of this permit. The meter reading or quantity withdrawn must be reported in gallons and submitted online at <https://permitting.sjrwm.com/srep/#/ep>, even if there is no use.

The reporting dates each year are as follows:

Reporting Period	Report Due Date
------------------	-----------------

January-June	July 31
--------------	---------

July-December	January 31
---------------	------------

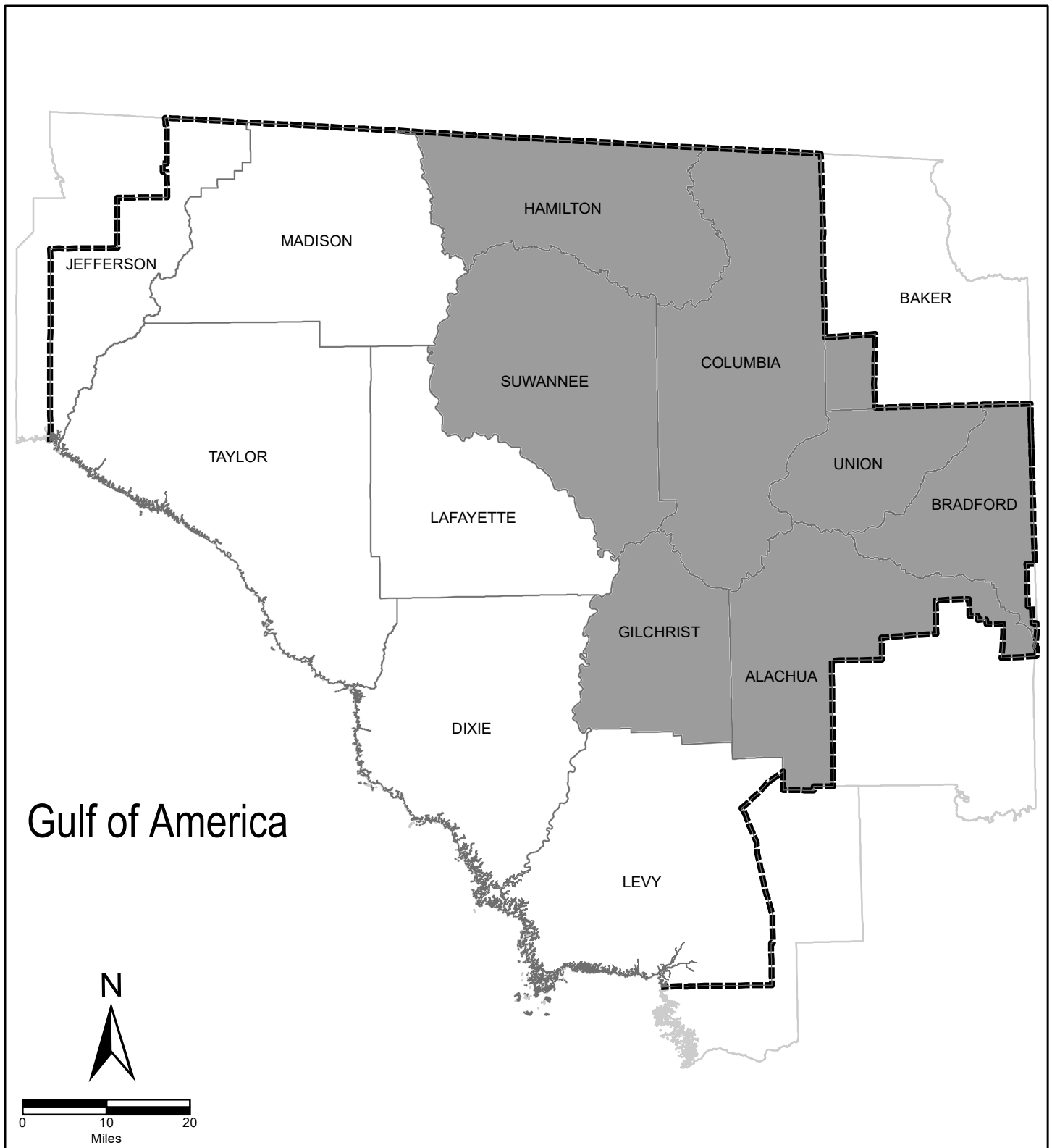
- (c) The permittee shall maintain all totalizing flow meters. In case of failure or breakdown of any meter, the District shall be notified in writing within five days of its discovery. A defective meter shall be repaired or replaced within 30 days of its discovery.
- (d) The permittee shall have all flow meters checked for accuracy once every ten years within 30 days of the anniversary date of the issuance of this permit. The meters must be recalibrated if the difference between the actual flow and the meter is greater than five percent.

5.2.9 Surface Water Management

An Environmental Resource Permit or Surface Water Management Permit will be required prior to any modification of the topography/land surface.

5.2.10 10-year Compliance Reports

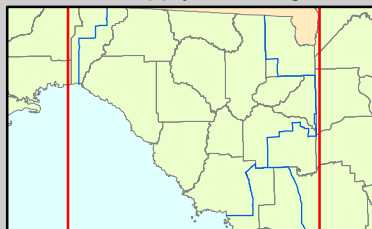
Except for permits issued pursuant to subsection 373.236(6), F.S., permits issued for a duration of 20 years or longer shall require submittal of a compliance report under subsection 373.236(4), F.S., once every ten years, when necessary to maintain reasonable assurances that the conditions for issuance can continue to be met for the remaining duration of the permit. Permits issued for greater than 20 years pursuant to subsection 373.236(6), F.S. shall require submittal of a compliance report once every five years. The compliance report shall, at a minimum, include all of the information specifically required by the permit's limiting conditions. After reviewing the report, the District may modify the permit to ensure that the use of water authorized by the permit can continue to meet the conditions for issuance set forth in the rules existing when the District issued the permit. As required by sections 120.569 and 120.60, F.S., the District shall provide notice of intent to modify the permit. For all water use classes, when economic conditions or population growth rates result in the actual water use being lower than permitted water use, a modification to reduce the permitted allocation shall only be made by the District when there is no reasonable likelihood that the allocation will be needed during the permit term. For agricultural water use permits for irrigation, reductions in actual use compared to permitted water use that are due to weather events, crop diseases, nursery stock availability, or changes in crop type shall not result in a permit modification by the District to reduce the permitted allocation during the term of the permit. Additionally, in order to incentivize conservation of water, if actual water use is less than permitted water use due to documented implementation of water conservation measures, the permitted allocation shall not be modified by the District due to these circumstances during the term of the permit. Nothing in this subsection shall be construed to alter the District's authority to reduce permitted water use under circumstances not addressed by this section, nor be construed to alter the water conservation requirements of the permit for the duration of the permit.



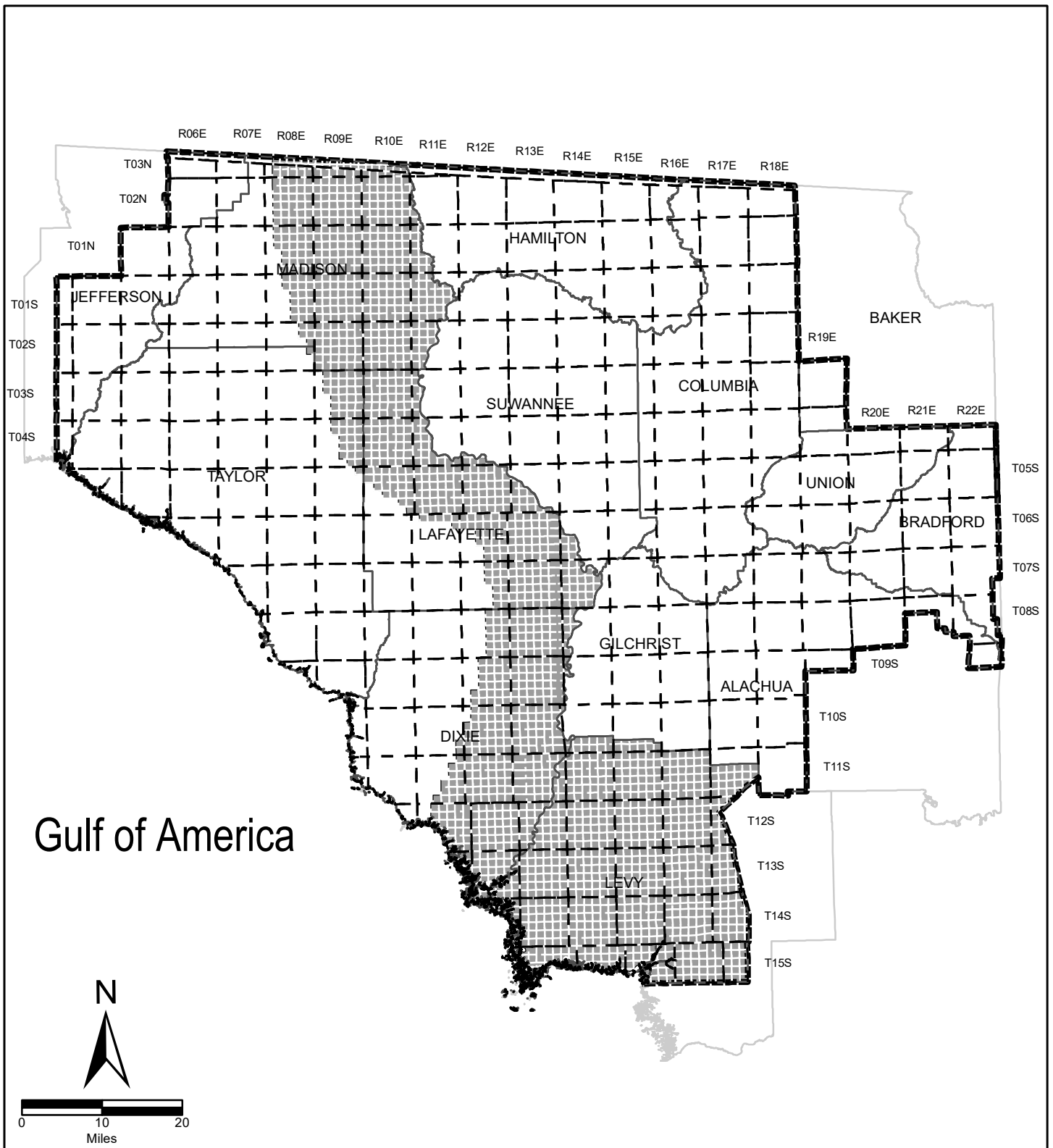
-  County Boundary
-  Eastern WSPA
-  SRWMD Boundary

Appendix A

Eastern Water Supply Planning Area (WSPA)



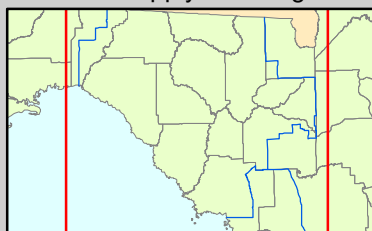
Note: This map was created by the Suwannee River Water Management District (SRWMD) to be used for planning purposes only. SRWMD shall not be held liable for any injury or damage caused by the use of data distributed as a public records request regardless of their use or application. SRWMD does not guarantee the accuracy, or suitability for any use of these data, and no warranty is expressed or implied. For more information please contact the SRWMD at 386-362-1001.
Map Created by Zwanka



- County Boundary
- SRWMD Boundary
- Western WSPA

Appendix B

Western Water Supply Planning Area (WSPA)



Note: This map was created by the Suwannee River Water Management District (SRWMD) to be used for planning purposes only. SRWMD shall not be held liable for any injury or damage caused by the use of data distributed as a public records request regardless of their use or application. SRWMD does not guarantee the accuracy, or suitability for any use of these data, and no warranty is expressed or implied. For more information please contact the SRWMD at 386-362-1001.
Map Created by Zwanka